CareAdvantage from the Johnson & Johnson Medical Devices Companies (JJMDC) helps large health system revitalize device reprocessing program to drive substantial savings and waste reduction.

As part of a greater mission to build healthier communities, one of the nation’s largest nonprofit health systems developed several “green” initiatives focused on conserving resources, using energy efficiency, and establishing sustainable procurement processes. Within these efforts, the system established a reprocessing program to facilitate the recycling and reuse of FDA-cleared medical devices.

However, the reprocessing program was not meeting the system’s cost or environmental targets, so it asked JJMDC to help turn around their underperforming program. Within a year, the program provided millions of dollars in savings and prevented the generation of hundreds of tons of waste.

To learn more please visit www.CareAdvantageJJMDC.com or email CareAdvantageJJMDC@its.jnj.com.

References
Needs Identification

To identify where the reprocessing program was struggling, a team from Sterilmed, a part of the Johnson & Johnson Family of Companies, and an expert in medical device reprocessing worked with the system’s Supply Chain team. Together, the teams analyzed several data sets—including device collection rates, purchase orders, product mix, and surgical procedure trends.

From these data, the teams identified two potential causes of the underperforming reprocessing program: 1) low compliance of collecting used devices and 2) inconsistent purchasing practices for reprocessed devices. To remedy these problems, the teams declared the following objectives:

- Improve collection of devices from the operating room and the electrophysiology lab
- Streamline purchasing procedures
- Reduce the environmental impact of the system’s use of invasive and non-invasive devices

Additionally, the teams identified key metrics that they would track to assess the performance of the reprocessing program:

- Devices collected compared with new devices purchased
- New devices purchased compared with reprocessed devices purchased
- Devices purchased versus devices needed to meet surgical demand
- Realization of new savings opportunities

With the needs and metrics clearly defined, the teams set out to implement changes to the program.

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- Director, Supply Chain Optimization

Capabilities

1. Facility-wide Education

A series of webinars, jointly hosted by the facility’s director-level reprocessing category lead and the Sterilmed account team, were used to introduce the revitalized program to the supply chain and perioperative staff.

The goal of the sessions was to establish a common understanding of the science behind reprocessing, how to mitigate safety risks, and how the collection and procurement processes work. Further, to ensure behavioral change at all levels of the organization, additional on-site training sessions were developed for administrators and physicians.

2. Coordinating Collections

To simplify the steps required by the hospital staff, two separate collections processes—one for sharps and one for devices—were merged to a single vendor.

This decision to streamline the collections process reduced the number of collection personnel entering the operating rooms and electrophysiology labs and significantly reduced the burden of managing the reprocessing initiative.

3. Unleashing Data

To track progress, specific goals were assigned to each facility, and the JJMDC team was responsible for reviewing metrics with facility stakeholders monthly.

By reviewing facility-specific data, the JJMDC teams could provide meaningful insights on actual performance versus planned performance, discussing ways to close any gaps that existed. A report tailored to the system’s specific metrics—collection rates, devices purchased, and additional savings opportunities—provided a consistent way to measure, monitor, and improve the impact of the program.

Delivering Results

Over the next 12 months, these efforts made a significant impact to the system’s financial position and environmental footprint:

- Estimated savings on waste removal costs: $141K
- Estimated reduction in CO2 emissions: 171K lb.
- Regulated medical waste diverted from landfills: 281K lb.
- Estimated annual savings from utilizing reprocessed single-use devices: $8.6M

The partnership with JJMDC helped increase annualized invasive device savings by 67% (from $3.0 million before JJMDC engagement to $5.0 million after JJMDC engagement).

Also, the initiative enhanced the staff’s familiarity with using reprocessed devices, laying the foundation for the next phase of supply chain integration, which is currently in process and focuses on delivering additional efficiencies by standardizing the ordering of devices across the system’s facilities.

Key Success Factors

1. Assign resources to facilitate device collections, staff training, and program management
2. Focus on mutually defined goals
3. Assess progress toward goals by reviewing metrics monthly
4. Ensure physician engagement
5. Establish detailed implementation plans for each facility

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