

- [Society for Healthcare Epidemiology of America \(SHEA\) Spring 2015 Conference](#)

Stopping Contact Precautions for MRSA, VRE Saves Money, Time

Fran Lowry

May 26, 2015

ORLANDO, Florida — Discontinuing routine contact precautions for endemic methicillin-resistant *Staphylococcus aureus* (MRSA) and vancomycin-resistant *Enterococcus* (VRE) can save time and money without increasing rates of hospital-acquired infection, according to a new study.

"Frequently, hospitals put patients into individual rooms and use gowns and gloves when they have resistant organisms, like MRSA and VRE, and Gram-negative-resistant infections, like *Acinetobacter* or *Pseudomonas*," said Elise Martin, MD, from the David Geffen School of Medicine at UCLA in Los Angeles.

"There really aren't a lot of data saying that using a gown and gloves for MRSA and VRE is necessarily going to help the patient and decrease the risk of infection," she told *Medscape Medical News*. However, "there have been a lot of data recently saying there is an increased risk of adverse events associated with contact precautions."

Some data suggest that patients suffer more depression and anxiety when they are in isolated rooms and that healthcare workers are less likely to go into the rooms to examine the patients.



DrElise Martin

"In our hospital — the Ronald Regan UCLA Medical Center — we decided to look at the impact of removing routine contact precautions for patients with MRSA and VRE," Dr Martin said here at the Society for Healthcare Epidemiology of America Spring 2015 Conference.

The researchers stopped routine contact precautions for patients with MRSA and VRE at their center on July 1, 2014.

To identify trends in infection rates, the team analyzed data on lab-identified hospital-acquired infections from July 2013 to December 2014.

The difference in hospital-acquired infection rates before and after the discontinuation of precautions was not significant for MRSA (0.44 vs 0.36 per 100 admissions; $P = .27$) or for VRE (0.62 vs 0.53 per 100 admissions; $P = .27$).

There was also no significant difference in the rate of *Clostridium difficile* infection before and after the discontinuation (11.57 vs 14.44 cases per 10,000 patient-days; $P = 0.21$).

Considerable Savings

Discontinuing contact precautions also resulted in considerable savings for the hospital.

After the policy change, the average monthly cost for personal protective equipment (PPE) fell by \$36,599 for gowns and \$17,867 for gloves. The projected saving was \$653,587 per year.

Stopping routine contact precautions also saved time because healthcare workers didn't have to don PPE at every room entry.

The average time to don PPE was 38 seconds, and the average number of hourly nursing room entries was 5.7 in the intensive care unit (ICU) and 1.7 on the floor.

We have seen a really significant cost savings for our healthcare system.

The researchers calculated that nursing time costs \$1.75/min for floor nurses and \$1.66/min for ICU nurses. Before the policy change, MRSA or VRE isolation accounted for 28.5% of ICU beds and 19.0% of inpatient days.

Therefore, when routine contact precautions were in place, the estimated time nurses spent donning PPE for MRSA and VRE was 20,379 hours/year, at an estimated annual cost of \$2,076,858.

"By stopping routine contact precautions for endemic MRSA and VRE, we have seen a really significant cost savings for our healthcare system. And we've freed up a lot of time for our

healthcare providers for direct patient care and other work," Dr Martin reported. "With everyone having such busy schedules, it is wonderful to have the extra time."

She said they will continue the policy of not isolating these patients and not using contact precautions, and they will continue to track their numbers.

Caution Needed



Dr Silvia Munoz-Price

"Foregoing of contact precautions is a modality currently being done by a few hospitals within the United States," said Silvia Munoz-Price, MD, from Froedtert & the Medical College of Wisconsin in Milwaukee.

"There doesn't seem to be a negative impact on the acquisition of MRSA or VRE in these institutions, especially in hospitals endemic for these pathogens," Dr Munoz-Price told *Medscape Medical News*.

However, "caution should be taken not to extrapolate these measures to other organisms, such as *C difficile* or carbapemase-producing Gram-negative rods," she added.

Dr Martin and Dr Munoz-Price have disclosed no relevant financial relationships..

Society for Healthcare Epidemiology of America (SHEA) Spring 2015 Conference:
Abstract 6820. Presented May 15, 2015.