

Plugging the gaps

How supply chain fortifies critical care, surgical services operations

by Rick Dana Barlow

At core, the fundamental principal behind customer service 101 simply involves providing what he or she needs and/or wants in a timely fashion, preferably on request and right away.

Ramping that up a notch, customer service 201 involves anticipating what he or she needs and/or wants before fulfilling the basics.

If the critical care department were to assess the customer service performance of the supply chain management department it typically might evaluate the group rather harshly in the 101 category and even worse in the higher category.

Bottom line: Few may be making the grade with the fundamentals; even fewer with the extra credit.

Because supply chain management has more of a hands-on and system-linked inventory history with surgical services it tends to fare better even though basic problems may surface.

Ask supply chain management to grade its own customer service performance to the critical care and surgical service areas and it might acknowledge problems but justify the kinks to the frenetic pace and unpredictability of the cardiac/coronary and intensive care units as well as the surgical suites.

Experts and observers point to communication challenges as the overriding culprit between supply chain management and its clinical customers in the ICU and operating room before computer- and process-oriented excuses can be cited.

But more hospitals see the two areas work together. *Healthcare Purchasing News* invited a variety of supply chain, critical and surgical care experts to share some innovative success stories on how supply chain management teamed with critical care and surgical services to identify problems and collaboratively develop solutions.

Space invasion

Deb Laughon, R.N., BSN, MS, DBA, CCRN, Magnet recognition manager, Florida Hospital Celebration, with extensive critical care nursing experience, emphasized the importance of customer service and what that really means.

"Customer service is critical and I agree it is very challenging to find the level of service that we historically saw or think is adequate in the environment of critical care," she said.

Laughon recalled critical care working with supply chain regarding some antiquated monitoring equipment in an intensive care unit. Critical care cited safety concerns due to the accuracy of pulse oximetry readings.

"Once the administration was aware of the problem, the vendor was brought in quickly to validate the accuracy and to pilot new equipment," she said. "This immediate response wouldn't have happened without a strong vendor/organization partnership. The intervention addressed the staff's concern promptly and identified an equipment update to sustain the level of readings necessary to support the patient's care needs. We are now obtaining quotes and working out a gradual equipment exchange to ensure that we are able to support the capital needs and provide the appropriate equipment for the patient in our ICU."

For Mark Whitman, director, supply chain Diagnostix Services, Amerinet Inc., it's all about space.

"Given space constraints, many critical care areas attempt to minimize the amount of supplies that are stored within their areas," he noted. "The overall reduction of inventory is also cited as a reason for doing this. This, however, creates a problem with the management of the supply chain. As a result, the supply chain function is forced to service this area on a daily - or even more frequent basis - which requires a significant amount of labor.

"The supply chain and critical care areas can work with each other on a process to reduce the frequency of PAR level replenishment to every other day - or even less," Whitman continued. "Through a coordinated review of the actual usage patterns, the required levels can be established so that the replenishment frequency can be reduced. The reduced labor costs typically



Deb Laughon

far outweigh the impact of any incremental inventory required."

But Gina Pugliese, R.N., MS, vice president, Premier Safety Institute and adjunct faculty, University of Illinois School of Public Health, pointed to deeper collaboration between clinical- and supply chain-driven objectives.

"An ongoing challenge is keeping up with the rapid publication of evidence-based practices to guide both clinical decision making and product selection to assure the highest quality outcomes for the patient in a cost effective manner," Pugliese indicated. "Clinicians must be aware of new practices and products that may contribute to patient safety and quality care, including reducing risks of infection. Clinicians will need to collaborate with supply chain management to review available products, solutions and related clinical evidence during the process of considering them for adoption. It is estimated that it takes more than 10 years to fully implement evidence-based practices into patient care."



Gina Pugliese

Valuing value analysis

Dee Donatelli, vice president, Performance Services, VHA Inc., recalled how one facility tapped into an effective value analysis process to acquire new continuous venous-to-venous hemodialysis (CVVHD) machines for the ICU because the current units were 20 years old and consistently breaking down.

"They enlisted the nursing staff, intensivists, nephrologists, purchasing and biomed to evaluate several companies and determine the best solutions," she recalled. "The clinical coordinator in the ICU arranged the vendor presentations, all [the key] individuals participated in the meetings by learning about the various machines, evaluating them against patient needs and selecting the machine the organization would purchase."



Dee Donatelli

Yet Donatelli urged caution about calling anything value analysis if it doesn't meet five criteria: The process is documented, communicated to everyone who is properly trained on the process and also follows the process, which can be audited.

