

providers and we searched for addresses using the CMS online database. On March 25, 2019, the high prescribers were sent a hard copy letter from the Massachusetts Department of Public Health stating that they were “among the 1% of frequent prescribers.” In addition, the letter provided citations to professional guidelines and prescribing best practices and invited participation in health department-sponsored training for continuing education credits. We tracked the monthly number of antibiotics prescribed by provider before and after the mailing and compared those who received the letter (intervention) to those whose address was either out of state or undeliverable (comparison). **Results:** Prescribing records for 3,008 dentists were available from September 2018 through July 2019. Most (67%) prescribed <10 antibiotic courses in the 11-month period; the mean monthly antibiotic courses prescribed ranged from 1.2 to 1.6, and the median monthly prescriptions was 0. However, 33% prescribed 10–199 antibiotics, and 1% prescribed >200. Of these 28 comprising the highest 1%, 15 received the intervention letter. The others were either out of state (N = 3) or the letter was returned undelivered (N = 10). The average monthly number of antibiotic courses prescribed before the intervention was similar in the intervention and comparison groups (25.0 and 24.2, respectively). In the 4 months after the intervention, the average did not change in the intervention group but increased slightly in the comparison group (25.2 and 26.2, respectively). The intervention had no significant effect ( $P = .80$ ). **Conclusions:** We observed no effect of this peer comparison message among a small sample of dentists in the Massachusetts Medicaid program. This finding may be due to multiple factors, including the small number of the targeted prescribers, the use of a relatively friendly message for communicating with the high prescribers, and the possibility that other forms of communication would be more effective.

**Funding:** None

**Disclosures:** None

Doi:10.1017/ice.2020.960

### Presentation Type:

Poster Presentation

### Healthcare Professionals Perception of Mobile Phone Usage and Hand Hygiene Adhesion in Intensive Care Units

Evelyn Sanchez, University of São Paulo; Lauro Perdigão-Neto, Hospital das Clínicas, University of São Paulo, São Paulo, Brazil; Sônia Alves dos Santos, Laboratory of Medical Microbiology, University of São Paulo; Camila Rizek, São Paulo University; Maria Renata Gomez, Hospital das Clínicas of the University of São Paulo, São Paulo Brazil; Roberta Martins, University of Sao Paulo; Gaspar de Oliveira, University of Sao Paulo; Thais Guimaraes, Hospital das Clínicas – FMUSP; Icaro Boszczowski, Hospital das Clínicas University of Sao Paulo; Flavia Rossi, University of São Paulo; Maristela Freire, University of Sao Paulo; Anna Levin, Hospital das Clínicas, University of São Paulo, São Paulo, Brazil; Silvia Figueiredo Costa, São Paulo University; Marina Farrel, Universidade de Sao Paulo

**Background:** The introduction of new technologies into the medical field has the duality of improvement and concerns about correct usage and cleaning. Mobile phones are used by healthcare professionals (HCPs) in the work place, and there is not an official policy about their use in health environment. **Methods:** We asked 60 intensive care unit (ICU) HCPs from 2 units (the burn unit and the internal medicine unit) to participate in an electronic survey about mobile phone usage and hand hygiene compliance; we also cultured the hands and mobile

Table 1. Microorganisms isolated accordingly with the Health-care Professional category and Health Associated Infections (HAI)

Health-care Professional Category	Hand HAIs Agents	Mobile Phone HAIs Agents	A.baumannii Hand Culture	E.faecalis Hand culture	S.aureus Hand Culture	S.aureus Mobile Phone
Nurse	55,56% (5/9)	22,22% (2/9)	33,33% (3/9)	33,33% (3/9)	0% (0/9)	22,22% (2/9)
Cleaning staff	66,67% (4/6)	0% (0/6)	50% (3/6)	16,67% (1/6)	0% (0/6)	0% (0/6)
Physiotherapist	25% (2/8)	37,50% (3/8)	0% (0/8)	12,50% (1/8)	0% (0/8)	25% (2/8)
Consultant	60% (3/5)	0% (0/5)	20% (1/20)	0% (0/8)	20% (1/5)	0% (0/5)
Resident	22,22% (2/9)	22,22% (2/9)	11,11% (1/9)	0% (0/9)	11,11% (1/9)	22,2% (2/9)
Nursery technician	37,50% (3/8)	25% (2/8)	0% (0/8)	12,50% (1/8)	12,50% (1/9)	0% (0/8)
Radiologist technician	100% (2/2)	50% (1/2)	50% (1/2)	100% (2/2)	50% (1/2)	50% (1/2)

