Applying Collaborative Contracting To The Supply Chain Department Of A Regional Health Care Provider

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ABSTRACT

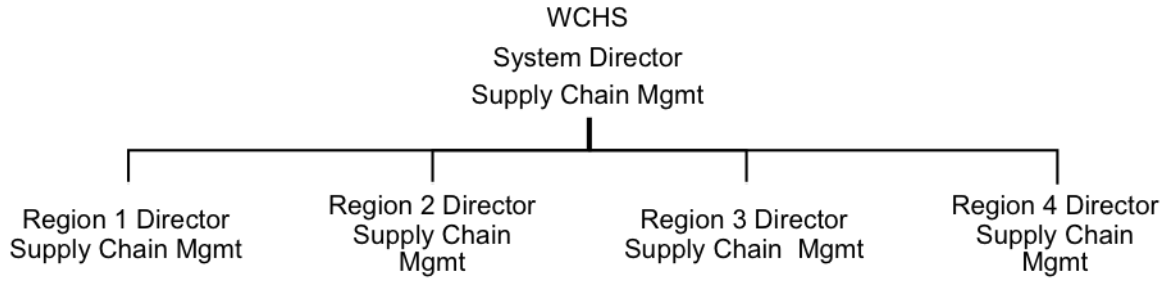
With health care costs continuing to increase, a southern California health care system struggled to balance its budget. A lack of hospital department participation in development of the supply contracts has lead to fractured relationships between the hospital departments and the Regional Supply Chain Department as well as fiscal deficits. Poor communication between supply chain partners can lead to differences in perceptions, misinterpretations, and misunderstandings. This paper examines the results of efforts by one organization to close the "gaps" within a supply chain through the creation of a Value Analysis Team (VAT). The results demonstrate a marked improvement in the bottom line, but more importantly, a significant improvement in the relationship between supply chain partners within this health care system.

Keywords: Supply Chain Management, Health Care Procurement, Collaborative Contracting, Value Analysis Team

INTRODUCTION

West Coast Health System[1] (WCHS) is a health care organization providing medical services to members in several western states. WCHS operates 17 acute care hospitals, 12 freestanding long-term care facilities, and 19 low income and assisted living facilities covering more than 772,000 members. Each of the health system's statewide regions are further divided into service areas, with nearly 33,000 employees serving within their respective geographic locations. One such service area is located in southern California and operates four hospitals in the greater Los Angeles area.

