Running low on pens or paper clips is rarely a big deal, but exhausting a supply of catheters or sutures could be calamitous. Surgical procedures performed at Rockford Ambulatory Surgery Center rely on storage shelves filled with the various instruments, equipment and small devices necessary to outfit our physicians with the proper medical tools every day. “These products and services are part of the surgery center’s backbone and an incredibly important component of its daily activities,” says Barb Johnson, materials coordinator.

Universal precautions, conscientious hand hygiene and current environmental cleaning procedures prevent communicable diseases, such as Methicillin-resistant Staphylococcus aureus (MRSA), from spreading to patients, visitors and health care staff. Surveillance, research and communication are the cornerstones of a rigorous prevention regime at Rockford Ambulatory Surgery Center.

“Health care-associated infections cause needless suffering and expense,” says Mary Beth Barich, RN, director of perioperative services. “Surgical patients with open wounds are very much at risk, and we have to protect them.”

The Accreditation Association for Ambulatory Health Care (AAAHC) once again granted three-year accreditation to Rockford Ambulatory Surgery Center. “The accreditation program sets quality-of-care standards for surgery centers and reviews participating centers’ programs and procedures to ensure that they conform to those standards,” says Dr. Steve Gunderson, CEO and medical director. “Accreditation is granted only to facilities that have voluntarily committed to..."
Maximum support
Materials management comprises the systems, functions and tasks for buying, storing, processing and delivering supplies to their point of use. Fulfilling backorders, arranging emergency deliveries and scheduling equipment repairs fall within the scope of the Materials Management Department.

A consistent, cost-effective medical supply chain empowers user departments to achieve their own goals and objectives. Because the supply system extends to manufacturers, distributors and vendors, smoothly conducted materials management requires planning and leadership.

“Materials management affects the surgery center’s operating budget, quality of outpatient service and staff satisfaction,” Barb says.

Taking stock
As coordinator, Barb supervises the quarterly physical inventory of materials.

Disposing of and replacing outdated and recalled stock with sterile and appropriate substitutes are among the department’s key responsibilities. Occasionally, recalls of medical products by manufacturers or the FDA occur. The surgery center may receive recall notifications from supply vendors. The department investigates whether the recalled items are in the center’s inventory.

Regular dealings with sales representatives on pricing and new product trial purchases are integral to Barb’s job as well.

“Materials management affects the surgery center’s operating budget, quality of outpatient service and staff satisfaction.”

“We always try to maximize outcomes while conserving resources where we can, especially when it comes to physician-requested items,” she says. “That means seeking the best prices for materials and minimizing the extra charges above and beyond the prices set for a surgical procedure.”

Savings in numbers
Like many successful businesses, the surgery center leverages the buying power of volume purchases through its affiliation with group purchasing organizations. Other tools exist to help maintain a fully stocked inventory and be prepared for the unexpected. Just-in-time inventory management is a popular ordering technique that reduces space allotted to storage and capital outlays tied up in inventory. Consignment is another common technique for controlling costs. Consignment products owned by the vendor, such as intraocular lenses or orthopedic screw sets, are housed at the center at no charge until they are used.

Clinical standardization goes hand-in-hand with these methods.

“Standardization of equipment and supplies not only drives product costs down but also decreases the volume of inventory kept on hand,” Barb says.

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\begin{array}{|c|c|}
\hline
\text{Frequent supplies/items ordered; approximate use per month:} & \\
\hline
\text{Eye Packs (cataract surgery):} & 180 \\
\text{Breathing Circuits (anesthesia):} & 80 \\
\text{Suction Tubing and Canister (anesthesia):} & 80 \\
\text{Bair Hugger Warming Blankets:} & 120 \\
\text{Surgical Skin Preps:} & 120 \\
\text{Sterile Towels (pack of 4):} & 125 \\
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The Supply Chain Starts Here
Since 2004, Barb Johnson has been the go-to person for medical supply acquisition and inventory management. A surgical technologist by training, Barb started her career in the operating room. The transition from scrub tech to supply guru came gradually.