phones of the participants. Unfortunately, 13 HCPs did not participate. Susceptibility testing of the strains was conducted, as well as molecular testing. **Results:** Overall, 47 HCPs responded to the inquiry: 19% were nurses (9 of 47), 19% were resident physicians (9 of 47), 17% were nursery technicians (8 of 47), 17% were physiotherapists (8 of 47), 13% were cleaning staff (6 of 47), 11% were consultants (5 of 47), and 4% were technicians (2 of 47). Moreover, 26 of 47 participants (55%) were woman and 21 (45%) were men. From all HCP categories, 39 of 47 respondents (83%) reported that they had optimal hand hygiene compliance. However, 92% of respondents had a colonized hand and 90% had a colonized mobile phone. Also, 44 of 47 HCPs (94%) reported that they took their personal mobile phone into the workplace; 40 (85%) reported that they used it during the work day and 35 (74%) reported that they cleaned it. However, 8 HCPs (26%) reported that they had never cleaned the device. All of the HCPs understood that mobile phones can harbor bacteria, and 27 of 47 HCPs (57.45%) indicated that they use 70% alcohol to clean their mobile phones. In contrast, the first choice for hand hygiene was water and soap in 51% of HCPs (24 of 47). Also, 3 HCPs did not have any colonization in the hand culture but had healthcare-associated infection (HAI) pathogens in the mobile phone culture. **Conclusions:** A policy regarding mobile phone usage in the healthcare setting should be in place, and cleaning of electronic devices in hospitals should be standardized.

**Funding:** None

**Disclosures:** None

**Funding:** None

**Disclosures:** None

Doi:10.1017/ice.2020.961

### Presentation Type:

Poster Presentation

### Perceptions of Antimicrobial Stewardship among Infectious Disease Physicians at Two Affiliated Teaching Hospitals

Katharina Rynkiewich, Washington University in St Louis; David Schwartz, John H. Stroger Jr Hospital of Cook County; Sarah Won, Rush University Medical Center; Brad Stoner, Washington University in St Louis

**Background:** Two affiliated teaching hospitals in Chicago, Illinois, participated in an ethnographic study of hospital-based inpatient antimicrobial stewardship programs and interventions between 2017 and 2018. Although antimicrobial stewardship is now a requirement in medical practice, it is not clear how infectious disease physicians perceive and understand antimicrobial stewardship. Over a period of 18 months, we directly observed infectious disease practice to better understand how antimicrobial stewardship is conducted among physicians within the same specialty. **Methods:** A doctoral candidate medical anthropologist conducted semistructured interviews with infectious disease attending

Table 1. Interview Themes Related to the Perception of Antimicrobial Stewardship

Theme(s)	Exemplar Quote(s)
Domain 1: Descriptions of antimicrobial use among hospital-based physicians	
<i>Overuse and misuse of antibiotics</i>	<p>“Most practitioners will have one or two antibiotics that they know, and they’ll use those one or two antibiotics that they know in every situation.” – Infectious disease attending physician</p> <p>“A lot of times, other practitioners will use really broad empiric drugs and not think about switching and changing, or when to stop.” – Infectious disease fellow physician</p>
Domain 2: Solicited definitions of antimicrobial stewardship	
<i>Stewardship is using antimicrobials responsibly</i>	<p>“Stewardship means caretaking antibiotics to preserve them so that they can be useful today and in the future. When I break down the words that is what it means to me.” – Infectious disease attending physician</p> <p>“Stewardship is the intelligent and thoughtful way of utilizing antibiotics, with the future in mind.” – Infectious disease attending physician</p>
<i>Stewardship is changing the prescribing habits of others</i>	<p>“Stewardship is trying to steer the use of antibiotics in the hospital, to avoid inappropriate prescribing, or (the) use of antibiotics for inappropriate indication.” – Infectious disease attending physician</p> <p>“Stewardship is a program that’s goal is to restrict the use of broad-spectrum antibiotics in (our) patients.” – Infectious disease attending physician</p>
Domain 3: Experiences practicing as an infectious disease consultant	
<i>Expert advice is often appreciated</i>	<p>“If we weren’t in infectious diseases, we wouldn’t know this information. Not everyone’s going to know the information. So, they know very little, and that’s ok, because it’s not what they do for a living.” – Infectious disease fellow physician</p> <p>“I think for the most part other physicians are eager to find out our input, because it has an impact on length of stay, because we may say, “No. Switch to this [antibiotic].” So, a lot of times, if we have explained to them what our rationale is, they’re at least would be open to what we have to offer.” – Infectious disease attending physician</p>
<i>Deferring to the primary team can be challenging</i>	<p>“I try to call them directly. I’ll say it smoothly, like “Consider a CT” instead of “Get a CT.” The primary is always the quarterback, we are just the consultants. – Infectious disease fellow physician</p> <p>“Sometimes other physicians are a little uncomfortable stopping antibiotics because it’s like a safety net. Someone is sick and has a fever. I would say, it’s not from an infection, you can stop the antibiotics. But sometimes they’re uncomfortable. Ultimately, we’re consultants.” – Infectious disease attending physician</p>

physicians and fellow physicians (N = 18) at 2 affiliated teaching hospitals in Chicago, IL, between July 2017 and March 2018 as part of an ethnographic study involving direct observation of inpatient care. Interview questions focused on 3 key domains: (1) descriptions of antimicrobial use among hospital-based physicians, (2) solicited definitions of antimicrobial stewardship, and (3) experiences practicing as an infectious disease consultant. Physicians who were directly involved with the antimicrobial stewardship program were excluded from this analysis. Transcriptions of the data were analyzed using thematic coding aided by MAXQDA qualitative analysis software. **Results:** Infectious disease physicians have a robust understanding of antimicrobial stewardship (Table 1). Infectious disease physicians described other hospital-based physicians as regularly overusing and misusing antimicrobials, compared with their practice, which they described as “thoughtful.” Definitions in response to the question “What is

