Opportunities to Improve Operation and Bottom Line

An empowered organization is one in which individuals have the knowledge, skill, desire, and opportunity to personally succeed in a way that leads to collective organizational success.

—Stephen R. Covey, Principle-Centered Leadership

Healthcare leadership team members need to understand whether their organization more closely resembles the traditional model or the vertically integrated model of supply chain management, as well as where they would like their organization to be in the next few years. Likewise, team members should understand the value principles behind effective supply chain management and be able to determine the level of development that they would like to see in their strategic factors. This chapter suggests a series of projects that can help your healthcare organization gain incremental victories, while improving the supply chain management system, the healthcare delivery operation, and the financial bottom line. Each project should be evaluated for prioritization and “worthiness” for your organization.
For each project, the anticipated level of effort, expected impact, action steps, and the project’s link to a value principle(s) are presented.

**SIX PROJECTS FOR YOUR ORGANIZATION**

**Project 1: Develop Online Supply Chain Training and User Support Tools**

*Supporting value principle:* Increase staff knowledge of supply chain operations.

*Financial impact estimate:* Reduce supply chain operation and item cost, across the organization, by 2 percent to 5 percent.

*Effort:* High  
*Benefit:* High

*Cost estimates:*
- Adobe Captivate (formerly RoboDemo) software to create flash video courses ($500)
- Supply chain operations expert to create online courses and documentation (250–500 hours)
- Information technology staff to load (4 hours) and support (2 hours per week) courses and documentation on Web server
- Supply chain operations staff member to manage content and live chat sessions (4–8 hours per week)

*Description:* This project focuses on improving training materials and access to supply chain information, knowledge, skills, and abilities. This could include online 24/7 training with animated courses that incorporate practice tasks and testing, bulletin board for end users to post needed or unneeded items, scheduled chat line with experts available for online discussions, and continuing education credits and defined skill-level paths.

*Steps toward action:*
1. Purchase and develop software tool or tools.  
2. Coordinate with IT department for online use.  
3. Coordinate with human resources department for end-user participation history.  
4. Create training content, tools, and materials (start simple).  
5. Receive leadership approval for process, content, and requirements.

*Performance indicators/metrics:*
- Volume usage noted through user log
Staff skill path and levels
- New items added to or obtained from bulletin board
- Participants on scheduled chat

Project 2: Develop Point-of-Use Supply Charge-Capture and Automated Replenishment System with Reconciliation Procedures

Supporting value principles:
- Follow the supply items that bring in revenue.
- Develop, standardize, and use supply chain metrics for quality, process, cost, and revenue production.
- Develop supply chain goals and objectives by service line for medical/surgical items and pharmaceuticals.

Financial impact estimate: Reduce costs by 1 percent to 2 percent, attributed to charge capture and supplies replenishment. Potentially increase charge-capture efficiency (revenue for supply items that can be charged to the payer; many organizations have a supply-item charge-capture rate of 50 percent to 70 percent) by 20 percent to 30 percent.

Cost estimates:
- Purchase of a technology solution, including hardware, software, and training (approximately $750–$1,250 per hospital bed)
- Potential modifications of storage locations and equipment (situation specific)

Description: In this project, you will implement the latest technology (such as bar-code scanning), allowing for point-of-use capture of supply consumption. This knowledge of supply usage can automate patient charging, decrease inventory, and automate purchase orders. Using the latest technology allows for easier reconciliation of patient charges for supplies. By comparing supply issues to patient charges, this allows for better management of potential revenues. Develop, communicate, and implement clear processes to ensure compliance and control based on selected point of use system.

Steps toward action:
1. Document the current and future state processes, as well as the select a vendor solution for implementation:
a. Define best practices in supply charge capture; and  
b. Perform a vendor selection process to choose the best solution.

2. Emphasize clinical end-user workflow and patient care.

3. Adopt a methodology that matches revenue and expense to the cost center that provided patient care.

4. Educate management and staff about the importance of tracked data to maximize revenue capture.

5. Accurately interface or link point-of-use charge-capture system with supply chain system and charge master and billing systems.

Performance indicators/metrics:
- Percent charge-capture rate for chargeable supply items by department:
  - Departmental lost supply charges
  - Patient bill accuracy for supply chargeable items
- Average supply cost per procedure or admitting diagnosis
- Number of stock-outs (when a needed supply item is not available) per department
- Contract usage rates and compliance

Project 3: Develop a Methodology to Support Continuous Product Standardization and Consolidation

Supporting value principles:
- Determine item, source, contract, and compliance targets for supply chain items of high cost and high volume.
- Decide which external manufacturers and/or distributors the organization wants to work with directly—and remember the 80/20 rule.

