

nearly half of known CPO-colonized NIHCC patients over the past 6 years. Modest compliance with swab collection leaves room for improvement and likely results in missed instances of colonization. Although we cannot determine its effectiveness, we view our strategy as one of several key safety measures for our highly vulnerable patient population.

**Funding:** None

**Disclosures:** None

Doi:10.1017/ice.2020.570

**Presentation Type:**

Top Rated Posters

**SPARC-ing Change—The Maryland Statewide Prevention and Reduction of *Clostridioides difficile* (SPARC) Collaborative**

Clare Rock, Johns Hopkins University School of Medicine; Rebecca Perlmutter; David Blythe, MDH; Jacqueline Bork, University of Maryland; Kimberly Christine Claeys, University of Maryland, Baltimore; Sara Cosgrove, Johns Hopkins University School of Medicine; Kathryn Dzintars, The Johns Hopkins Hospital; Valeria Fabre, Johns Hopkins University; Anthony Harris, University of Maryland School of Medicine; Emily Heil, University of Maryland School of Pharmacy; Yea-Jen Hsu; Sara Keller, Johns Hopkins University; Lisa Maragakis, Johns Hopkins University School of Medicine; Aaron Michael Milstone, Johns Hopkins University; Daniel Morgan, University of Maryland School of Medicine; Richard Brooks, Centers for Disease Control and Prevention; Surbhi Leekha, University of Maryland Baltimore

**Background:** In 2018, the Maryland Department of Health, in collaboration with the University of Maryland and Johns Hopkins University, created the Statewide Prevention and Reduction of *Clostridioides difficile* (SPARC) collaborative to reduce *C. difficile* as specified in Healthy People 2020. **Methods:** The SPARC collaborative recruited hospitals contributing most cases to statewide *C. difficile* standardized infection ratio (SIR), according to data reported to the National Healthcare Safety Network (NHSN). SPARC developed intervention bundles around 4 domains: infection prevention, environmental cleaning, and diagnostic and antimicrobial stewardship. Each facility completed a self-assessment followed by an on-site, day-long, peer-to-peer (P2P) evaluation with 8–12 SPARC subject matter experts (SMEs) representing each domain. The SMEs met with hospital executive leadership and then led 4 domain-based group discussions with relevant hospital team leaders. To identify policy and practice gaps, SMEs visited hospital inpatient units for informal interviews with frontline staff. In a closing session, SPARC SMEs, hospital executives, and team leaders reconvened to discuss preliminary findings. This included review of covert observation data (hand hygiene, personal protective equipment compliance, environmental cleaning) obtained by SPARC team 1–2 weeks prior. Final SPARC P2P written recommendations guided development of customized interventions at each hospital. SPARC provided continuous support (follow up phone calls, educational webinars, technical support, didactic training for antimicrobial stewardship pharmacists) to enhance facility-specific implementation. For every quarter, we categorized *C. difficile* NHSN data for each Maryland hospital into “SPARC” or “non-SPARC” based on participation status. Using negative binomial mixed models, we analyzed difference-in-difference of pre- and postincidence rate ratios (IRRs) for SPARC and non-SPARC hospitals, which

allowed estimation of change attributable to SPARC participation independent of other time-varying factors. **Results:** Overall, 13 of 48 (27%) hospitals in Maryland participated in the intervention. The baseline SIR for all Maryland hospitals was 0.92, and the post-SPARC SIR was 0.67. The SPARC hospitals had a greater reduction in hospital-onset *C. difficile* incidence; 8.6 and 4.3 events per 10,000 patient days for baseline and most recent quarter, respectively. For non-SPARC hospitals, these hospital-onset *C. difficile* incidences were 5.1 preintervention and 4.3 postintervention. We found a statistically significant difference-in-difference between SPARC and non-SPARC hospital *C. difficile* reduction rates (ratio of IRR, 0.63; 95% CI, 0.44–0.89;  $P = .01$ ). **Conclusions:** The Maryland SPARC collaborative, a public health-academic partnership, was associated with a 25% reduction in the Maryland *C. difficile* SIR. Hospitals participating in SPARC demonstrated significantly reduced *C. difficile* incidences to match that of high-performing hospitals in Maryland.

**Funding:** None

**Disclosure:** Aaron Milstone, BD – consulting.

Doi:10.1017/ice.2020.571

**Presentation Type:**

Top Rated Posters

**The Burden of Infection in Transfers from Nursing Homes to Hospitals**

Andrew Dick, The RAND Corporation; Mark Sorbero, The RAND Corporation; E. Yoko Furuya, Columbia University Irving Medical Center; Tadeja Gracner; Mansi Agarwal, Columbia University; Patricia Stone, Columbia School of Nursing

**Background:** The focus on infection prevention in nursing homes is growing, but little is known about the role infections play in transfers from nursing home to hospital. Our goals were (1) to identify rates of infection-related transfers to the hospital and (2) to identify trends in these rates from 2011 to 2014. **Methods:** Using a nationally representative sample of 2,501 nursing homes (2011–2014), elderly resident data from the Minimum Data Set 3.0 were combined with CMS inpatient data (MedPAR). We classified transfers from nursing home to hospital as caused by infection (1) if infection was the primary diagnosis and present on admission (POA) or (2) if infection was indicated as the MedPAR admitting diagnosis code and POA.

Table 1.

**Table 1: Percent of all-cause transfers caused by, or made with, infection**

Infection Type	Transfer Classification	Year			
		2011	2012	2013	2014
Respiratory:	Caused By	10.4%	9.9%	9.9%	8.6%
	With	28.8%	30.1%	31.0%	29.5%
Sepsis:	Caused By	12.1%	13.8%	15.0%	16.6%
	With	14.6%	16.3%	17.6%	19.4%
UTI:	Caused By	7.7%	7.9%	7.6%	7.6%
	With	28.1%	29.3%	28.8%	28.9%
All Infections:	Caused By	31.1%	32.4%	33.0%	33.4%
	With	50.5%	52.1%	52.6%	52.6%
NH Residents (Millions)		3.75	3.80	3.86	3.92
Hospital Transfers / Patient		0.479	0.428	0.407	0.396

Note: Transfers classified as with infection include all those with an infection diagnosis present on admission and therefore include transfers that were caused by infection.