Figure 1
WCHS Supply Chain Management Department
Organization Chart



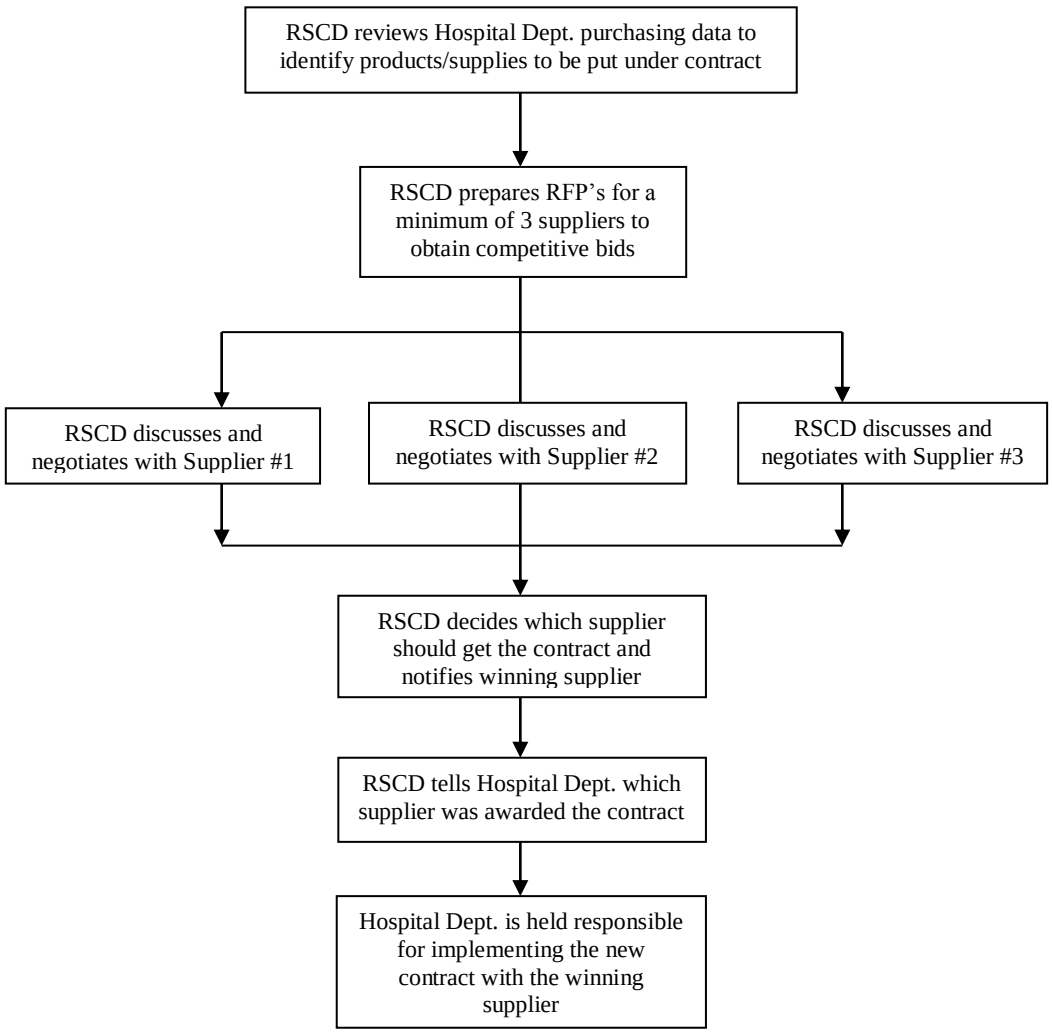
Each service area is supported by its Regional Supply Chain Department (RSCD) responsible for establishing procurement contracts with suppliers of the predominant medical equipment and supplies used by the various hospital departments within its region. The regional directors of supply chain management report to the

System Director of Supply Chain Management as shown in Figure 1. The hospital departments within each region include: perioperative, laboratory, radiology/diagnostic imaging, pharmacy, respiratory therapy, and cardiology. Departments consist of several subspecialty groups with each focusing on one aspect of their field of care. For example, within the perioperative department is the "hips & knees implant" subspecialty.

EXISTING PROCUREMENT PROCESS

In fulfilling its procurement function, the RSCD negotiates contracts for supplies that the department's physicians use every day. For example, the Hips & Knees implant subspecialty of the Southern California service area currently has contracts with seven vendors who supply $4.1 million in materials annually.

Figure 2
Existing Procurement Process at WCHS



The RSCD continually reviews the various hospital departments' purchasing data and decides which products the hospital purchases in large enough quantities to warrant putting them under contract in order to gain better pricing and thus obtain savings for the hospital. After reviewing this data, the RSCD then makes their decision. Then, the RSCD prepares and sends out Requests For Proposal (RFPs) to three suppliers of a specific item

that they believe can best support the needs of the hospital departments based on the data they have reviewed. They will then meet with, discuss, and negotiate a new contract with the suppliers that they feel will generate the greatest savings for the hospital. The RSCD will then notify the winning supplier that they have been awarded the contract. They will also notify the relevant hospital department as to what supplier was awarded the contract.

The hospital department is then held responsible for implementing the RSCD's contract and making sure that their physicians, and other department personnel, begin purchasing from the awarded supplier in compliance with the new contract. This process can be seen in the process chart in Figure 2.

The RSCD holds no formal meetings with the departments that the contracts impact. They negotiate contracts for supplies which the departments and physicians use yet the RSCD has *never* asked the departments or physicians for their input or allowed them a forum to discuss what they believe is important to include in the contracts. The current process reveals that the WCHS Regional Supply Chain Department works in a vacuum, making decisions that affect the hospital departments with *no* input from those departments and their physicians. The affected hospital departments have no involvement in the vendor selection process.

