



The Greening the Operating Room Initiative Backgrounder

Hospitals are energy and resource intensive, and operating rooms are the largest users of that energy. They are also a major consumer of resources, using as much as 56 percent of a hospital's total budget. In addition, operating rooms produce a disproportional amount of waste—between 20 and 30 percent of a hospital's total waste volume.

Much of the nation's operating room waste is disposed of as regulated medical waste, which costs between 10 and 15 times more in disposal fees than regular waste. In addition, most operating room supplies are thrown out after just one use or even after being opened but not used, even though re-use may be an option.

At the same time, operating rooms are a large source of revenue, accounting for up to 42 percent of a hospital's total revenue. Thus, running a more efficient and less wasteful operating room can boost the bottom line. To help hospitals run more efficient, environmentally-friendly operating rooms, Practice Greenhealth introduced the Greening the OR Initiative, which helps hospitals reduce environmental impact, reduce costs, increase efficiency and improve worker and patient safety.

Through analyzing data, evaluating the latest research, gathering best practices, and listening to our members, Practice Greenhealth has compiled a range of successful interventions for greener, more efficient operating rooms. These include:

- Reduction and segregation of regulated medical waste
- Reusable canister fluid management systems
- Single-use device reprocessing
- OR kit reformulation
- Reusable surgical gowns and basins
- Energy-efficient LED lighting HVAC Setback Systems
- Medical plastics recycling
- Reusable hard cases for surgical instruments

Council for Environmentally Responsible Surgeons

Increasingly, physicians are recognizing the link between environmental choices and their impact on health, costs and staff and patient safety. The Council for Environmentally Responsible Surgery (CERS) is a physician organization that operates in conjunction with the Greening the OR Initiative. CERS assists operating room physicians in sharing best practices from their own facilities through peer-to-peer learning, networking and presenting at medical conferences.

Endorsing hospitals

Since the launch of the Greening the OR Initiative in April of 2010, more than 160 hospitals have signed on as participants in the initiative. Participating hospitals work with Practice Greenhealth to continue to define additional best practices as they are piloted and implemented at various cooperating institutions.

Success Stories

MetroWest Medical Center is a 269-bed regional health care system including two hospitals, and an outpatient diagnostic imaging and rehabilitation center. MWMC is the largest health care system between Worcester and Boston, Massachusetts and has 16 operating rooms taking up 17,956 square feet. After attending the Greening the OR kickoff symposium in April 2010, MetroWest became interested in the concept of reusable sterilization containers for surgical instrumentation. After framing the benefits for leadership, \$75,000 in capital was allocated for the purchase of reusable hard cases. More than 200 containers were purchased with the allocated dollar amount. Projections for savings from the program included a five-year savings of \$84,000 and a 10-year savings of \$233,000.

Inova Fairfax Hospital is a 900-bed Trauma 1 community hospital located in Falls Church, Virginia. The hospital is part of the Inova Health System, a large integrated delivery network of five hospitals with 1,700 beds and 16,000 employees. Since 2007, Inova has worked on continuous improvement in its sustainability efforts, including creating a position dedicated to sustainability, starting a system-wide environmental committee, and forming “green teams.” Through the implementation of practices that focus on waste minimization and proper segregation of waste, along with green practices such as Environmentally Preferable Purchasing (EPP), recycling, and Health Information Technology (HIT), Inova Health System reduced more than one million pounds of regulated medical waste in one year, saving over \$200,000.

Metro Health Hospital is a 208-bed hospital located in Wyoming, Michigan. It serves the Grand Rapids region and surrounding areas and has 10 operating rooms for a total OR suite footprint of 8,890 square feet. After attending the Greening the OR symposium in April of 2010, MetroWest became interested in the concept of reusable sterilization containers for surgical instrumentation. After framing the benefits for leadership, \$75,000 dollars in capital was allocated for the purchase of reusable hard cases. 211 containers were purchased with the allocated dollar amount. Projections for savings from the program included a 5-year savings of \$84,000 and a 10-year savings of \$233,000.

A Suite of Practical Tools

Implementation modules. One of the key deliverables from the Greening the OR Initiative is a guidance document that sets out a data-driven strategy and roadmap for successfully greening individual operating rooms. The “implementation modules” from this guidance document describe the initial interventions that provide the greatest benefit and reduce costs the most.

Case studies. Practice Greenhealth has already published a series of in-depth case studies detailing various sustainability initiatives at eight different facilities across the country. These are available at www.greeningtheor.org.

Virtual Green OR. In conjunction with Digitel and Greening the OR sponsors, Practice Greenhealth has created an online, experiential “virtual tour” of the ideal green operating room. Participants can learn about the individual sustainable interventions and technologies, as well as participate in online collaboration, webinars and training, all while inside the Virtual Green OR.

Webinars. Since 2010, Practice Greenhealth has hosted 14 webinars documenting various Greening the OR initiatives and interventions, all with relevant research and data as well as case studies of individual facilities. These webinars will continue in 2012.

Supply Chain Partnership. Practice Greenhealth is working closely with stakeholders in the health care supply chain to develop sustainable product and service offerings. These companies are helping the Greening the OR Initiative and participating hospitals by providing intervention ideas, detailing the benefits of green products and services and providing training to hospital staff on the implementation of certain interventions.

For more information: visit our website at www.greeningtheor.org.