Data capture and analysis can erect roadblocks, particularly in surgical services, according to ReAnna Dunn, executive director, clinical supply chain, MedAssets Inc. Dunn recalled one health system's inability to capture and benchmark operating room data, including procedural length, products used and trays opened, room turnover time, surgical events.

"This health system wanted to benchmark procedural data to assist with OR time management, reduction in inventory and products used, reduction in overall procedural costs, reduction in sentinel events and improved patient outcomes," she noted. "Unfortunately, each facility in the health system had been benchmarking data differently, and the health system was unable to disseminate that data."

So the health system closed the gap between disparate facilities, according to Dunn. The vice president and executive director of sup-

ply chain and the directors of perioperative and surgical services began meeting quarterly to discuss how to rework its data collection and benchmarking. The focus of the meetings included everything from determining protocols for data collection to determining benchmarks to choosing a technology provider that could help the health system standardize its data collection and protocols system-wide.

Remember your roles

However, perception can be brutal, according to Joe Colonna, vice president, supply chain, Piedmont Healthcare, Atlanta.

"Our biggest customer service issue was, and still is in some places, that supply chain was perceived as transactional in nature," he said. "In other words, we placed orders, checked prices, delivered items, etc. Over the last 18 months we have worked hard with the executive team, supply chain staff and our customers to change that perception. We realized that if we were going to move to a



Joe Colonna

higher level of responsiveness and customer service we would have to become more strategic in nature.

"If you become more strategic, then you start to be considered an asset to your customers and they will begin to plug you into their long-term planning," Colonna continued. "Over the last year and a half, we have begun the move to becoming a strategic partner to our customers. This transition, has driven our ability to provide better planning for future initiatives and allow us to move to the higher levels of customer participation in cost improvement initiatives."

Colonna insisted that the "most innovative thinking revolves around creating an environment where the customer drives the process." He cited his team's work with the electrophysiology laboratory. "We are making great strides in the EP lab around product utilization," he noted. "This is a physician-driven initiative and requires the physicians to self-manage, on a daily basis, the amount of products they use from certain suppliers. Supply chain acts as a facilitator and contract manager, but the day-to-day success requires physician and EP staff leadership." **HPN**

Critical strategies and tactics for effective relationships

Managing successful collaborations and partnerships between supply chain, critical care and surgical services may hinge on open communication and fluid dialogue but there's more. Here are 45 suggestions.

- Maintain an open attitude about new products and technologies and learn about their value before making judgments.
 - Perform a search of competitive vendors and provide contact information for the corresponding representatives so the clinicians can meet and learn about the products and technologies.
 - Visit the units and observe practice to learn about the challenges of the clinical setting.
 - Teach clinical staff about the requisition process/contracts/distribution/etc. so they can understand supply chain challenges and provide possible solutions to those challenges and their own supply chain needs.
 - Work with vendors on pricing, contracting, leasing, etc., so the clinical staff can focus on education, training and implementation.
- Dee Donatelli, VHA Inc.**
- Remember that the staff in these areas are walking a razor's edge every day between the financial needs of the organizations and the needs of the physicians... become an asset.
 - Be open to other ways to get to the same end point. Whenever possible, allow the end users to develop the processes that result in the best outcomes – both clinically and financially.
 - One problem with the [end users developing processes] is that occasionally, in an effort to help, physician and/or clinical leaders will get ahead of your strategy with suppliers and their peers. Have regular meetings and gut checks [but] still expect some unexpected "help."
 - Strive to send the message that you are trying to get the right thing and the right price. I often say in meetings that we are not doing it on the "cheap" [but] we are doing it on the "right."
 - Check your ego at the door with your staff, your customers and your suppliers.
- Joe Colonna, Piedmont Healthcare**
- Make periodic checks to ensure needs are met and to offer product updates.
 - Educate one another in the areas of new products and research...with financial support or information sharing.
 - Partner to solve problems. When there is an open relationship both parties are more likely to share challenges and work collaboratively to develop solutions.
- Deb Laughon, R.N., Florida Hospital Celebration**
- Develop service line-oriented clinical value analysis teams. This approach to utilization of supplies gets everyone involved – physicians, nurses and materials managers – to discuss the cost and clinical outcome differences to impact decisions.
 - Understand the importance of adherence to clinical pathways and protocols. The benefit is being able to better measure uniformity of care and drive quality.
 - Calculate the financial impact of order sets.
 - Track variance from order sets and protocols in conjunction with clinical teams to understand the impact on supply utilization and cost.
- Nick Sears, M.D., MedAssets**
- Communication – Supply chain professionals should continue to work hand-in-hand with the critical care and surgical services teams on purchasing initiatives within a health system/facility. Those facilities that do have interactive groups tend to make purchasing decisions that are, on the whole, in the best interest of all parties involved. Even when tougher decisions are made, those communicative teams have an easier time accepting any resulting changes.
 - Education – Supply chain professionals need to be educated about the products and services offered in these units of a hospital. Education can help supply chain teams look beyond cost at the true patient and clinician impact of supply chain decisions.