antimicrobial stewardship?” centered on guiding the prescribing behavior of others. Infectious disease physicians valued stewardship and were concerned with lack of adherence to antimicrobial prescribing recommendations among other hospital-based physicians, behaviors which infectious disease physicians viewed as perpetuating antibiotic resistance. Finally, infectious disease physicians found serving as antimicrobial stewards during their everyday practice to be challenging based on their role as consultants to the primary service. **Conclusions:** Our qualitative analysis revealed that infectious disease physicians not regularly involved in antimicrobial stewardship are highly motivated stewards who perceive their hospital-based colleagues to be less effective at appropriately prescribing antimicrobials. As consultants, infectious disease physicians are not autonomous decision makers. However, as antimicrobial stewardship programs search for champions, infectious disease physicians could be better utilized as

knowledgeable and motivated individuals who can make the case for stewardship.

**Funding:** None

**Disclosures:** None

Doi:10.1017/ice.2020.962

**Presentation Type:**

Poster Presentation

**Perioperative Microbial Contamination From Patients on Contact Precaution in Operating Room Environment**

Hajime Kanamori, Tohoku University; William Rutala, University of North Carolina School of Medicine; Maria Gergen, Hyper Light

Technologies, Cary, North Carolina, USA; David Jay Weber, University of North Carolina at Chapel Hill

**Background:** The contaminated healthcare environment, including operating rooms (ORs), can serve as an important role in transmission of healthcare-associated pathogens. Studies are very limited regarding the level of contamination of ORs during the surgery of a patient on contact precautions and the risk to the next surgery patient after standard room cleaning and disinfection. **Objective:** Here, we investigated the microbial burden on the OR environment when patients on contact precautions receive surgery, and we assessed the impact of cleaning and disinfection on

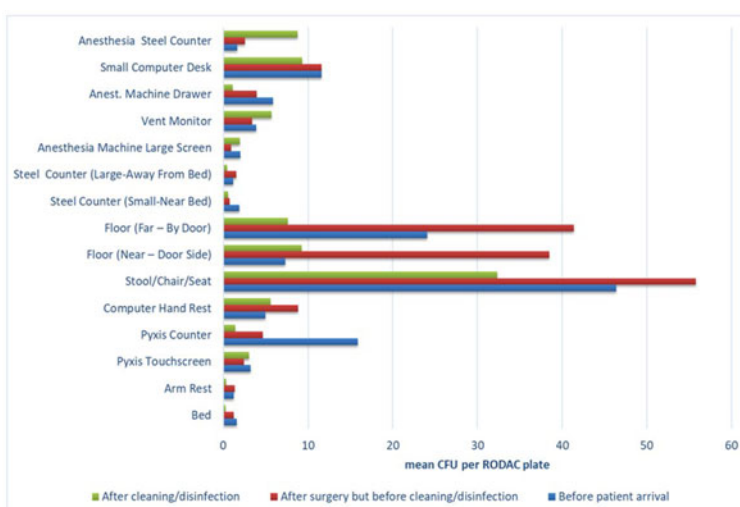


Figure 1. Microbial Burden by Environmental Site in Operating Rooms Before Patient Arrival, Before Cleaning/Disinfection, and After Cleaning/Disinfection.

Fig. 1.

Surgical Patient	Contact Isolation Organism	PFGE Relatedness of Environmental MRSA isolates			Environmental Site	Operating Room
		Before Patient Surgery	After Surgery Before Cleaning	After Cleaning		
Pt2	MRSA		B		Floor (Near Door)	OR32
			B, B		Floor (Far Door)	
Pt3	MRSA		A2/B2, C		Floor (Far Door)	OR2
			A2/B2		Computer Desk	
Pt4	MRSA, CRE	A2/B2	D		Pyxis Counter	OR10
			A2/B2, A2/B2, A2/B2	A2/B2	Floor (Near Door)	
		A2/B2, A2B2	A2/B2, A2/B2, A2/B2, A2/B2, A2/B2, A2/B2	A2/B2, A2/B2, A2/B2	Floor (Far Door)	
Pt5	MRSA		G1, G		Floor (Near Door)	OR29
		G			Floor (Far Door)	
Pt6	MRSA		H		Blue Stool	OR16
		A2/B2, A2/B2, A2/B2	F1, I, A2/B2		Floor (Far Door)	
Pt7	MRSA, CRE		J		Floor (Far Door)	OR9
			J1		Steel Counter	
Pt8	MRSA		F2	F2	Floor (Near Door)	OR2
			F2	A2/B2	Floor (Far Door)	
Pt9	MRSA	F2	A2/B2, A2/B2	A2/B2	Floor (Far Door)	OR2
Pt10	MRSA	Fp			Floor (Far Door)	OR9

Figure 2. PFGE relatedness of environmental MRSA isolates from operating rooms.

Fig. 2.