Financial impact estimate: Reduce total number of suppliers, selecting those with the best core and developmental relationships (and required category relationships, if absolutely necessary), while reducing the total number of different items being managed, to reduce costs of supply items by service line (such as cardiac rhythm management supplies) by 5 percent to 20 percent. Overall, total supply chain savings could reach 5 percent to 9 percent if four or five major service lines adopt and implement this strategy.

Effort: High
Benefit: High
Cost estimates:

- Supply chain representative to design standardization initiative and manage ongoing relationships with manufacturers and distributors (approximately $30,000 per service line)
- Information management staff to perform ongoing analysis identifying like-type items for potential consolidation (2 hours per week) and to perform project effectiveness analysis (2 hours per week) (approximately $15,000 per year per organization, such as a hospital)
- Supply chain representative and clinical staff to manage consolidation efforts (1 hour per week), although this task may be accomplished without additional cost

Description: This project involves agreeing on standardized items and allowing for fewer unique items to be managed from preferred manufacturers and/or distributors (hopefully, core or developmental partners). It is necessary to perform ongoing analysis to determine functional equivalents for commodity items, so that as few supply items are managed as possible. This will allow for greater volume purchasing of a single item and will reduce the overall number of total items needing to be maintained. Greater volume purchases and higher compliance rates (meeting negotiated utilization targets and measurements) will allow for better negotiations with the supplier of the standardized item.

Steps toward action:
1. Perform current-state analysis of functional equivalent items that are being maintained.
2. Determine when and where consolidation and standardization of these items are feasible.
3. Select the appropriate vendors to have an ongoing relationship with and to source these items.
4. Create an education program for clinical managers, showing how consolidation can facilitate volume, which can reduce cost from supplier.
5. Receive clinical buy-in of compliance cost-benefits and leadership approval for process, content, and requirements.

Performance indicators/metrics:

- Consolidated item compliance levels for preferred supplier and nonpreferred suppliers
- Cost savings derived from increased volume of consolidated item purchase
- Total number of managed supply items in stock area and within item file

**Project 4: Develop Comprehensive Enhancements to Improve Surgery Inventory Management**

*Supporting value principles:*
- Clinical staff should focus on clinical decisions and patient care.
- Develop supply chain goals and objectives by service line for medical/surgical items and pharmaceuticals.

*Financial impact estimate:* Increase the capability to perform a true case-cost analysis and demonstrate purchase compliance for preferred supplier items, enabling a 5 percent to 10 percent potential supply cost and management savings within the surgery department.

*Effort:* High
*Benefit:* High

*Cost estimates:*
- Brainstorming session to set compliance goals for both surgical area consumption compliance and supply chain support role (2–4 hours, including preparation time, for approximately $7,500)
- Inventory specialist to make recommendations on inventory reduction, as well as on consolidation and compliance goals (2 hours per week, for approximately $7,000 to $9,000 per year per organization)
- Data analyst to perform a current-state analysis of clinical staff’s time commitment to supply-related activities (approximately $3,500 per organization)
- Supply chain operations staff member to manage weekly customer service meetings with surgical staff representatives (2 hours per week, for approximately $10,000 per year per organization)

*Description:* In this project, an improved understanding can be obtained of how to better manage surgical inventory by formalizing communication via ongoing meetings between the surgical customer department and the supporting supply chain department. One of the intended outcomes of this project is to help the clinicians minimize the amount of time spent performing supply chain tasks and focus more on treating patients. By setting predetermined compliance goals for high-cost and high-volume items, contracting based on
consolidation and standardization can be sought. It is vital that both parties participate in ongoing improvement of surgical inventory management, because a great deal of supply cost and revenue is consumed and produced, respectively, within the perioperative area.

Steps toward action:
1. Develop desired metrics.
2. Coordinate with surgery to communicate purpose and desired outcomes.
3. Perform current clinician supply time and high-cost, high-volume supply usage analyses.
4. Identify key participants and schedule ongoing meetings.
5. Receive leadership approval for process, content, and requirements.

Performance indicators/metrics:
- Cost reduction from item consolidation of high-cost and high-volume items
- Clinical staff time spent on supply chain–related tasks
- Number of compliance goals met by both clinical staff and supply chain
- Clinical staff overall program compliance

Project 5: Develop a Model to Support Optimal Product and Vendor Selection

Supporting value principles:
- Determine item, source, contract, and compliance targets for supply chain items of high cost and high volume.
- Decide which external manufacturers and/or distributors the organization wants to work with directly—and remember the 80/20 rule.
- Manage external group purchasing, distribution, and transportation partners/organizations.

Financial impact estimate: Perform continuous product consolidation and standardization with external core and developmental partners that provide the greatest long-term cost benefits, to achieve a 2 percent to 3 percent overall supply chain savings.