The hospital department personnel have developed great resentment towards the Supply Chain Department. They resent that people without medical knowledge and training appear to be forcing decisions upon them based solely on financial considerations, and in breach of the department's duty to provide care of the greatest quality to patients. Many physicians have preferences of materials from certain manufacturers based on prior experience, sometimes dating back to their medical school exposure. In an attempt to satisfy the needs of the physicians, many departments have had to contract with alternative suppliers directly and without the involvement of the Regional Supply Chain Department. The result is that the hospital is getting very poor prices because they have not aggregated their purchasing volume to fewer suppliers. Since the hospital departments are not knowledgeable in procurement practices they do not realize how poor their pricing is or what they might potentially save if they were able to standardize to fewer suppliers.

VALUE ANALYSIS TEAM (VAT) FORMATION

To improve the efficiency of the supply process for WCHS while also improving interdepartmental relationships, a reengineering of the process was necessary (Carr et al, 2008). What was needed was a methodology for employees (physicians and nurses) from the various hospital departments to work collaboratively with members of the RSCD in selecting appropriate suppliers to meet the needs of the department. Such a methodology was created through a pilot program within the Hips & Knees implant subspecialty of the perioperative departments. The pilot program began with the creation of a Value Analysis Team. (The hope was that the success of this pilot subspecialty VAT would lead to the creation of VATs in other subspecialties and other departments in the future.) The purpose of the pilot VAT was to illustrate the value of collaborative contracting by allowing members of the hospital departments to participate in the development of new contracts for hip and knee surgical products. The goal was to develop new contracts with hips and knee product suppliers that would yield annual cost savings for WCHS while achieving superior quality outcomes for patients (Chow and Hwang, 2007).

To ensure an appropriate "voice of the customer" on the team, the Southern California Area Hips & Knees Value Analysis Team (VAT) was comprised of the following relevant department representatives, with the following responsibilities:

Regional Supply Chain Department

Regional Executive Director – responsible for oversight and approval of VAT processes, contracting strategies, supplier negotiations, and supplier contracts.

Regional Contracting Director – responsible for creation, development, and implementation of VAT structure, processes, and meetings. Coordinator of VAT meetings, supplier meetings, contract strategy development, contract negotiations, and contract implementation.

Hospital Perioperative Departments (4 Area Hospitals)

Perioperative Coordinator – responsible to liaison with nurses and physicians of their respective hospital to survey their Hips & Knees needs and to assist in contract strategy development and in discussions with suppliers.

Nursing Director – responsible to liaison with nurses and physicians of their respective hospital to assist in contract strategy development and to analyze their hospital's current spend with each supplier.
Physician/Physician Champion – responsible to serve as Physician Champion to survey physician's needs and opinions on product quality.

The objectives identified by the first Value Analysis Team for Hips & Knees include:

- Compliance & Utilization: Ensure physician and nurse departmental participation in contract development that will encourage greater contract compliance and utilization. It is hoped that WCHS could get better service and better pricing if they were able to dedicate a greater percentage of business to a smaller group of suppliers. The goal of the VAT is to reduce the number of suppliers of Hip & Knee products.
- Cost Savings: Generate substantial annual cost savings for each of the four hospitals for Hips & Knees implant products.
- Standardization: Establish standardization of Hips & Knees products in order to improve the knowledge level of physicians with these products. To improve knowledge levels, it would be necessary to control and reduce the supplier base.

These objectives were then translated into the following tactical goals and metrics to gauge progress:

1. **Compliance Goa**l: Increase % of Contract Compliance with Awarded Supplier by 10%
    1. Metric: % of Spend Contract Compliance (in %)
    2. Purpose: Meet/Exceed % of Annual Spend w/Supplier = Lower prices
    3. Formula: Total Spend with Each Supplier/Annual Spend = % Spend per supplier
    4. Measurement: Measure what % of business goes to each Awarded Supplier

