

**Improved Environmental Hygiene Lowers
Infections and Raises HCAHPS Scores at
Rush-Copley**

A CASE STUDY



INTERVENTION

Part of the Intervention Series
4/25/2013

Improved Environmental Hygiene Lowers Infections and Raises HCAHPS Scores at Rush-Copley

A group of 20 housekeepers crowded into a patient room recently at Rush-Copley Medical Center in suburban Chicago. They were there to refresh their knowledge of the proper way to disinfect and clean, using microfiber mops and wipers and a bleach solution. The instructor, Baldwin Galan of UMF Corporation, was demonstrating a figure-eight pattern for floor cleaning with a “damp, not wet flat mop,” as well as the correct use of color coded wipers for each cleaning application. “If anyone asks, you want to tell them, these are infection prevention tools,” Galan says, proudly holding up the ergonomic flat mop tool set.

Traditionally, this has been healthcare’s lowest-tech activity, performed by employees seen as the lowest rung on the hospital organizational chart. As healthcare moves into the era of value-based care, that image is slowly shifting toward an understanding that these employees are the front line of defense against the spread of infection. Proper hand-washing and medical checklists have little effect if patients are bedded and operated on in environments contaminated by bacteria. At stake in this seemingly mundane work is nothing less than the hospital’s reputation, its finances and the lives of patients.

The Organization

Rush-Copley Medical Center in Aurora, Illinois, is a 210-bed Level II trauma center, treating more than 70,000 patients in its emergency room each year. Nearly 500 physicians and 2,000 clinical and professional staff members provide advanced cancer, heart, neurology and joint replacement services. The hospital is a member of the Rush System for Health, a not-for-profit academic medical center comprising Rush University Medical Center, Rush University, Rush Oak Park Hospital and Rush Health.

The Challenge

Three years ago Environmental Services leadership at Rush-Copley set out to improve patient satisfaction on the important Cleanliness of the Hospital Environment domain of the federal government’s HCAHPS patient satisfaction questionnaire. The hospital was in the 64th percentile nationally . not bad, but we knew we could do better,+ says Elizabeth Sainski, a Sodexo Manager responsible for Hospitality and Environmental Services at the hospital. Sodexo has a multiyear management agreement at Rush-Copley under which UMF provides PerfectCLEAN products, training and support.

Then, in 2012, the hospital enrolled in the State of Illinois Campaign to Eliminate Clostridium difficile (ICE C. Diff). Environmental cleaning and monitoring of cleaning is one of the main elements of the ICE C. Diff infection control bundle.

The bundle includes:

- Contact Precautions
- Hand Hygiene
- Environmental Cleaning
- Lab alerts
- Education

As we implemented the bundle, we realized changes needed to be made in our cleaning protocols, said Maria Montero, MPH, CIC, Infection Prevention Manager.

The Decision

In 2010, Rush-Copley switched to UMF's PerfectCLEAN® system, which uses a color-coded set of micro-denier flat mops, wipers and accessories . in this case blue for patient rooms, orange for washrooms and yellow for isolation rooms. The company's proprietary micro-denier fiber products have a much greater surface area than other products and are capable of removing virtually everything from an environmental surface. By adopting the ONE_{per}ROOM¹ methodology of only one color coded product per task per room, the system virtually eliminates patient room-to-room cross-contamination.

In November 2011 Rush-Copley also implemented PerfectCLEAN's Hygiene Specialist® training program. After a lengthy training and education session, EVS staff members were awarded Hygiene Specialist pins and certificates designating them as Hygiene Specialists®. They also receive a laminated Room Checkout Guide with color codes and chemicals to be used for each cleaning application. Sainski follows up on the training individually with each specialist.

We want them to be able to have hands on experience on the proper use of the product otherwise it is not going to eliminate bacteria, Sainski says. We wanted to impress on them that they are Hygiene Specialists, not just housekeepers sweeping up a room.