See **STRATEGIES**, next page

PRODUCTS & SERVICES

STRATEGIES from previous page

- **Involvement** – For those facilities with advisory committees in the critical care and surgical areas, the supply chain team should be involved and represented. Committees are usually the places where challenges and concerns are brought to light, and having a supply chain representative as part of those groups can provide valuable feedback up through the higher ranks of supply chain in an organization.
- **Patient Care** – Supply chain professionals should realize that their decisions more often than not impact patient care in the critical care and surgical areas of a facility. Decisions should be made with that in mind; just because there is a cost/labor/supplies reduction as a result of a supply chain initiative, that doesn't mean that patient care was impacted just as positively.
- **Teamwork** – Supply chain, critical care and surgical services are all part of the same healthcare organization. Their ultimate goals should all be aligned to provide the best care for patients at the best cost for care possible.

– **ReAnna Dunn, MedAssets**

The key to achieving success in supply chain management efforts in the critical care and surgical services areas is to make sure all parties have bought in to the solutions that are being pursued and implemented. This is extremely important in for surgical services, but many of these areas also apply to critical care.

- **Structure of coordination between supply chain and surgical services** – Often these two organizations are set up in an adversarial relationship, and the result is that they do not agree on an overall approach on how the supply chain should be managed. A clear communications and accountability structure that links the senior leadership of these organizations together can be very effective. Probably the best way to approach it in this instance is a "process improvement team" so that both sides can voice their opinions about specific issues. This should improve buy-in and implementation success.
- **Product standardization** – Both critical care and surgical services should be part of a comprehensive value analysis process at the facility. This is another opportunity for collaboration between supply chain management and the departments that it services. Focus on reduction in the number of overall products and reduced costs will improve the ability to manage these products.
- **Surgical supply coordinator** – For surgery, it is especially important that there is some focused expertise and resources that will guide the supply chain process for this area. The reporting relationship of this position is not as critical as the cooperation that will be fostered between the supply chain function and surgical services. This increased focus will ensure that efficient processes are established and followed.
- **Minimize supply locations and optimize turnover** – Many surgical areas have supplies in a central location, but also in procedure rooms, hallways, specialty carts and various other areas. The management of these supplies often involves a combination of clinical and operational staff. The result of this is often very challenging to manage because supplies are everywhere and there is little accountability in the process. There is often excessive amount of inventory. The overall inventory management process should be evaluated with the intention of reducing the duplication and handling of inventory.

- **Case cart process** – Many facilities have some kind of case cart process, but the process used can vary widely. These processes should be reviewed to reduce excessive handling and waste. Supply preference lists should be managed in such a way to reduce the need for restocking items, and minimize the need for clinician involvement in the supply picking process.

– **Mark Whitman, Amerinet**

- **Commit to establishing an evidence-based, data-driven process with active engagement of clinical leaders and front-line staff.**
- **Assist in the identification of new or emerging products that have evidence of efficacy in reducing risks to patients or improving the quality or safety of care and provide fact-based feedback.**
- **Assist in establishing an effective system to track shortages and recalls on all clinical products.**
- **Collaborate in the development of evaluation criteria for product trials.**
- **Help secure commitment from all clinical areas to follow an established process for the product trials/evaluations, and to develop a method to ensure consensus of decisions with a process for appeals of a decision on a product.**

– **Gina Pugliese, R.N., Premier**

- **[Offer] open, honest communication.** Don't tell people what they want to hear in order to make a situation seem acceptable. There are tactful ways to relay your needs/wants without bullying or insulting someone.
- **Make an effort to understand the other department's perspective.** There are often strained communications due to looking at only one side of a circumstance/situation. Each party should discuss their goals for the current project. Knowing goals can help each party to work together to develop a plan of action.
- **Be patient.** Whatever is currently being addressed did not happen overnight, therefore it will not be remedied overnight.
- **Be persistent.** Don't give up on what you are targeting. We all have more than one project/task that we are working on each day. Develop timelines and methods to remind folks of the action items for which they are responsible.
- **Provide recognition.** Show appreciation for the work that everyone does to contribute to achieving the goal. Go out of your way to stop by their office to say thank you.