2. **Cost Savings Goal**: Decrease Current Annual Spend for Hips & Knees products by 10%
    1. Metric: Reduction of Annual Cost of Hips & Knees Implants
    2. Purpose: Reduced Annual Cost = Departments meeting Budget Goals
    3. Formula: Reduction in Pricing x Annual Usage
    4. Measurement: Reductions in Cash Outflows

3. **Standardization Goal**: Decrease number of Hips & Knees Suppliers by 20%
    1. Metric: Reduction in # of Suppliers
    2. Purpose: Greater Spend with Fewer Suppliers = Lower Prices from Supplier
    3. Formula: Increase in % of Spend with Fewer Suppliers
    4. Measurement: Increase in % of Spend with suppliers

LAUNCH OF PILOT VAT

Discussions within the newly created pilot VAT often led to challenges as many people held different viewpoints regarding the direction of the VAT. "Should we standardize down from our current 7 suppliers to 2 or to 1? Should we try for a sole source contract in order to get the best pricing? Would a single supplier really be able to provide all the implants we would need?" This is what is referred to as creative tension. Leadership in a learning organization starts with the principle of creative tension. Creative tension comes from seeing clearly where we want to be, our "vision", and telling the truth about where we are, our "client reality" (Cutler, 2001). The gap between the two generates a natural tension. Creative tension can be resolved in two basic ways: by raising current reality toward the vision, or by lowering the vision toward current reality.

In order for change to progress smoothly and with few complications on the VAT, one must look at the leadership style of the change agent. The Chairman of the VAT functions as the change agent for this project. In this case, the Chairman chose to employ a democratic, participative and relationship oriented approach to leadership. Bass (1990, p. 437) describes participative leadership as:

Involving the possibility of drawing others out, listening actively and carefully, and gaining acceptance through engaging colleagues in the planning or decision making process. Participation refers to a simple, distinct way of leader-subordinate decision making in which the leader equalizes power and shares the final decision making with subordinates.

Bass (1990) states that participative leadership allows group members freedom to actively participate in decision making. He also suggests that with participation comes increased autonomy of workers, power sharing, information sharing, and due process. Participation is likely to be seen with general rather than close supervision. Participative leadership was effective for this committee because it fostered increased participation in decision-making and problem solving. The adage that two heads are better than one applies with this approach. This is most important when creating a new program to improve effectiveness. Bass further states that when followers have as much or more information as the leader and where power is more widely shared, participation as a style of leadership is very beneficial. For the VAT, the more knowledge the members have of the impending changes, the more productive the committee can be.

The VAT adopted the participative style of leadership because they felt the values reflected their own. They believed that their goal would require changes and that the partnership approach would help all members who participated feel that their contribution was valuable.

Consideration, an important element of participative decision-making, provided a framework for building teamwork. Consideration involves asking followers for their suggestions before going ahead, getting the approval of followers on important matters, treating followers as equals and putting follower's suggestions into operation(Bass, 1990). These behaviors were implemented when working with the VAT. Employing consideration helps to build trust, respect and personal relationships among committee members that generate consensus for the vision.

Hersey and Blanchard (1983, p. 143) said consideration referred to "behavior indicative of friendship, mutual trust, respect and warmth in the relationship between the leader and the members of the staff." Members of the VAT valued participative leadership because it empowers and increases creativity. Lawler (1992) advocated participation for decreasing workers' resistance to changes in procedure and increasing flexibility of assignments. This aspect has been greatly appreciated by the VAT.

The Chairman of the VAT also employed a democratic approach that is characteristic of participative decision-making. According to Bass (1990) democratic leaders strive for consensus and pursue open, trusting, follower-oriented relationships. The democratic leader is more often dependent on the followers than the followers are on the leader. Highly favorable characteristics of a democratic leader are compromise, caring, a sense of attachment to the followers and a sense of responsibility. In democratic leadership, the focus is on relationships. Studies have shown that, over time, patterns of behavior demonstrated by democratic leadership are more satisfying to its followers than those associated with autocratic leadership.

A strategy known as visioning was used to help VAT members develop consensus on questions that arose as they tried to determine the best contracting solution for Hips & Knees products (Punia, 2005). Visioning was used to address five basic questions about the hospital's future:

- Where are we today?
- Where do we want to go?
- How are we going to get there?
- Who is responsible for what?
- How much will it cost and what are the benefits?