Upon graduation from the SwedishAmerican School of Surgical Technology in 1984, the future materials coordinator piloted her training as a member of the hospital’s surgical care team. She later was promoted to surgical specialty area supervisor, a post she held until 1994.

“I eventually missed the interaction, the many different personalities and moods in the OR,” Barb recalls. “The surgery center offered an open door to practice my profession.”

Not long afterward, it opened the door to materials management. Barb learned many of the accepted methods by occasionally assisting the materials coordinator. That experience prepared her for her current position when the previous occupant retired.

Membership on the Infection Control and Quality Assurance/Improvement committees accompanied the move.

“Materials management is a natural fit with monitoring potential infection hazards in the building since it directly or indirectly encompasses appropriate usage and disposal of supplies and equipment,” Barb says.

All equipment and surgical instruments come with Manufacturers’ Instruction for Use documents. Barb maintains large files of these documents in order to show accreditation surveyors that the surgery center follows current manufacturers’ instructions when cleaning, decontaminating and sterilizing clinical equipment and reusable surgical instruments.

Barb sees herself as continually growing into the coordinator’s role.

“I’m able to learn something new every day and overcome challenges,” she says. “There are opportunities to constantly improve my skills, such as working with group purchasing organizations and strengthening pricing negotiations with salespeople. I enjoy the communication with staff physicians on the purchasing level, gaining knowledge of the medical and business sides of the equation to balance preference and economy.”

Barb Johnson, an 18-year veteran of the surgery center and former surgical tech, has spent the bulk of her career at RASC.
The center’s Medical Advisory Committee has approved new guidelines concerning patients with a known history of MRSA who do not have an active MRSA infection.

“Our previous policy with respect to MRSA was to require patients to have two negative nasal cultures 48 to 72 hours apart and within a month prior to the day of surgery,” Mary Beth explains. “If a patient was unable to obtain both cultures within the specified time frame because of scheduling conflicts or other reasons, we would reschedule the procedure.”

Under the new guidelines, the center will accept patients for surgery when circumstances do not allow MRSA cultures to be done; however, the entire perioperative experience for the patient will adhere to contact precautions. Furthermore, these cases must be reviewed by the anesthesia care team and a progress note placed in the patient’s chart determining that it is acceptable to proceed. A positive nasal swab result still would delay the surgery until the patient is decolonized and could produce two negative cultures.

“This isn’t a huge change,” Mary Beth notes, “but it eliminates last-minute cancellations.” Contact precautions reduce the risk of MRSA transmission by placing special emphasis on gloving, gowns, patient transport, patient care instruments, and environmental measures. Staff members are to follow universal precautions regarding personal protective equipment and pay closer attention to hand hygiene. The patient should be scheduled for the last case of the day whenever possible.

“This reminds the staff to properly remove disposable supplies, perform thorough cleaning and decontamination procedures as would be the case for any patient, and not rush over to the next patient without removing their gloves and washing their hands,” Mary Beth says.

Who Do You Depend On? A good right-hand woman, of course.

Any department head can benefit from a good right hand. Surgical technologist Kathy Welborn stepped into the number-two slot about a year ago. She works alongside Barb Johnson two days a week in ensuring that supplies are in the right place at the right time and in the right quantity.

“Kathy contributes a strong sense of what is going on in the operating room,” Barb observes. The balancing act between the familiar hands-on environment in the OR and the occasionally unknown territory in making sure surgeons’ supply needs are met gives her a much-appreciated infusion of excitement.

“This involves a totally different skill set from what I do as a surgical tech,” Kathy says. “It’s like adding variety to a menu or workout.”

One day a week, Kathy places orders for the facility. The bulk of ordering occurs over the Internet. Phone orders are made for some items. Keeping physician preference cards up to date is another key responsibility.

“Accurate physician preference cards are essential for fostering great relationships between the staff and physicians,” she says. “The surgery center respects the surgeons’ time and wants them to be able to work as efficiently as possible.”

