

## Reducing Operating Room Waste with Sterile Wrap Recycling

**Environmental and Human Health Impact:** Reduce OR waste production by approximately 20 percent by diverting plastic from landfill to recycling.

**Business Impact:** Reduces waste disposal costs by over **\$94,000 per year** associated with **510,000 pounds** of plastic and **44,832 pounds** of cardboard.

### Challenge

Kaiser Permanente buys over \$2 million or 679,400 pounds of sterile wrap per year. Sterile wrap is a tear and moisture resistant #5 plastic sheet that is used to maintain sterile medical and surgical instruments until needed for an operation. While many Kaiser Permanente facilities use reusable aluminum containers for the majority of sterile processing and storage of surgical equipment, there are circumstances where disposable wrap is still currently needed. Until recently, sterile wrap has been a costly and cumbersome material to manage. It is often disposed of in expensive red bag waste and has a low recycling value, which made it difficult for Kaiser Permanente to sustain a robust national recycling program for wrap.

### Aim/Goal

- Design and implement a sustainable national process to recycle sterile wrap and reduce waste from operating rooms.

### Team

Richard Trogman, Regional Operations Support Leader, SCAL  
 Timothy Eng, Project Manager, SCAL  
 Kimberly Stokes, Product Manager, Product Support, NCAL  
 Ken Calhoun, Corporate Account Manager, Kimberly Clark  
 Robert Gotto, Senior Sourcing Director

### Actions Taken

- ✓ Spent three years conditioning Kimberly Clark (KC), KP's sterile wrap supplier that their products, such as the wrap, are in conflict with Kaiser Permanente's EPP Policy by being disposable, single-use, difficult to recycle, and made of precious natural resources.
- ✓ Took opportunities to move business away from KC toward reusable products in order to solidify conditioning message
- ✓ In negotiations for sterile wrap contract, required KC to extend their product responsibility, and shepherd responsible recycling of the wrap.
- ✓ KC found partners to collect product within facilities, and a market that would purchase #5 plastic.

- ✓ Implementation team observed successful sites such as South Bay in Los Angeles, and trialed process in Sacramento, Harbor City, and Roseville.

### Results

Kimberly Clark contractually committed to increase blue wrap recycling to 75 percent by 2011

KC partnered with two organizations to collect wrap within facilities.

As of Quarter 2010, three pilot facilities continue to recycle wrap and seven additional efforts launched in CA and Oregon

Upon roll-out completion:

\$94,000 dollars, 510,000 lbs of plastic, and 44,832 lbs of cardboard saved per year!



Dora Ratcliff, Assistant Director of Preoperative Services at the South Bay Medical Center, led the recycling charge and captured enough surgical wrap to make up 10 of these 500 pound bales in less than 12 months!

### Lessons Learned

- ✓ Clear and consistent communication to suppliers about Kaiser Permanente's goals can facilitate innovation and custom solutions to meet our needs.
- ✓ It's very possible to encourage manufacturers to take full accountability for the entire lifecycle of their products – from production to disposal.

### Next Steps

- ✓ If pilot works, KC will offer this service to other health systems.
- ✓ Continue implementation at next seven facilities to get recycling rate to 30 percent.
- ✓ Identify next batch of facilities to get to 50% by end of 2010.
- ✓ Encourage ORs to take advantage of existing contract with Aesculap for reusable sterilization containers