Keeping these questions in mind helped the VAT minimize internal conflicts and develop consensus as well as to help keep the VAT members on track. During the strategic planning process interactive planning was also used as a means to help avoid and solve problems between task force members and to achieve consensus.

The strategic planning process began with the preparation of a mission statement. However, no mission statement alone is sufficient to ensure that an organization will achieve its goals. In order to reach its mission, the VAT members had to first develop strategies for achieving the outcomes envisioned in the mission statement. Planning is an attitude as well as an activity, and all members of the organization must be participants in order for planning to succeed. In this case, the Hips & Knees VAT, made up of representatives from all levels of management, had taken the lead in planning.

Much long-range planning relies on a logical, rational approach to preparing for the future. Planners collect data on a variety of indicators that show how well the organization is succeeding in achieving its goals and then develop strategies for improving performance where needed. In the interactive model (Adams, 1988), the positive assumptions of rational planning are replaced by a belief that reality must be understood from the perspective of the individual. Interactive planning places less stress on rational approaches and gives more attention to social and political activities, taking into account differences in individuals' values and views of reality.

Interactive planning accepts conflict as a normal and expected part of human activity and proposes to minimize it by discussing and clarifying views of stakeholders until a consensus is reached. Advocates of the interactive approach to planning strongly believe that conflict must be explored and not ignored, as it often is when a rational approach to planning is followed (Hamilton, 1991).

Strategic planning operates on two assumptions—that the future evolves from the present and that it will be different from the present (Alessandri and Bettis, 2003). The Hips & Knees VAT had to set out to create a base for planning and change within the organization so that they could improve customer service. The VAT found it helpful to utilize the perspective of interactive planning and approach the process with the belief that reality must be understood from the perspective of the individual. The ability to remember the individual and to conduct interactive planning helped the VAT place less stress on rational approaches and provide for solutions that are more palatable to the organization.

In organizations, decision-making may be initiated when individuals perceive a discrepancy between how their organizations could or should be and how it actually is. This perceived difference between what is and what could or should be precipitates decision-making and action. Individuals respond to these perceived discrepancies by making decisions and taking actions. These individual choices and actions affect the group or organizational choices and actions. At the group or organizational level, good decisions do not always produce good actions. When there are lots of people involved, even good decisions can be implemented incorrectly. The VAT needed to remember that the larger environment in which the organization functions responds to behavioral changes. These responses by the environment provide inputs that lead individuals to new perceptions, choices, and actions.

The Hips & Knees VAT decided to focus on the individual decision-making component of organizational decision-making. Northcraft (1990) states that there are five steps in the decision making process: (i) recognition and definition of the problem; (ii) information search; (iii) alternative generation; (iv) evaluation and choice; and (v) implementation and assessment.

The VAT chose individual decision-making because, like organizational decision - making, it can be represented as a feedback cycle. The individual defines the problem and collects information to generate alternatives. When a choice is made and implemented, the outcome provides feedback about whether the problem was defined correctly, and whether it was solved or needs further attention. The five-phase cycle of individual decision-making is often referred to as the "rational model" (Northcraft, 1990). The VAT's responsibility is to work through the same five phases that the individual would. They must monitor the plan, evaluate it, and devise follow-up plans or revisions, if necessary.

Perceiving a discrepancy between what is and what could or should be is problem recognition, and provides the foundation for all decision-making. Problem recognition requires the decision maker to: (i) understand goals and objectives of the organization; (ii) monitor accomplishment of those goals (performance discrepancies); and (iii) evaluate the importance of the discrepancy. If a perceived discrepancy is important, then the decision maker will implement a second stage of the process: determining why the problem occurred. In order to do this the decision maker must gather information about the problem or discrepancy and possible ways to solve it.

The third phase of individual decision-making is developing or identifying potential courses of action. This phase requires that the information previously gathered be transformed into a set of alternatives. The VAT reviewed the pricing data and contract proposals from each of the Hips & Knees suppliers in order to decide which supplier(s) would be awarded the WCHS business.

