

Case Study: Smarter Purchasing Challenge - Single Use Device Reprocessing



Summary

Single-use medical devices are expensive resources that end up in the landfill after use.

By using reprocessed medical devices, Virginia Mason has provided the highest quality of care, while reducing waste to the landfill and reducing supply costs by over \$3M in three years.

In 2014, Virginia Mason reprocessed or recycled over 18,850 pounds of devices, which may have otherwise have been discarded in a landfill.

Virginia Mason

Challenge/Situation

Virginia Mason has been transforming health care since 2002, when it was the first in the industry to adopt the Toyota Production System. Virginia Mason provides the highest quality of care at the lowest possible cost. The system's commitment to environmental sustainability is integrated into its work. The system's award-winning EnviroMason program is supported on every level of the organization.

Medical devices are an important part of providing the highest quality care in Virginia Mason's hospital. The total cost of device use includes both initial purchasing and the cost environmentally responsible disposal. Virginia Mason's Perioperative Services team challenged themselves to find a way to reduce the total cost and environmental impact of these devices.

The Strategy Selected

Stryker, a reprocessing vendor, approached Virginia Mason with the idea of utilizing reprocessed medical devices. Reprocessed medical devices are FDA approved (and thus pre-audited for quality), demonstrate the same high level of quality, have a lower total cost, and a reduced environmental impact than many single use devices. Physicians joined the leadership team to evaluate the devices, including visiting the reprocessing plant and consulting with other surgeons. The group decided to start with a few devices and expanded as time went on. After learning how each device is inspected for quality and held to the highest standard, the team moved forward.

Implementation Process

With its Purchasing department's support, the devices were integrated into the facility's supply chain. Implementation required a new process, staff education, installation of new bins and signage. The Perioperative team and vendor conducted the in-service for staff. To make the process easier, the system was set up so that the staff can put all the devices in one bin, which the vendor then sorts. A Stryker representative also visits regularly to ship the collected devices offsite for reprocessing as well as assist the hospital team with regular reports. The hospital purchases back the reprocessed devices, creating significant cost savings.

About Virginia Mason

Virginia Mason is a nonprofit organization offering a system of integrated health services including the following:

- A large multispecialty group practice of 460 physicians, offering both primary and specialty care.
- An acute-care hospital licensed for 336 beds.
- Benaroya Research Institute at Virginia Mason.
- A network of medical centers throughout the region.
- Bailey-Boushay House, a nursing residence and chronic care management center for people living with AIDS and other chronic or terminal illnesses.

Benefits

- Purchasing costs reduced by over \$3 million dollars since 2012.
- Annual waste disposal costs were reduced.
- Eliminating waste disposal reduces toxins potentially released to the environment.



Challenges and Lessons Learned

Patient safety is Virginia Mason's first priority. Lack of understanding as to the value of reprocessed devices can be an initial roadblock. Sharing the clinical data and research proving that the reprocessed device has equal quality and safety to a single use device is essential.