Implementation

During the training, staff members learn how to clean high-touch areas, including bedside tables, TV remotes, nurse call lights, IV poles and monitors, blood pressure cuffs, wall boards, nightstands and phones. A total of 24 high touch areas have been identified.

There are separate protocols for daily room cleaning and terminal cleaning after a patient has been discharged. In the surgical suite, Sainski's team is responsible for daily terminal cleans and weekly cycle cleanings, which cover ceiling to floor (PerfectCLEAN's products and procedures recently received the Association of Perioperative Registered Nurses (AORN) Seal of Recognition, confirming that the PerfectCLEAN Operating Room program meets the guidelines of the AORN Perioperative Standards and Recommended Practices).

The EVS staff know they hold patients' lives in their hands when cleaning any patient area; if they miss one piece of high-touch equipment, that is enough to cause an infection, Sainski says.

As part of the ICE C. Diff program, the cleaning is monitored using black light technology. On an on-going, and rotating basis, managers mark high-touch areas in every isolation room with an invisible marker. The hygiene specialist goes in not knowing the room is marked. Post-cleaning, managers come in with the black light which reveals any marked surface that was missed. Results are immediately shared with staff and if any surfaces are missed staff is asked to clean them again. Rates of Hospital acquired C. Difficile infections are shared with EVS staff on a quarterly basis. All staff assigned to clean units that have zero Hospital Acquired infections are rewarded with gift cards.

Part of the effort to improve patient satisfaction is to have the hygiene specialists inform patients and their families on the nature of the process to disinfect a room. They are also instructed on how to enter the room, introduce themselves, let patients know they are there to clean and disinfect, that they will use separate wipers and mops for the patient room and the bathroom, and only use them in that room to prevent the spread of bacteria.

The scripting while in the room is very important, Sainski says. You are telling the patient how this thorough cleaning is protecting them, so it changes the perception of the cleaning and the sense of room cleanliness.

Results

With the monitoring, increased attention to cleaning and the heightened education and awareness, the hospital has been able to decrease its *C. diff* rates by more than 50% (See chart), well below the national average.

The project, which stresses the opportunity to engage environmental services staff as part of the infection prevention team, has had a significant impact on the perception of Sainski's department by others in the hospital, says Maria Montero, Infection Prevention Manager at Rush-Copley.

We were working with UMF before, but participating in the ICE C. Diff program really brought environmental services to the forefront. It was an eye opener, and it revealed that good environmental hygiene is a key component to preventing any type of infection, whether it is *C. difficile*, MRSA or surgical site infections, she says.

"I know that when I started rolling out the education and I outlined the proper environmental cleaning process to the nursing staff, everyone understood the importance of following proper cleaning protocols. We implemented a color-coded system from PerfectCLEAN for each cleaning process. Staff fully understands the importance of using a specific colored wiper for cleaning each area - no one forgets about those colors!" Montero says.

"The staff is very proud about their Hygiene Specialist status," Sainski says. "We communicate on a monthly basis about where we stand on *C. diff* and HCAHPS. We review protocols on disinfecting and cleaning patient rooms, as well as how to communicate with the patient. Our infection rates have gone down and our patient satisfaction scores have gone up."