The VAT formally listed items it felt were necessary to ensure success of any revision to the procurement process:

1. It is assumed that the Hips & Knees Value Analysis Team will attend and participate in all scheduled meetings and remain committed to the project for the duration.
2. It is assumed that the CEO/Administrators of the four hospitals that comprise the WCHS Southern California Area will continue to offer their support and commitment for the duration of the project so that the project will remain a priority and will enjoy active participation and a successful completion.
3. It is assumed that the suppliers will be willing to respond to our Requests for Proposal (RFPs) and enter into negotiations to develop new contracts.
4. It is assumed that the hospital physicians will be willing to take time to participate in Hips & Knees strategy development meetings so that they can have an active voice and share their feedback regarding the various suppliers, the quality of the products, and the development of contract pricing strategies.

OUTCOME OF PILOT VAT

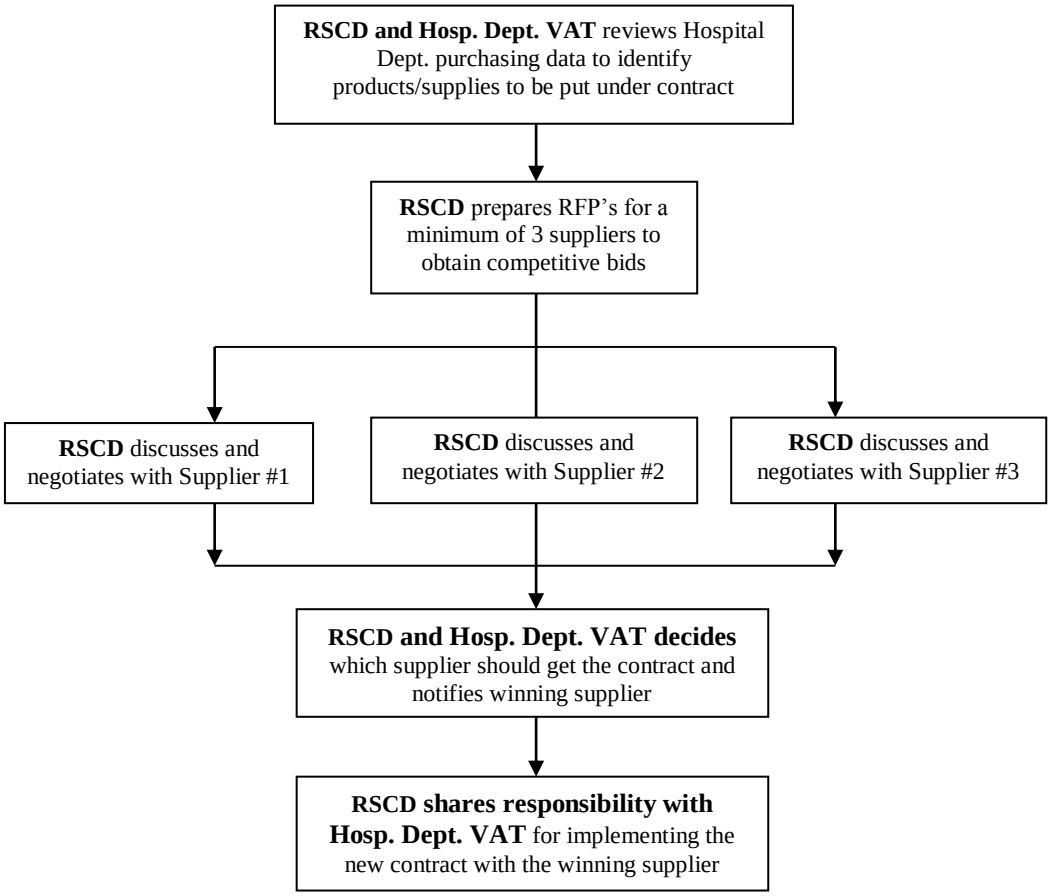
As a result of collaboration with hospital department personnel, the contracting process was modified in a number of ways. As the project began, the Hips & Knees Value Analysis Team held discussions and decided that the Hips & Knees Project should adopt and be governed by the WCHS Code of Ethics. In order to ensure conformity of the contracts to the parent organization, the Hips & Knees Value Analysis Team also referred to and utilized the appropriate and necessary contract language from the West Cost Health System's "Standard Contract Language" reference document.