– **Cathy Richards, R.N., MSN, implementation manager, VHA Inc.**

- **Develop a CQVA or VAT program.**
- **Involve both departments on the teams.**
- **Educate both groups on "clinical quality" and "value analysis."**
- **Develop and work off of, team building tools and project planning tools.**
- **Add subject matter experts or adjunct team members as needed.**
- **Have physician involvement.**
- **Require administrative support.**
- **Celebrate and advertise the successes.**

– **Germaine Bair, R.N., MSN, implementation manager, VHA Inc.**

Linking the supply chain within critical care

Pros offer 30 strategies and tactics to keep critical communication lines open, inventory lines loaded

Stockouts in the critical care nursing units can be downright dangerous and life-threatening. Understanding that can be easy. Acting on it can be more challenging.

Healthcare Purchasing News has interviewed scores of clinical and operational experts, and for the last seven years moderated educational panel discussions at the annual National Teaching Institute & Critical Care Exposition of the American Association of Critical-Care Nurses about bridging the gap between the two areas.

Here's what the experts advised as surefire ways to achieve success.

1. The critical care nurse manager should get to know the materials manager who orders supplies for the ICU. They should discuss needs and priorities.
2. If possible, assign a "stocker" to each individual unit. Each individual unit then should get to know its dedicated stocker and make them part of the unit's activities, including lunch, special days.
3. Materials management should dedicate someone to be on call for weekend issues.
4. If the ICU still works on an exchange cart system, talk about turning. Critical care nurses may be doing patient baths at the time materials managers want to change carts. That's a bad time to be changing carts.
5. Be sure to discuss materials management's practices, in terms of projects and product standardization. Be open to differing priorities. You may not always get exactly the product you want but through training is a particular product useful and does it work?
6. Actively participate in the value analysis processes. If you're not part of that process you're part of problem.
7. Establish a collaborative working group to compare costs and benefits of products, particularly if that's not part of the value analysis committee.
8. The materials manager should get to know the nurse managers – where they keep supplies, what their issues are and material priorities. Be open to differing opinions.
9. Empower the front line critical care nurses to make suggestions for setting PAR levels. Some things absolutely cannot run out. Others must continue to remain in PAR even if it hasn't been used in a long time.
10. Look for opportunities to engage them in groups working on cross-functional teams. If you're having problems in a particular unit during a particular shift you may need to attend a staff meeting or work with the ICU's ordering clerk.
11. Communication between the two areas must be succinct, open and frequent. Both sides should be sending information and listening – seeking their input or opinions.
12. Use bar code scanners or automated supply systems to control PAR levels and ensure stock availability. Manual PAR level supply management is a major contributor to nursing dissatisfaction with materials management and still exists in many hospitals.
13. List supplies by common names and not by the manufacturer's name.
14. Materials managers should go on rounds with critical care staff members for feedback. At the very least they should visit the ICU because the critical care nurses would welcome the opportunity to show them around.
15. PAR levels should be closely monitored by materials management, with PAR levels set higher than conventional nursing units to accommodate peaks in critical care census.
16. Rely on emergency department supplies as backup due to ER's usage of similar critical care products. These departments are generally adjacently located.
17. ICU needs help with inventory management systems that produce user-friendly usage and cost reports.
18. Materials managers should consult with the clinical experts for product selection and support. Critical care nurses are very concerned about quality and durability, as well as the latest and greatest.
19. Critical care nurses actively seek warranty information and support – how to plan for equipment support, useful life, repair costs and overall management within the needed time frames.
20. Keep resource material close to the respective equipment, particularly if the equipment is used infrequently. Quick reference guides may be helpful.
21. Create an equipment pool for cleaning and distribution of equipment.
22. Materials management should develop a process to support crisis issues (such as not enough supplies, essential equipment breakdown) and share this information (spare parts or backup equipment are available) with critical care nurses.
23. Strategies and tactics used in other industries, such as "lean manufacturing," are fair game for implementing in critical care areas to organize supply rooms. Make sure a critical care nurse leads the charge.
24. Don't hesitate to approach other internal departments, such as the pharmacy or surgical services, for supply management advice and tips.
25. Check with your group purchasing organization (GPO) to see if it offers supply contracting services, be it consulting or third-party management, to direct, drive or influence process changes.
26. Work with materials management to enlist your distributor to deliver products on a just-in-time basis, organized by care unit or even supply location, if possible.
27. Organize supply carts and/or individual supply bins on carts by type of care or specialty.
28. Broach the issue from a patient care perspective or standpoint, rather than by a supply availability or expense management perspective or standpoint so you set the tone right away. Nurses should go beyond supply shortage complaints; materials managers should go beyond line-by-line budget issues and usage reports.
29. Recruit your vendor(s) – manufacturers and distributors – as well as your GPO(s) to provide you with accurate and relevant clinical data and cost-in-use data that apply to real-life situations.
30. Channel the creativity used to locate and hoard supplies without apparent detection into solving the supply deficit problem.