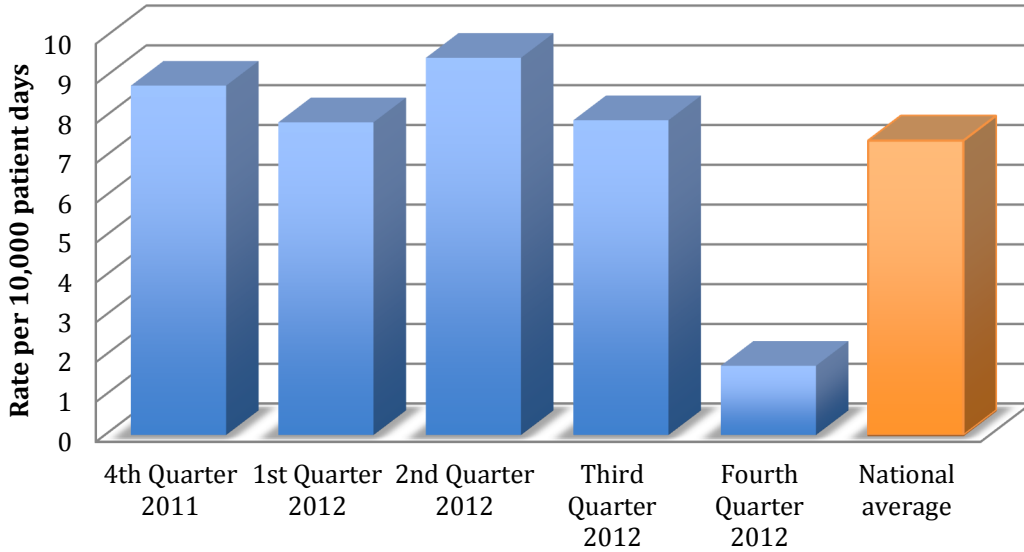
Isela Torres has been a housekeeper at Rush-Copley for five years, and currently works in the Intermediate Care Area, which has many isolation patients. She has enjoyed the new status of Hygiene Specialist and likes the feedback the black light checkups provide. "I found out I did miss a few spots here and there, so that was an eye opener for me. I want to know how I am doing. I do a lot of disinfecting at home too; my daughter calls me a neat freak," she says with a laugh. "The light has been one of the best tools we have had for monitoring cleaning."

Torres adds that she is proud of her larger role in preventing infections.

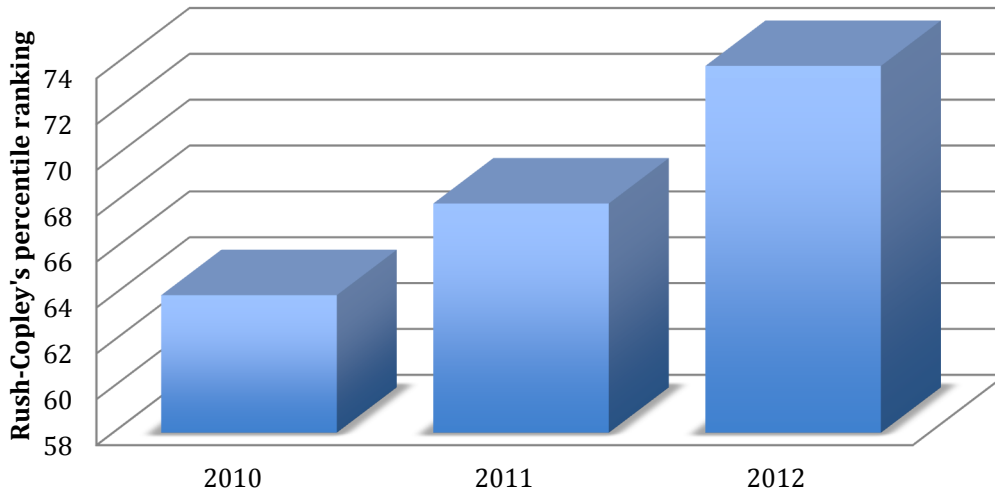
The work at Rush-Copley has resulted in a significant improvement in the hospital's national percentile ranking for patient satisfaction with room cleanliness (See chart). The ranking puts Rush Copley ahead of all other local hospitals. "Our staff strives for the highest scores and patient safety is one of our top priorities," says Sainski. "I tell them they have done very well, but we want to continue to improve."

Overall, concludes Sainski: "The partnership with UMF and PerfectCLEAN products has enhanced the image of our hospital and our hygiene specialists."

Incidence of *C. Difficile* Declines at Rush-Copley



Room Cleanliness Scores* on the Rise



* Hospital Consumer Assessment of Healthcare Providers and Systems