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CCN-SIRs, their relative position in the quartile distributions of SIR_NEW and SIR_OLD remained the same. The discrepancies between SIR_NEW and SIR_OLD tended to be larger among CCNs with high SIRs.

Conclusion. The updated national pooled mean SIRs were close to 1.0, validating the potential use of new risk adjustment models and baseline as updated benchmarks for tracking CDI and MRSA prevention progress. The shifts in CCN-level SIRs between old and new baselines were not large, indicating a modest impact of new baselines at the CCN level, except among hospitals with high SIRs.

TABLE 1: Comparisons of the NHSN HAI standardized infection ratios (SIRs) between new and old baselines

	Metrics	CDI	MRSA
National pooled mean SIR			
NEW baseline (SIR_NEW)	RCCN facility reporting, mean	3810, 0.997	3753, 1.013
OLD baseline (SIR_OLD)	RCCN facility reporting, mean	3810, 0.931	3753, 0.962
Distribution of CCN-LEVEL SIR			
NEW baseline	RCCN with SIR available, mean, median (IQR)	3047, 0.96 0.92 (0.60)	1710, 1.01 0.85 (0.91)
OLD baseline	RCCN with SIR available, mean, median (IQR)	3298, 0.82 0.80 (0.62)	1845, 0.99 0.82 (0.95)
Comparison of overall distributions of CCN-LEVEL SIRs between OLD and NEW baseline			
Kolmogorov-Smirnov test p-value		<0.0001	
Pairwise comparison of CCN-LEVEL SIRs among CCNs with available SIRs across OLD and NEW baseline		N=3041	N=1694
SIR Difference (SIR_NEW - SIR_OLD)	mean, median(IQR)	0.11, 0.07(0.17)	0.005, 0.002(0.21)
Test if median of pairwise differences is away from null	p-value by Sign test	<0.0001	0.1568
Change in significance level of CCN-level SIR from OLD to NEW baseline			
No change*	RCCN (%)	2519 (83%)	1568 (93%)
Change into less favorable direction**	RCCN (%)	424 (14%)	73 (4%)
Magnitude of shift in CCN-level SIR from OLD to NEW baseline			
Shift within the same quartile	RCCN (%)	2215 (73%)	1267 (75%)
Shift up or below but within 1 quartile	RCCN (%)	762 (25%)	218 (24%)

*CCN with "Not different from national benchmark" (NS) in SIR_OLD remains NS in SIR_NEW; CCN with "worse than national benchmark" (WORSE) in SIR_OLD remains WORSE in SIR_NEW; CCN with "better than national benchmark" (BETTER) in SIR_OLD remains BETTER in SIR_NEW.
**CCN with "not different from national benchmark" in SIR_OLD becomes "worse than national benchmark" in SIR_NEW; CCN with "better than national benchmark" in SIR_OLD becomes "WORSE than national benchmark" in SIR_NEW; CCN with "better than national benchmark" in SIR_OLD becomes "not different from national benchmark" in SIR_NEW.

Figure 1: Facility-onset laboratory-identified *Clostridium difficile* infection: (1-A) Comparison of overall distributions of CCN-level SIRs between new and old baseline, (1-B) Pairwise difference of CCN-level SIRs between new and old baseline, (1-C) Agreement plot that compares CCN-level SIRs between new and old baseline

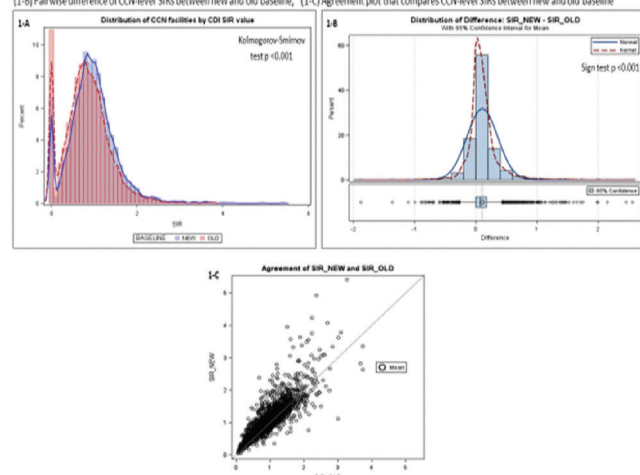
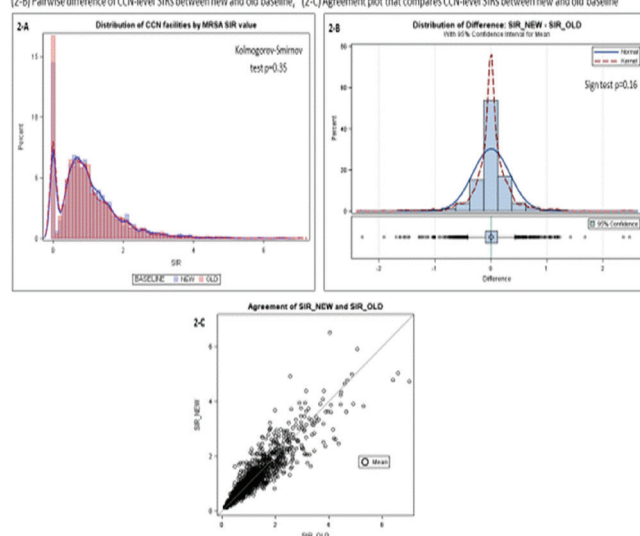