Figure 3 provides the process map for the revised procurement supplier contracting process. The involvement of the VAT in all phases of the revised process should be noted. It should also be noted that the Regional Supply Chain Management department will now share in the responsibility of ensuring the successful implementation of new contracts. These represent radical changes from the original procurement process shown in Figure 2, as signified by the bolded notation Figure 3.

While the Hips & Knees VAT only recently completed its charge, several significant tactical goals have been realized:

1. **Compliance Goa**l: Increase % of Contract Compliance with Awarded Supplier by 10%
   Result: Primary suppliers have increased their share of all WCHS contracts from 36 percent to 75 percent.
2. **Cost Savings Goal**: Decrease Current Annual Spend for Hips & Knees products by 10%
   Result: Procurement costs for hip & knee implant materials has decreased 11%
3. **Standardization Goal**: Decrease number of Hips & Knees Suppliers by 20%
   Result: Number of hips & knees suppliers has been reduced 71%, from 7 to 2 suppliers

Figure 3
Revised Procurement Process at WCHS



In the aftermath of the original undertaking, continued benefits have been observed. With regard to the items the VAT felt were necessary to ensure success, the following was observed:

- **It is assumed that the Hips & Knees Value Analysis Team will attend and participate in all scheduled meetings and remain committed to the project for the duration.**

  This requirement has been met throughout this project. Overall commitment and attendance remained positive throughout.

- **It is assumed that the CEO/Administrators of the four hospitals that comprise the WCHS Southern California Region will continue to offer their support and commitment for the duration of the project so that the project will remain a priority and will enjoy active participation and a successful completion.**

  This requirement has been met throughout this project. All of the hospital administrators and their personnel have been very helpful at writing letters, memos, attending meetings and actively reaffirming their support.

- **It is assumed that the suppliers will be willing to respond to our Request for Proposals (RFPs) and enter into negotiations to develop new contracts.**

This requirement has been met throughout this project. Although the first few meetings with some of the 7 suppliers were a little tense because of past personality conflicts, all eventually began to feel more comfortable and receptive to the behaviors of the VAT members and grew to develop a new sense of trust and confidence in our intentions.

- **It is assumed that the hospital physicians will be willing to take time to participate in Hips & Knees Strategy Development meetings so that they can have an active voice and share their feedback regarding the various suppliers, the quality of the products, and the development of contract pricing strategies.**

  This assumption has been met throughout this project. Not surprisingly, the physicians were almost always happy to make time to participate in the meetings once they realized that their feedback was actually appreciated and was actively used in the decision-making process.

CONCLUSION

In the past, Regional Supply Chain Management departments of WCHS were responsible for negotiating contracts with suppliers of medical supplies and equipment used by various departments within the organization. Their operation functioned autonomously with no input from hospital personnel (physicians and nurses) as to the preferred brands or suppliers. By adopting collaborative contracting, WCHS has significantly improved morale of the hospital personnel by allowing them to participate in the supply contracting decision making process. Through the creation of a Value Analysis Team composed of supply chain personnel and medical personnel, WCHS has been able to achieve substantial costs savings through an improved supply chain management process.

This pilot program has profoundly demonstrated the value of collaborative contracting in one subspecialty of one department within the WCHS organization. It can only be expected to prove successful in the other departments of WCHS and would likely prove successful for other health care systems throughout the country.

NOTES

[1] The name of the actual health care system has been disguised.

AUTHOR INFORMATION

Craig Johnson is the President of Supply Chain Doctors, a healthcare supply chain consulting group. Craig began his career in the Aerospace industry working on commercial and government satellite contracts before deciding to transfer his skills to the healthcare arena. He earned his Masters in Public Health from UCLA and recently completed his Masters in Supply Chain Management at the University of San Diego. He also holds masters degrees from UCLA in Information Science and from Loyola Marymount in Business Administration as well as Engineering.

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