



for carbapenem-resistant organism carriage. We interviewed infection preventionists to define when CP were used for CRE, ESBL, and 3DC-GNR Enterobacteriaceae. HAI were defined using National Healthcare Safety Network criteria including all HAI categories. We compared the incidence rate of HAI attributable to the two MDRGN types in hospital months with and without use of CP, with HAI due to CRE as a comparison group since all hospitals used CP for CRE throughout the study period. **Results:** The periods of CP use, by hospital, are shown in Figure 1. Throughout the study

period, there were 987 HAI attributed to ESBL Enterobacteriaceae, 579 due to 3DC-GNR Enterobacteriaceae, and 329 due to CRE. Figure 2 shows the unadjusted aggregate rate of HAI for each of the three MRGN types, including among hospitals with and without CP in each month, for ESBL and 3DC-GNR. In months with and without CP, the rate of HAI was 1.482/10,000 and 1.093/10,000 patient days (incidence rate ratio [IRR], 1.356 [95% confidence interval, 1.195-1.540]) for ESBL Enterobacteriaceae. In months with and without CP, the rate of HAI was 1.071/10,000 and 0.493/10,000 patient days (IRR, 2.173 [95% confidence interval, 1.838-2.569]) for 3DC-GNR Enterobacteriaceae. **Conclusion:** DcCP was not associated with an increase in HAI due to ESBL and 3DC-GNR Enterobacteriaceae in aggregated facilities that self-selected for DcCP. Facilities that used CP were associated with significantly higher rates of ESBL and 3DC-GNR Enterobacteriaceae, a relationship that did not change as hospitals DcCP for these MDRGN. Further analyses are necessary to assess for a causal relationship.

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Antimicrobial bathing of the critically ill for the prevention of health-care-associated infection at a hospital in California

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Background: Patients in the intensive care unit (ICU) have invasive lines increasing their risk for healthcare-associated infections (HAIs). Our objective was to determine if antimicrobial bathing with 2% chlorhexidine gluconate (CHG) compared to the colloidal silver-based antimicrobial product would reduce the incidents of central line-associated bloodstream infections (CLABSI) and catheter-associated urinary tract infections (CAUTI). **Methods:** We performed a before-and-after study in four adult ICUs at a two-hospital facility in California. Prospective surveillance of CLABSI and CAUTI prevention bundles monitoring was established. The intervention consisted of daily bathing with CHG for all patients in the ICUs. A baseline period of one year was followed by an intervention period of one year. The incidence rates of CLABSIs and CAUTIs were compared between the baseline and intervention periods utilizing a t-test analysis. **Results:** A total of 10103 patients were included. At Facility A, a mean CLABSI rate of 2.43/1000 central line catheter days (CL) with 2149 patient days (Mean differences 95% CI -0.5-3.1; P>0.0975), during the baseline period followed by 1.11/1000 CL days with 2193 patient days in the intervention period. At Facility B, the mean CLABSI rate of 1.82/1000 CL days with 2976 patient days (Mean differences 95% CI -0.6-2.31; P>0.161) during the baseline period was followed by 1.01/1000 CL days with 2785 patient days in the intervention period. At Facility A, the mean CAUTI rate of 1.37/1000 indwelling catheter days (IUC) with 2149 ICU patient days (Mean difference 95% CI is 0.28-1.97; P 0.2160) was noted in the baseline period, followed by 0.45/1000 IUC days with 2785 in the intervention period. **Conclusion:** Daily bathing with CHG significantly reduced the incidence of CAUTI at Facility A. It is unclear why Facility A saw a statistically significant reduction in CAUTI, but Facility B did not. The difference in outcomes may be related to hospital size, service lines, supply constraints, and discrepancies in staffing. CHG bathing was not directly associated with a reduced risk of CLABSI at Facility A and B during our limited study, but it was encouraging enough that our organization will continue this intervention to obtain additional data to determine if bathing with CHG will reduce CLABSI and CAUTI.

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