

bacterial contamination that can be easily incorporated into clinical workflow. Larger studies are needed to determine the efficacy of ABHR at removing CIP from stethoscopes as stethoscopes in both arms were frequently contaminated with CIP. Prior cleaning of stethoscopes on the study day did not seem to impact contamination rates, suggesting the impact of alcohol foam disinfection is short-lived and may need to be repeated frequently (ie, after each use).

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Poster Presentation

Amidst the CAUTI Metrics Hurley Burly, a Sustained SURLY Success Adaptable for Reducing Other Nosocomial Infections

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Background: Surveillance metrics for catheter-associated urinary tract infections (CAUTIs) are subject to ongoing debate and refinement to best capture infectious catheter-related harm (ICRH) and noninfectious catheter-related harm (NCRH). Indwelling urinary catheters cause 5 times more NCRH than ICRH. The commonly

used standardized infection ratio (SIR) does not fully capture NCRH nor the impact of prevention efforts in all settings. Alternatively, device utilization rates and ratios (DUR) do not reflect differences in other factors that may describe levels of device use. DUR lose comparability over time and across settings and can mask truly effective interventions by selecting for a higher risk group of catheterized patients. Experts now advocate use of the standardized utilization ratio (SUR). We sought to implement a multidimensional intervention to reduce exposure risk, CAUTI, and NCRH across a 5-hospital healthcare system, totaling 1,692 acute-care beds. **Methods:** The intervention comprised the following elements: (1) an interactive educational campaign comprising one-on-one engagements between infection preventionists and frontline providers, encouraging the use of female external urinary collection devices and male custom-fitted condom catheters, rewarding overall participation, device utilization, hand hygiene, and CAUTI rates; (2) educational emails to all staff from top executives; (3) increasing the urinalysis reflex to culture threshold from >5 to ≥ 10 WBCs; and (4) clinical decision support (CDS) for ordering urine cultures for patients with indwelling catheters and for encouraging Foley catheter alternatives and catheter removal. Monthly, quality department representatives discuss unit level DURs with managers, who then discuss patient-level device use at daily huddles with physicians and advanced practice providers. Significance was determined using the 2-tailed *t* test. The results are listed in Table 1. **Discussion:** One year after the intervention, use of device alternatives increased 5-fold, CDS-driven ordering predominated, and the SIR and SUR remained significantly decreased. These successes are especially notable because, a ventricular-assist device program was launched in the postintervention period. By the end of the study, the program became the second-busiest of its type in the United States, resulting in a group of patients at high risk of device use and infection in the postintervention period, but absent in the preintervention period. Numerous reports of effective interventions for reducing CAUTI have been published, we found no large studies using the SUR as the main metric. The limitations of this study include the lack of a population SIR and data pertaining to catheter-related bacteriuria and antibiotic usage. However, this approach is easily customizable to any infection, device, and diagnostic test.

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An Interactive Sociotechnical Analysis of the Implementation of Electronic Decision Support in Antimicrobial Stewardship

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Background: There is great enthusiasm for the potential of decision support tools embedded in the electronic medical record to improve antimicrobial use in hospitals. Yet they are often limited in their ability to change prescriber behavior. Analyzing these tools using an interactive sociotechnical approach (ISTA) can identify

Table 1.

Table:

	Pre-intervention 09-01-17 to 09-15-18	Post-intervention 09-16-18 to 09-30-19	P value
Mean Monthly CAUTIs (SD)	6.69 (1.97)	3.08 (2.02)	0.0002
Mean Monthly Patient Days (SD)	27071 (1150)	26879 (961)	0.6544
CAUTI/ 10,000 Patient Days (SD)	2.49 (0.77)	1.15 (0.76)	0.0002
Mean Monthly Device Days (SD)	4582 (430)	3837 (357)	0.0001
CAUTI/ 1000 Device Days (SD)	1.47 (0.45)	0.80 (0.55)	0.0035
Mean Monthly Orders for Device Alternatives	9.00	131.43	
Mean Monthly Device-Alternative Days (SD)	108 (177)	541 (34)	<0.0001
Monthly Average SIR (SD)	1.31 (0.41)	0.70 (0.49)	0.0029
Monthly Average SUR (SD)	1.05 (0.09)	0.85 (0.07)	<0.0001
Mean monthly % of total urine culture orders that were CDS-driven	0%	55.91%	