

Six steps to make single-use device reprocessing more effective

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By Lars Thording

Since 2000, hospitals have used FDA-regulated single-use device reprocessors to reduce costs across hospital service lines and lessen the environmental impact of single-use devices. The process of re-using single-use devices involves partnering with a reprocessor, which sets up systems for collecting certain single-use devices that are FDA-cleared to reprocess. The reprocessor then cleans, tests, inspects, and sterilizes the used devices and make them available to the hospital at a much lower cost than a new device. Devices included in reprocessing programs vary widely – from compression sleeves and pulse oximeters to OR devices and cardiology devices. As a result of reprocessing, hospitals can acquire technology they otherwise couldn't afford, hire more nurses, offer their services to more patients, or otherwise improve care. The process is safe, scientifically advanced, and regulated by FDA.

The economic impact of reprocessing is substantial. Some service lines can reduce their procedure device costs by up to a third, with some hospitals saving millions of dollars every year. We are not talking about just paying for the department's annual Christmas party. We're talking about an opportunity to significantly improve patient care. The COVID pandemic and the climate crisis have only intensified the call for hospitals to look for solutions that make a difference in terms of the environment and in terms of the supply chain.

However, studies show that the average hospital doesn't even get close to savings as much as it potentially could. In the cardiology space, for example, hospital departments typically only realize about a third of reprocessing's savings potential. A cardiology department that could save \$900,000 per year typically saves about \$300,000. Given the financial instability in US hospitals, this sounds odd, if not overtly negligent, given that cardiology is still plagued by ever-increasing technology prices and reimbursement that just doesn't follow suit.

Six factors determine how much a healthcare department at a hospital can save through reprocessing. To achieve the savings potential – and potentially triple savings - healthcare departments need to ensure that all these factors are addressed and optimized to achieve maximum savings:

1. Collection compliance

Healthcare departments must diligently work to collect all devices from procedures their reprocessor has clearance to reprocess. Some reprocessable devices in cardiology yield savings of more than \$1,000 per device, so failing to place even one of these in the reprocessing collection system is expensive. Reprocessors typically go to great lengths to educate staff about what can be reprocessed and what can't, yet collection compliance is very frequently an issue.

Make sure your reprocessor does frequent education (in-servicing) so that all staff (even staff that rotate in and out of the department) knows what to collect. Also, make sure the reprocessor collects in a timely fashion that it is part of the department culture to focus on the value of some used devices.

2. Device protection

All too often, reprocessors collect devices that are technically compromised (their tips are bent or kinked, or parts break off) because they are not handled with proper care. Devices that haven't retained their integrity have to be rejected at the reprocessing plant and are taken out of the reprocessing cycle. Again, this can be very costly in terms of lost savings opportunity for the hospital department.

Cardiology devices designed for single use are often fragile and must be treated with care. To ensure device protection, reprocessors create special designed trays and collection and shipping systems that protect the device, but the devices still need to make it to the collection container intact. Make sure your reprocessor has adequately instructed staff and uses proper signage to remind and instruct. Also, make sure your reprocessor's collection system is optimized for device protection and that you get reports about device rejections so you can re-direct staff if needed.

3. Buy-back compliance

To actually realize savings from a reprocessing program, the department and the hospital need to buy back the lower-priced device from the reprocessor. I frequently see cardiology departments diligently collect devices, only to fail to order reprocessed devices back. The result: no savings.

When this is the case, it is often because it is difficult to ensure optimal buy-back compliance. Purchasing systems are set up to reorder – from the original manufacturer - when certain par levels are reached. The reprocessor's device and pricing information needs to be loaded into the purchasing system and given priority when re-ordering. Of course, this may need to be balanced against any volume commitments the hospital has with the manufacturer, but keep doing the math and make sure the advantages of such volume commitments actually make up for the lost reprocessing savings. This requires collaboration between department

management and supply chain staff.

Additionally, the staff that pulls devices for cases needs to be instructed to always pull reprocessed devices first. Because of the circularity of the process and the constant fall-out of devices because they have been reprocessed the maximum number of times, there will always be a supply shortage. Make sure you buy and use as many reprocessed devices as possible, and make sure you ask your reprocessor for excess inventory. Finally, it is a good idea to regularly audit that the purchasing process works optimally.

4. Device availability

A reprocessor needs to get clearance from FDA to reprocess every device individually. This means that some reproducers may have a wider variety of devices available for reprocessing than others, increasing the savings realized from the program. A reprocessor that gets clearance for a new cardiology device may instantaneously add another \$500 in savings per procedure. Make sure to choose the reprocessor that has the most clearances (for expensive devices) in each area of the hospital. Otherwise, you may miss out on substantial savings.

The competitive landscape for reprocessing clearances changes over time, so even if you are happy with your reprocessor, you should continuously evaluate if you are working with the company that can give you the highest savings. Additionally, you should maintain an ongoing dialogue with your reprocessor about what additional devices may be reprocessable, and what devices your department spends a lot of money on. Finally, make sure staff is instructed every time a new device is added to devices that can be reprocessed – otherwise, it will miss the collection bin.

5. Supplier controls

In healthcare, hospitals often have to use only a few suppliers within a certain product area. This creates a risk that suppliers will take advantage of the hospital's dependence on them. We see this in cardiology when suppliers try to (and succeed in) stopping hospitals from using reprocessed devices to protect their own revenue. The hospital then pays for their dependence with lost savings. In cardiology, supplier controls are economic controls, and controlling the supplier means owning the often-complex equation that makes the service line profitable – or not.

When so many cardiology departments miss out on two-thirds of their potential reprocessing savings, it is often because a supplier has prevented the hospital from using certain reprocessed devices – usually the most expensive ones. In seeking to remedy this problem, a good place to start is by – again – doing the math and discovering whether the demands of the supplier – and what you get from it – are worth the lost cost savings. I know of examples where cardiology departments lose \$700,000-800,000 a year from such lost savings opportunities.

Very importantly: Seek to build a more equitable market environment around your

technology purchases. Using more than one (or two) suppliers massively changes your ability to move market share and, thereby, obtain better supplier controls. In other words, if a manufacturer prevents a hospital from using reprocessing to reduce costs, that hospital can more easily move its purchases to another supplier.

6. Clinical integration

Very important and often forgotten is the inclusion of clinicians in the discussion about reprocessing. Ultimately, the physician decides what devices to use – and whether she or he is OK with using a reprocessed device. Reprocessed devices are safe and functionally similar to new devices, but the physician may have had a bad experience with a reprocessed device in the past, when reprocessing was not as advanced as it is today.

Transparency helps: Physician need to “buy in” and understand the financial implications of reprocessing – and its impact on their ability to work in an ideal work environment. For example, in cardiology departments where clinical integration has been central to the reprocessing program, physicians can see that using reprocessed devices means that they get the best new technology.

Single-use device reprocessing has become a key cost-saving strategy for most US hospitals. Overall, reprocessing can be said to be a great success, as hospitals simultaneously reduce costs without compromising care quality and safety – and reduce environmental harm. It has been suggested that reprocessing may be a model for other similar circular economy initiatives in healthcare that focus on reuse and design for sustainability. Opportunities abound for manufacturers, healthcare facilities, and clinicians to come up with new ways in which circular economy principles can be applied in a healthcare setting with an appetite to become greener and more economical.

That said, getting the most out of a single-use device reprocessing program is not easy. It is, however, highly (maybe even critically) rewarding from a financial standpoint. Looking at each of the above factors will help get you optimize your program for maximum cost savings.

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