Effort: Low
Benefit: Moderate

Cost estimates:
- Development (40 hours) and ongoing management of product consolidation model metrics (3 hours per week, for approximately $8,000–$12,000)
Development of supplier program to manage vendor performance metrics (16 initial hours and then 2 hours per week, for approximately $5,000–$7,500)

**Description:** This project includes establishing a program to analyze the desired supplier relationships (core, developmental, required, and minor), along with their levels of compliance, to help optimize desired future working arrangements. By formally evaluating the manufacturer and/or distributors based on the desired levels of service and their ability to meet agreed on commitments, your organization can be better served in the future. Future product-line consolidation and standardization efforts of the organization will be furthered by strategically aligning the manufacturer relationships and by achieving contractual savings with these suppliers. Similarly, the management of external GPOs, distributors, and transportation partners is necessary for furthering the long-term selection of appropriate partners. Utilization of a model to aid in the ongoing measurement of key areas—such as customer service, automation, and breadth of supply chain line items—will serve as the justifying information needed for future strategic alignment. Additionally, using the same information-based approach in selecting optimal products for the organization will allow your organization’s supply chain to manage only the items most needed, based on statistical and operational analyses.

**Steps toward action:**

1. Develop metrics around how products will be selected for your organization.
2. Define what key characteristics the partner vendor/manufacturer must have.
3. Communicate the vendor program mission and process to the key vendors/manufacturers for their understanding.
4. Receive leadership approval for process, content, and requirements.

**Performance indicators/metrics:**

- Cost reduction from item consolidation of high-cost and high-volume products
- Rate of compliance of vendor/manufacturers with newly implemented vendor program
- Compliance of clinical staff purchasing “optimal items” as determined by item analysis metrics
Project 6: Enhance Supply Chain Customer Communications

Supporting value principles:
- Be the master of the data.
- Increase staff knowledge of supply chain operations.

Financial impact estimate: Achieve a better working relationship and level of customer satisfaction through ongoing communication between clinical representatives and the supply chain. Financial impact will vary greatly by organization, so a conservative estimate is given.

Effort: Low
Benefit: Low

Cost estimates:
- Brainstorming session to launch new communication program (2–4 hours, including preparation time, for approximately $2,000)
- Supply chain operations staff member to manage periodic customer service meetings with clinical staff representatives, ensuring focus by product line (2 hours per week, for approximately $2,500 per year per organization)

Description: For this project, you will create a program of enhanced communication between consuming customers (clinicians) and supporting supply chain areas, which will help with ongoing participation in supply chain initiatives. Communications will be kept productive and meaningful by using statistical information to facilitate communication about levels of documented customer service, product consolidation efforts, or item substitutions caused by outages, etc. Only by owning your own data can this platform of understanding be achieved and the clinical areas better understand the drivers and processes of supply chain operations. Clinical staff buy-in to supply chain efforts can be made more successful by establishing a platform of ongoing communications and by developing interpersonal relationships with supply chain team members.

Steps toward action:
1. Develop supply chain metrics.
2. Coordinate with departments to communicate desired project outcome and purpose.
3. Identify key participants in and schedule ongoing meetings.
4. Receive leadership approval for process, content, and requirements.
5. Evaluate metrics continuously.
Performance indicators/metrics:
- Clinical compliance with supply chain initiatives (minimization of resistance)
- Measures of supply chain customer service (proxy measured by number of item outages, response times, number of killed orders, etc.)

OTHER PROJECTS FOR CONSIDERATION

Project: Implement an Instrument Management System
*Value principles:* Clinical staff should focus on clinical decisions and patient care; develop supply chain goals and objectives by service line for medical/surgical items and pharmaceuticals.

Project: Develop a Contract Compliance Management Strategy
*Value principle:* Determine item, source, contract, and compliance targets for supply chain items of high cost and high volume.

Project: Develop the Clinically Efficient Supply Chain Model
*Value principles:* Clinical staff should focus on clinical decisions and patient care; and develop, standardize, and use supply chain metrics for quality, process, cost, and revenue production.

Project: Develop a Comprehensive Periodic Automatic Reordering Management Strategy
*Value principles:* Clinical staff should focus on clinical decisions and patient care; follow the supply items that bring in revenue; determine item, source, contract, and compliance targets for supply chain items of high cost and high volume; and develop, standardize, and use supply chain metrics for quality, process, cost, and revenue production.

Project: Create Centralized Oversight of Supply Chain Information Management
*Value principle:* Be the master of the data.
Project: Implement a Surgical Department/Operating Room Perpetual Inventory

Value principles: Clinical staff should focus on clinical decisions and patient care; determine item, source, contract, and compliance targets for supply chain items of high cost and high volume; and develop supply chain goals and objectives by service line for medical/surgical items and pharmaceuticals.

SUMMARY

This chapter suggests various supply chain projects that are linked to value principles. Each project should be evaluated and adopted on its own merit, considering the specific situation of your healthcare organization. Projects can have incremental victories along the way to improving supply chain operations and management. The future of supply chain operations and management is discussed in summary fashion in the next chapter.