Kathy oversees the reprocessing of single-use devices for reuse. That involves monitoring the back-and-forth flow of used, open or date-expired devices sent to a registered third-party medical device reprocessor. Many durable orthopedic devices are reprocessable, as are devices used in minimally invasive surgery.

Trained in all facets of materials management, Kathy has a hand in inventories. She also carries out department invoicing and fills in when Barb is away.

Kathy studied at Swedish American’s surgical tech program in 1993. She joined the surgery center in 2004, after 10 years at OSF Saint Anthony Medical Center, eight of which were spent on the heart team.

“I was always fascinated by the medical field,” she says. “RASC is a busy, enjoyable place to work. As a parent, I’ve been impressed by how family-friendly the surgery center is.”

Surgical technologist Kathy Welborn divides her time between the OR and materials management.
Hernia Surgery

Hernia repair is among the 10 most frequently performed procedures at Rockford Ambulatory Surgery Center. A hernia forms when the abdominal wall muscle weakens, bulges or tears. Pressure in the abdomen tends to push the abdominal organs and surrounding tissue through the defect. This creates the “bulge” that characterizes most hernias.

Hernias can be present as a congenital defect or develop at any age from an acute or repetitive muscle stress or strain. Hernias affect both men and women, though overall they are eight to 20 times more common in men. Specifically, hernias in the groin area between the abdomen and the thigh (inguinal hernia) are more common in men, while femoral (top of the thigh) hernias are more common in women.

About 75 percent of all hernias are classified as inguinal hernias. Hernias can occur in different areas, such as the navel (umbilical hernia), site of a surgical incision, upper-middle abdomen and where the esophagus joins the stomach (hiatal hernia).

Surgery returns the protruding organ to its original position and prevents the hernia from becoming “strangulated” (pinched so that the blood supply is cut off). Without surgery, the hernia will not heal. The pain and size of the hernia usually increases over time.

Highly experienced general surgeons on staff who have recently performed hernia repairs at the surgery center include:

Jeffrey Barteau, MD  Michael Michelotti, MD
Stephen Bradley, MD  Roger Miller, MD
William Cowden, MD  Lawrence Prabhakar, MD
Leslie Edgcomb, MD  Jeffrey Schauer, MD
Donald McCanse, MD  Marc Whitman, MD
Michael McCarthy, MD  Mark Zarnke, MD

The vast majority of inguinal, femoral and umbilical hernias can be repaired using the standard open procedure under local or regional anesthesia. An incision is made over the hernia site, the hernia is moved back into the abdominal cavity, and the muscles around the hernia are sewn together. This will repair the hole or weakness.

If the hernia is large or in the groin, a piece of mesh is inserted safely and securely beneath the hernia defect. Two out of three hernia procedures at the surgery center employ surgical mesh. When mesh is used, the muscle is not sewn together.

Pump It Up

Electrical system fix resolves area of concern for IDPH.

The continuity of electrical power is vital for patients’ lives and safety. The surgery center recently upgraded our essential emergency electrical system to segregate circuits that support the critical, life safety and other equipment areas of the facility. Dedicating power to each of these three branches ensures that interruptions to crucial systems and machines are kept to less than a maximum legislated duration.

Power is automatically transferred from the main utility supply to the alternate power source whenever the main utility supply is interrupted. The alternate power source includes enough onsite generation to power the full load of the essential electrical system.

The critical branch enables task illumination for safe completion of procedures in preoperative, postoperative and operating rooms. Anesthesia machines and mechanical ventilators run off of the critical branch. So do the nurse call system and telephones.

Life safety circuits direct power to exit signs, fire alarms, medical gas alarms and emergency communication systems. Medical central suction machines, smoke control system and ventilation hoods are under the “other equipment” category.

The upgrade was in response to a Medicare recertification survey conducted by the Illinois Department of Public Health. Compliance with health and safety codes is a prerequisite for Medicare recertification. All ambulatory surgery centers must meet requirements for a safe, sanitary and appropriate environment.