Sustainability in the Operating Room

Sustainability

The benefits of sustainability are too important to ignore.

March 10, 2015

Lee Ann Jarousse

Hospital sustainability programs reduce costs and enhance the quality of patient care. However, given the long list of priorities that hospitals must tackle, sustainability too often falls by the wayside. Today, the benefits of sustainability are too important to ignore.

The operating room warrants a close look. It’s often the largest generator of revenue, as well as the largest consumer of supply costs and the biggest generator of waste. “Sustainability in the OR is the key to staying in business,” says John Abenstein, M.D., associate professor of anesthesiology at the Mayo Clinic, Rochester, Minn., and president of the American Society of Anesthesiologists. “It provides a considerable opportunity to reduce expenditures through better resource utilization and reduction in waste.”

Kate Huncke, M.D., vice chair of the department of anesthesia at NYU Langone Medical Center, New York City, says, “the waste generated from the OR is way out of proportion to the footprint it occupies within the hospital. There’s significant opportunity for improvement.”

Sustainability in the OR is a multipronged initiative that can include, but is not limited to, recycling and reprocessing equipment; reducing prescription drug waste; properly disposing of medical waste; and choosing and managing anesthetics to reduce the overall amount of inhalants used and dispersed into the atmosphere.

“Sustainability in the OR involves changing habits in a culture that needs to be so exacting,” says Susan Ryan, M.D., clinical professor of anesthesiology at UCSF Medical Center, San Francisco. Surgeons, anesthesiologists and perioperative nurses are cautious, Abenstein acknowledges. “There is a fear of the unknown, of anything that can put the patient at risk.”

Lauren Berkow, M.D., associate chief of the division of neuroanesthesia at Johns Hopkins Health System, Baltimore, says educating physicians on the financial and environmental impacts of OR sustainability will go a long way toward achieving buy-in.

Her organization saved more than $5 million on an OR reprocessing program between 2010 and 2013. “It’s important to show results to build on your success,” Berkow adds.

Engaging physicians early is key, says Bob Matthews, assistant vice president of materials management and support services, Albany (N.Y.) Medical Center. “It’s important to get to the overall value proposition when it comes to making decisions on supplies.”

7 Benefits of Sustainability

Sustainability programs offer numerous benefits to hospitals and health systems. They encompass a broad range of
opportunities within hospitals and health systems to become good environmental stewards. The benefits of sustainability include:

1. Improving brand image, building trust and building reputation
2. Saving money
3. Increasing employeesatisfaction, engagement and retention
4. Fostering a good public image
5. Managing risk and regulatory compliance
6. Improvingoperations
7. Demonstrating corporate socialresponsibility

Source: “Environmental Sustainability in Hospitals: The Value of Efficiency,” May 2014

---

**Getting Started**

Whether developing a systemwide sustainability program or a targeted program for the operating room, these key steps are crucial to getting started.

1 | Make the commitment. Determine the organization’s goals and objectives in pursuing environmental sustainability.

2 | Create a culture for supporting environmental sustainability. Develop a structure to integrate sustainability into the organization’s structure.

3 | Support and finance environmental sustainability. Sustainability requires executive leadership and support. Some sustainability initiatives may require significant up-front investment, although many have quick return on investment periods.

4 | Set goals and measure, report and evaluate change. Establish a baseline measure for the sustainability initiative, followed by realistic goals.

5 | Celebrate and share successes. Sharing and celebrating successes helps to renew focus on sustainability initiatives and also serve as an important public relations tool.

6 | Continue to assess and identify new opportunities. Continue to assess the organization’s performance on sustainability initiatives and look for ways to expand the organization’s efforts. The opportunities for sustainability improvement are many.

---

**Key Steps in Greening the OR**
Greening the operating room is just one subset of potential hospital sustainability initiatives, but it has high potential for cost-reduction and environmental impact. Key initiatives involve changes in the purchasing and storage of OR equipment and reducing regulated medical waste through proper disposal, reuse and recycling. Below is a list of best practices in OR sustainability.

**Dedicate a Green Team focused on sustainability in the operating room.** Create a multidisciplinary team to oversee sustainability initiatives in the OR. Participants may include representatives from nursing, materials management, anesthesiology, environmental services and surgery, among others.

**Educate OR staff on the benefits of sustainability.** Spell out to operating room staff the importance of sustainability. Getting buy-in up front will help to ensure the program’s success.

**Tackle waste.** Conduct a waste audit to help identify ways to streamline medical waste disposal. Preventing items from unnecessarily being placed in the regulated medical waste stream, which is more costly to dispose, can result in significant savings.

**Purchase reprocessed medical devices.** Partner with an approved third-party processor to purchase reprocessed medical devices, and reprocess eligible devices.

**Secure OR fluid management systems.** Fluid management systems capture liquid waste in reusable containers during surgery and direct the waste directly to the sewer. These systems help to reduce regulated medical waste disposal.

**Talk textiles.** Use of reusable surgical gowns and other textiles within the OR reduces the volume of waste disposal.

**Manage the flow of gas.** Inhaled anesthetics produce greenhouse gas emissions. Examine the use of inhaled anesthetics and use products with a lower environmental impact when clinically appropriate.

**Recycle.** Assess products used in the OR to determine whether they can be recycled. Place a recycling bin in the OR for recyclable material such as plastics, glass and paper.

**Reduce blue wrap use.** Use reusable rigid containers for OR kits when possible to reduce the need for blue wrap, and cut back on the resulting disposal costs.

**Purchase reusable sharps containers.** Reusable sharps containers eliminate the need for the continued purchase of disposable sharps containers and reduce regulated medical waste.

**Reformulate OR kits.** Reassess OR kits for items that often go unused and placed into the medical waste stream. This process can reduce supply costs and medical waste disposal costs.

**Implement HVAC setback mechanism.** Heating, ventilation and air conditioning setback in the OR is an energy-saving strategy, reducing the amount of fresh air flow to the OR when not in use.