Safety trumps cost

Hospital Opt for Safer, Cleaner Ways to Get Dispose of Sharps

In an effort to simultaneously increase safety and decrease medical waste, the hospital has launched a project that will eventually replace more than 1,800 single-use sharps containers with reusable units.

Workers from Frederick, Colo.-based Medical Systems of Denver, Inc.- which, despite its name is based in Frederick, Colo. – began on March 14 replacing all the old sharps containers in the inpatient units with new ones. The new ones from Daniels Sharpsmart, Inc. – headquartered in the U.S. in Chicago – are certified by the Food and Drug Administration for 500 uses.

When the Sharpsmart containers are full, providers simply remove them and place them in a soiled utility room. From there, EVS staff collect the containers and take them to a central location, where Medical Systems of Denver, or MSDI, employees take them to the Frederick processing center. MSDI disposes of the waste, and washes and disinfects the reusable containers, MSDI President Bruce Dakin explained.

About 60 health care facilities in Colorado already use the product, he estimated.

Older unit (right) has smaller opening to insert sharps.

Swing tray in the new disposal container gives providers a wide area to toss sharps. Sharps drop below tray when a provider closes the lid.

Waste be gone. The new process means thousands of containers – and the cardboard and plastic they came in – are not tossed in landfills after just one use. The hospital believes the new containers – 1,850 in all – could reduce landfill waste from discarded sharps units by 25 percent and – most importantly – significantly reduce the risk of accidental needle sticks, said UCH Support Services Manager Tom Davis.

MSDI finished installing units in the Anschutz Inpatient Pavilion, Cancer Center, Eye Center, Leprino Building and the Emergency Department in late March, Dakin said.

All ambulatory areas – both on- and off-site – will get theirs once they’ve consumed existing stock of the old units, Davis added. He said he expects that installation to begin sometime this summer.

Safety over silver. The replacement decision wasn’t made to save money, said Value Analysis/Supply Contract Manager Kamy Leeret. The Sharpsmart containers are more expensive than the previous units "on a container-for-container basis," she acknowledged, but safety and environmental concerns trumped cost in this case.

The design of the new container makes it "more difficult to access the contents than what we were using," Leeret noted.
The old container, she explained, has an opening just 2 or 3 inches wide with a flap that providers have to maneuver to insert a discarded needle, syringe, scalpel blade, razor or other sharp-edged item. The relatively small space increases the risk of getting stuck.

The new device, by contrast, is designed with a long swing tray into which the provider tosses the sharp. When the lid closes, the sharp automatically drops into a sealed container below. It’s very difficult to stick a hand below the swing tray to get to the waste, Leeret pointed out.

The Sharpsmart’s wider opening also helps dispose of “awkward” items like long needles more easily. “We’ll no longer have people getting accidental sticks by trying to stuff waste down,” Davis said. “We could wind up saving money on workers comp claims from needle sticks.”

Leeret termed the environmental benefit of the new containers a “side benefit” that played into the decision to make the change. “The design of the containers for safety was our primary concern,” she noted, “but the fact they are environmentally friendly was a bonus. We have huge cardboard and plastic waste with the [other containers].”

A long look. The massive changeover followed a lengthy period of review that began early in 2010, when MSDI contacted the hospital’s Infection Control Department about making a container switch. Infection Control referred the inquiry to Davis, who contacted Ed Heath, RN, MHA, director of Women’s and Infants’ Services and chair of the hospital’s Clinical Products Committee. The company then made a presentation to the committee. Representatives from Nursing, Clinical Lab, Transplant, Employee Health and other departments provided input.

The committee recommended piloting the Sharpsmart unit for one year in the 7 West Neurosciences Unit, half of the hospital’s operating rooms, the Lowry Clinic and the Lab Express blood draw unit in the Anschutz Outpatient Pavilion. The pilot began in March 2010.

After 60 days, MSDI conducted a survey of the pilot units that Davis said produced no negative responses. After the Supply Chain Department completed a cost-benefit analysis, the Sharpsmart product received approval from Chief Operating Officer John Harney, Chief Nursing Officer Carolyn Sanders, RN, PhD, and Vice President of Clinical and Support Services Derek Rushing.

Before the installation, Davis gave an orientation to MSDI staff about working with patients. The presentation, which Davis said his department gives to all contractors, helps ensure the hospital complies with a Joint Commission requirement (officially called “LD.3.50”) that a “patient, client, or resident should receive the same high degree of quality and safety regardless of whether care, treatment, or services are provided by the organization’s staff or through contractual agreement.”

“We wanted to be proactive and make [MSDI] cognizant of patients’ needs and privacy before they entered the rooms,” Davis explained.