Figure 2: Facility-onset laboratory-identified MRSA bacteremia infection: (2-A) Comparison of overall distributions of CCN-level SIRs between new and old baseline, (2-B) Pairwise difference of CCN-level SIRs between new and old baseline, (2-C) Agreement plot that compares CCN-level SIRs between new and old baseline



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1770. Wide Range of Carbapenem-resistant Enterobacteriaceae Incidence and Trends in Emerging Infections Program Surveillance, 2012–2015

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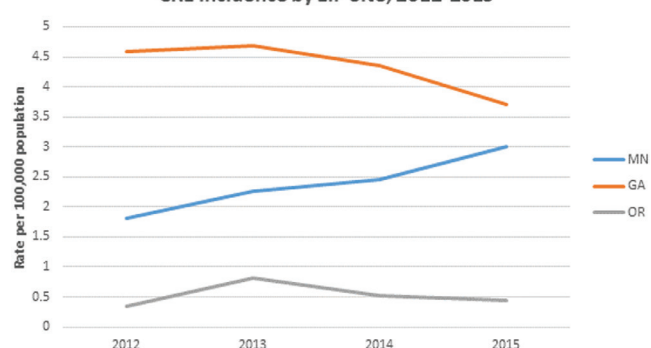
Background. Carbapenem-resistant Enterobacteriaceae (CRE) are an urgent threat in the United States because of high morbidity and mortality, few treatment options, and potential for rapid spread among patients. To assess for changes in CRE epidemiology and risk among populations, we analyzed CDC Emerging Infections Program (EIP) 2012–2015 surveillance data for CRE.

Methods. Active, population-based CRE surveillance was initiated in January 2012 at 3 EIP sites (GA, MN, OR) and expanded to 5 additional sites (CO, MD, NM, New York, TN) by 2014. An incident case was the first *Escherichia coli*, *Enterobacter*, or *Klebsiella* isolate (non-susceptible to at least one carbapenem and resistant to all third-generation cephalosporins tested) collected from urine or a normally sterile body site from a patient during a 30-day period. Data were collected from patients' medical records. Cases were hospital-onset (HO) or long-term care facility (LTCF) onset if patients were in the respective facility ≥ 3 days prior to culture or at the time of culture; and community-onset (CO) otherwise. We calculated incidence rates based on census data for EIP sites and described by type of infection onset.

Results. A total of 1,582 incident CRE cases were reported in 2012–2015. Most cases (88%) were identified through urine cultures; 946 (60%) were female, and median age was 66 years (interquartile range: 55–77). The median incidence by site was 2.95 per 100,000 population (range: 0.35–8.98). Among the three sites with four full years of data, a different trend was seen in each (Figure). Trends in GA and MN were statistically significant, and no significant trend was seen in OR. Overall, 480 cases (30%) were HO, 524 (33%) were LTCF onset, and 578 (37%) were CO. Of CO cases, 308 (53%) had been hospitalized, admitted to a long-term acute care hospital or were a LTCF resident in the prior year.

Conclusion. CRE incidence varied more than 20-fold across surveillance sites, with evidence of continued increases in MN. Measuring impact of programs aimed at reducing CRE transmission in other regions will require obtaining local data to identify cases occurring during and after healthcare facility discharge. Further study of changes in incidence in some settings and areas might offer opportunities to refine and expand effective control strategies.

CRE Incidence by EIP Site, 2012–2015



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1771. The Effect of National Healthcare Safety Network (NHSN) Rebaselining on Community Hospital SIRs

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