According to a recent study by the University of Chicago, the healthcare sector accounts for about 8 percent of greenhouse gases. Furthermore, other studies suggest operating rooms generate tremendous amount of waste: roughly 20-30 percent of a facility’s total waste. This is a major environmental issue, and it’s one the healthcare industry is going to have to take very seriously moving forward. With that in mind, three industry experts discussed OR sustainability and green healthcare.

SP: What are some of the factors behind hospital OR waste?
Kevin Liszewski, Vice President of Marketing and Corporate Accounts, Stryker Sustainability Solutions: According to the Sustainability Roadmap for Hospitals, hospitals in the United States generate nearly 7,000 tons of waste per day. Most of that comes from the OR. As one of the largest waste generating industries, healthcare brings with it two very distinct waste management hurdles: an enormous volume and a wide variety of complex types of waste, such as regulated medical waste (infectious or biohazardous waste), solid, hazardous, pharmaceutical, and traditional waste. The majority of materials used in healthcare facilities ultimately become waste and for some facilities that are open 24/7, year-round, that amount can add up quickly.

Ed Nuber, Senior Product Manager, Sterile Containers, Aesculap, Inc.: Look at the waste stream of what is going out of the OR. When you compare a sterile container, which is a reusable system, versus a blue wrap, which is a single-use system, you need to open up the blue wrap, inspect it, and then discard it. The blue wrap does not compress easily, so you are getting large piles of the blue wrap in the hospital to be discarded. There are several papers out there that state that 19 percent of the waste stream generated by surgical services is blue sterile wrap.

SP: What areas should facilities look into/target to make measurable improvements?
Liszewski: One of the most immediately impactful initiatives available to help reduce waste in the OR is third party medical device reprocessing. Reprocessing prevents thousands of tons of medical waste from entering landfills, in addition to saving healthcare systems hundreds of millions of dollars every year. Implementing a reprocessing program can be easy. It typically requires no up-front capital investment and service representatives can provide the necessary education to help staff get up to speed quickly on the science behind reprocessing, its benefits and how to implement a successful OR program.

Chris Hosler, Brand Manager for Fluid Waste Management, Zimmer Surgical: Implementation of a fluid management system provides significant, immediate, and measureable environmental performance improvements in the areas of regulated medical waste minimization, device reuse, and reprocessing, as well as medical plastics recycling.

SP: What do you believe has more of an impact on the amount of waste a hospital OR generates: purchasing decisions or proper/improper practices and behaviors?
Hosler: Purchasing decisions can have the most immediate and permanent impact on waste generation and savings. Behaviors and proper practices require on-going training and reinforcement as personnel change and good habits are formed.

Nuber: I think it’s both. If the facility decides to stick with disposable products, then you are generating a lot of waste out of that facility. Everything that gets thrown out has to be purchased, stocked, and moved through the hospital. A lot of internal resources are being utilized. If a facility has a reusable product, it is purchased once and it doesn’t have to be replenished.

Liszewski: We strongly believe that healthcare sustainability programs are the most effective at reducing waste when hospitals address both purchasing decisions and daily practices. These efforts are generally more accepted and successful when hospital leadership set clear expectations and drive a sustainability-centric culture. With the support of the C-suite, tackling both purchases and behaviors properly can significantly reduce the amount of waste generated in the OR.

SP: Can you point out the effects hospital waste has on a facility from a financial standpoint?
Liszewski: Because of special handling requirements for
certain types of medical waste, it costs more to put regulated waste into the waste stream than non-regulated waste and the costs multiply quickly. The Sustainability Report for Hospitals estimates that the industry could save as much as $4-7 billion annually by implementing waste reduction, recycling, and environmentally-preferable purchasing programs. When you consider there are also significant environmental benefits, it becomes a pretty compelling argument to make these initiatives a priority.

Many healthcare providers prescribe to the notion that a healthy environment positively contributes to a healthier patient population, and vice-versa. So, we’re not only talking about reducing the amount of waste going into local landfills, but we’re also talking about doing as much as possible to minimize any negative impact our behaviors have on future patient populations.

**Hosler:** A typical 10-suite operating room can save nearly $60,000 annually in hazardous waste packaging, treatment, and disposal costs with the implementation of a fluid waste management system. In addition, avoiding staff exposure to infectious fluid waste – and the potential harm and cost associated with an exposure – is helpful from a financial standpoint.

**SP:** What are some reasons why facilities do not adopt these methods? What holds them back? How can this be overcome?

**Nuber:** It comes down to budget dollars and where they want to be spent. Quite often, I’m not sure people truly understand the value of something like a sterile packaging choice and the impact it has overall.

**Liszewski:** There’s a common misperception that pursuing sustainability initiatives is expensive, and likewise that environmentally-preferable products are more expensive. While there are some cases where these products cost more, this belief is often false. If you look at the lifecycle of the product, many environmental products actually cost less. Facilities that want to make sustainability and EPP programs work for them should focus on evolving the thinking around environmental accounting and cost evaluation.

Additionally, some facilities struggle with establishing sustainability best practices because staff members are constantly under pressure to turn operating rooms over for the next case as quickly as possible. This rushed atmosphere is often cited as a hindrance to greener behaviors, such as disposing used items into appropriate collection containers after a procedure.

Facilities can help alleviate this issue with the vocal support of the C-level. They can also work with their vendors to accurately train staff, simplify processes, and track success to help staff better understand how significantly their behaviors impact hospital waste and costs.

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