

## Supplier Partnership with Becton Dickinson Leads to Waste Reduction from Multiple Angles

**Environmental and Human Health Impact:** 276 tons of material avoided from landfill – 94 tons from KP waste stream and 182 tons from manufacturing waste stream.

**Business Impact:** \$7 million in purchasing cost savings.

### Challenge:

When the medical procurement team established the Strategic Supplier Development program (SSD), it was designed to cultivate relationships for the mutual benefit of Kaiser Permanente and our key medical suppliers. All suppliers who participate in the SSD program are encouraged to propose environmental initiatives that benefit KP and the communities we serve. Becton Dickinson (BD) identified three projects to reduce the amount of waste going to landfills, through product design, packaging changes, and use of recycled content. The three projects undertaken reduced costs and reduced landfill waste.

### Aim/Goal:

- Product improvements leading to less plastic waste, landfill diversion, and reduced disposal costs.

### Team

Pat Schow – Manager, Strategic Supplier Development  
 Emily Estrada – BD Senior Strategic Account Manager  
 Ellen Kondracki – BD Manager, Global Sustainability

### Actions Taken:

Set supplier expectations for environmental goals, reviewed project proposals, and identified three products on which to focus sustainability efforts: IV catheters, sharps containers, and pre-filled syringe packaging.

#### 1) BD Nexiva™ IV Catheters:

- ✓ KP conducted internal field evaluations of the BD Nexiva IV catheter device and determined that the new product was a safer passive safety device for health care workers, would improve patient satisfaction, and would eliminate the need for two ancillary devices. **One product replaces three separate products.**
- ✓ New product manufactured with 100 percent renewable energy (wind).
- ✓ BD and KP partnered to formulate a single port Nexiva design, which supports Center for Disease Control and Prevention (CDC) guidelines to ensure an extension set and stabilized platform are included as best practice on IV insertions.
- ✓ BD provided representatives and clinicians to facilitate the education and training to Nexiva IV Catheters. The conversion began in March 2011.

#### 2) BD Recykleen™ Sharps Collectors

- ✓ Ensured that manufacturing the new product with **recycled resins** will not compromise the integrity or performance of the product, and provided landfill plastic waste reduction projections.
- ✓ New product, with same product code as old product, was introduced into the KP system on June 2011 with 80 percent conversion by November.

#### 3) BD PosiFlush™ Packaging Change

- ✓ BD identified the packaging tub for prefilled syringes as a good testing ground for developing new light-weight packaging made with increased recycled content.
- ✓ BD partnered with KP for two years on product development and launched new packaging in March 2011.

### Results

- Nexiva IV catheter conversion yielded **\$6.9 million in purchase cost savings** AND material waste reduction of **55 percent** or **87 tons** per year.
- Recykleen collector provided **\$18,000 savings** and facilitated re-use of **182 tons** of plastic resin per year just for KP.
- PosiFlush package **weight reduction of 25 percent** and **total waste by 33 percent** resulting in reduced plastic waste of **7 tons** per year.

	Summary	Tons of Material	Variance
1	Ancillary Catheter Products	196.2	
	Δ Nexiva™	108	-88
2	PosiFlush	28	
	Δ Package light-weight	21	-7
3	Recykleen Sharps Containers	181	-181
	<b>Total</b>		<b>-276 tons</b>

### Lessons Learned

Long-term partnerships with suppliers on clinical safety and environmental programs support both the supplier's and customer's goals.