

## GREEN CASE STUDY

**DEPARTMENT:** Perioperative Services Georgia Health Sciences Medical Center

**PROJECT:** Greening Initiative - Redesign surgical supply requirements

**GOAL:** Move from disposable to reusable surgical supplies

The Perioperative Greening Initiative – Reusable Project began in 2004 with an assessment and evaluation of a previous vendor's ability to respond appropriately and timely to the Operating Room's (OR) requests to modify Custom Pack Trays (CPT). The project goal was to standardize supplies contained within the sterile custom packs to have a broader application in order to minimize the number of packs required to cover various types of surgical procedures performed.

Custom pack trays contain the sterile supplies used for procedures – basins of various sizes, gowns, towels, drapes, cotton lap or gauze sponges are the basic sterile supplies. Specific custom packs used for orthopedic procedures include additional sterile supplies like a stockinette to go over an extremity. Each procedure requires a custom pack.



Due to the vendor's reluctance to address vital concerns on cost reduction initiatives, the OR administrative team consisting of charge nurses of each service, data coordinator, manager, the AVP, along with the Chairs and Chiefs of Surgical Services and Purchasing made the decision to seek other opportunities for a vendor-partnership. They sought a vendor that would be responsive and creative in reducing surgical supply costs.

SRI Surgical was the vendor of choice based on meetings and discussion about the company's capabilities in:

- turn-around time for revising surgical pack contents
- consolidation of packs
- product selection

### Eco-friendlier choices

The OR department's decision to change from disposable surgical supplies to reusable required a shift in thinking from disposable to sustainable practices. To reach our goal, we considered:

- custom pack consolidation
- quality of products offered
- the extended benefit of waste reduction
- overall expense reduction



With this initiative, not everything can be 100% reusable and some disposables remain in the sterile packs. Lap sheets (drapes with openings) are disposable because oftentimes necessity dictates the opening has to be enlarged. So to avoid modifying or "destroying" reusable drapes in this manner, disposables are used.

### Timeframe

The transition to reusable surgical packs evolved over three years starting at forty (40) different packs, with the first consolidation going down to twenty-one (21) and now at fifteen (15) surgical packs. All of the packs' components were entered into a spreadsheet and reviewed to evaluate the opportunity to compress the number of packs and to identify the procedures where they could be used. Surgical packs cover the range of procedures performed in the Main OR. These representative examples illustrate how this was achieved:

- **Orthopedics** as a high volume service and offered opportunities to consolidate and standardize into fewer custom packs. Instead of having packs for individual procedures, we moved to a total joint pack rather than having individual packs for knee, hip and shoulder surgeries.
- **Abdominal surgery** – general surgery and gynecology surgery were grouped resulting in one abdominal surgery pack to support cholecystectomy, hysterectomy, hernia procedures, and others.

### Results - Reduced CPT Inventory, Waste & Duplication

- SRI Surgical worked with Perioperative Services to move to a JIT (just-in-time) inventory management of the sterile packs and components.
- Par levels are adjusted for the OR procedure schedule. Inventory levels required to support surgical case volume are adjusted daily to meet the need. Custom pack deliveries are received Monday – Friday. Pack levels are evaluated on Thursday to determine the number required to cover the OR through the weekend and begin Monday morning cases.
- Standardized surgical supply procedural set up / eliminated former tote program
- Eliminated continual product handling demands and related costs generated by Tote Contents and their return from surgery to Central Sterile Supply. Estimated labor time saved: 3.0 hours per day.
- SRI system eliminated handling requirement of warehouse accounting personnel who assembled credit returns and reconciled dollar transfer from distributor. Estimate of 2005 cost was \$23,400 annually. This cost avoidance has been ongoing since that time.

*"Georgia Health Sciences has avoided generating medical waste successfully since 2005 at a total slightly over 192 tons as of 2010."*

Vickie Alexander, Director  
Corporate Solutions  
SRI Surgical  
6/29/11

### Measures – how do we know we are reaching our goal?

The criterion of 100% usage for any supplies contained in the surgical packs was a mandate.

- An annual review is conducted by a joint effort of SRI Nurse Specialists and our internal materials staff to assess that the criteria is still being met. Method to assess is to observe actual cases for supplies utilization. A recent review (within the month) validated the 100% rule.
- Procedure preference cards list additional supplies that are to be available, but remain unopened on cases until surgeon requests them.

### Keys to Success

- Department - collective support from all OR staff and surgeons
- Business partner - commitment of SRI Surgical to live up to their word to be responsive and to remove items from the packs as practice changed
- Competitive edge and continued commitment - SRI Surgical Company remains as attentive today as they did six years ago when they were vying for our account

### Sustaining the Project and Influencing Others

This ongoing project reaped rewards beyond expectations and validated the goal of moving to a "green" initiative. The "green" results have continued to expand across the Georgia Health Sciences Medical Center (GHSMC) organization. The savings achieved continue to be beneficial.

Our experience with making the change from disposable to reusable surgical supplies **encouraged others** to implement reusable surgical packs:

- Georgia Health Sciences Children's Medical Center Operating Room
- Georgia Health Sciences Medical Center Labor & Delivery Department

## **Vendor Partnership**

This project is an example of GHSU influencing and partnering with vendors to achieve sustainable practices within our organization. SRI Surgical is:

- Using the process as a benchmark
- Manufacturing new sustainable-oriented products – reusable Inst/PACK Wrap
- Engaging GHSMC in testing - will receive first opportunity to measure the value and effectiveness of highly evolved product competitively priced
- Making a contribution to healthcare environmental efforts
- Maintaining the vision that **"THE FUTURE IS NOT DISPOSABLE"**

## **Department Contacts**

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