

**Table: User Assessment of Different Aspects of the Online Course**

|                          | General Practitioners |               | Other Physicians |               | Other Professions |               | Total |               |
|--------------------------|-----------------------|---------------|------------------|---------------|-------------------|---------------|-------|---------------|
|                          | N                     | Average score | N                | Average score | N                 | Average score | N     | Average score |
| Overall Course           | 118                   | 1.23          | 98               | 1.41          | 57                | 1.3           | 273   | 1.31          |
| Technical Organization   | 121                   | 1.31          | 99               | 1.43          | 57                | 1.14          | 277   | 1.32          |
| Selection of Topics      | 121                   | 1.24          | 99               | 1.34          | 58                | 1.28          | 278   | 1.28          |
| Selection of Speakers    | 119                   | 1.47          | 99               | 1.53          | 58                | 1.36          | 276   | 1.47          |
| Presentation             | 121                   | 1.52          | 100              | 1.52          | 57                | 1.51          | 278   | 1.52          |
| Informativeness          | 121                   | 1.31          | 99               | 1.52          | 57                | 1.44          | 277   | 1.41          |
| Clinical Relevance       | 120                   | 1.18          | 98               | 1.35          | 51                | 1.35          | 269   | 1.27          |
| Knowledge Gain           | 121                   | 1.58          | 100              | 1.66          | 58                | 1.5           | 279   | 1.59          |
| Discussion with Speakers | 67                    | 2.07          | 53               | 1.85          | 29                | 1.62          | 149   | 1.91          |
| Exchange with colleagues | 64                    | 2.28          | 49               | 2.02          | 27                | 1.81          | 140   | 2.1           |

N = number of evaluators; Score-Scale: 1 (very good) – 6 (not sufficient)

face-to-face formats and helps to cover needs related to antibiotic training.

**Funding:** None

**Disclosures:** None

Doi:10.1017/ice.2020.732

### Presentation Type:

Poster Presentation

### Dissemination of Methicillin-Resistant *Staphylococcus aureus* (MRSA) and Viral Surrogate Markers Outside Patient Rooms

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**Background:** Patients with methicillin-resistant *Staphylococcus aureus* (MRSA) colonization often shed MRSA, resulting in contamination of surfaces in their room. It is not known whether MRSA-colonized patients also frequently contaminate surfaces

Figure. Dissemination of MRSA and Viral Surrogate Markers to Surfaces Outside Patient Rooms

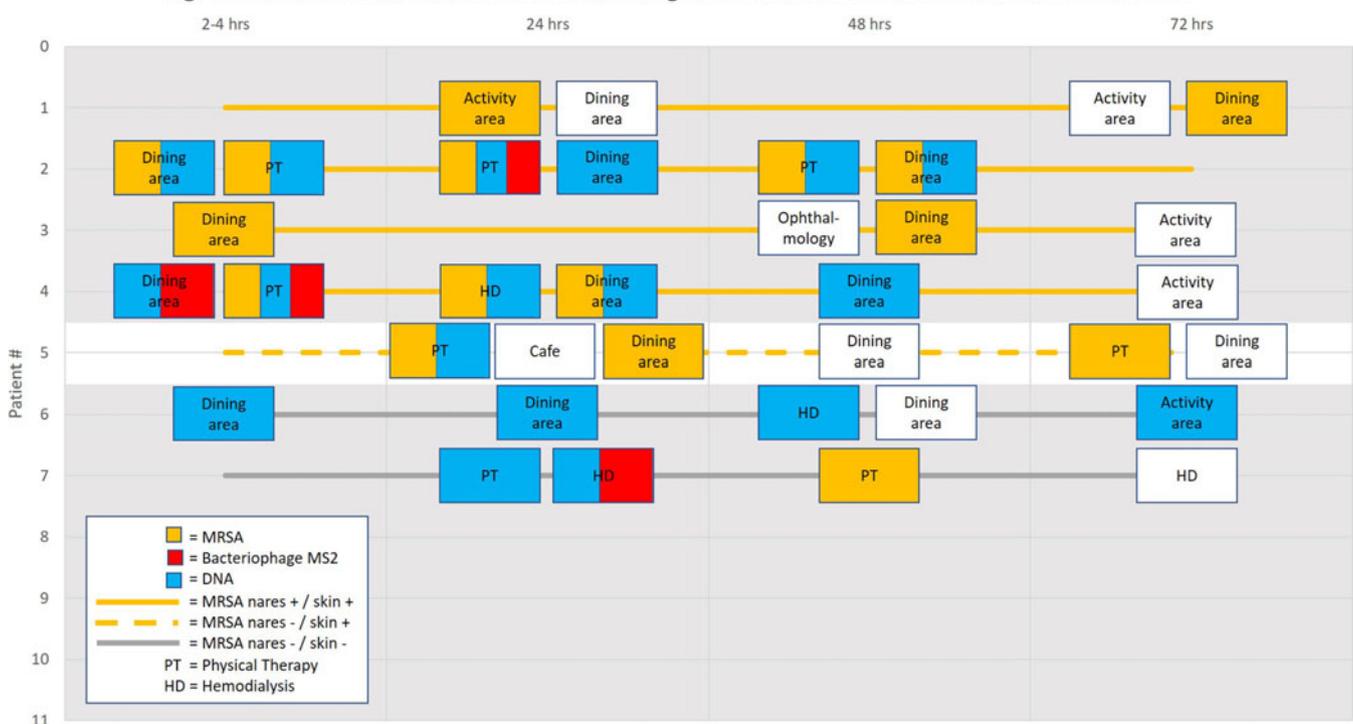


Fig. 1.

during medical appointments and other activities outside their room. **Methods:** We conducted an observational cohort study of MRSA-colonized long-term care facility (LTCF) residents to determine the frequency and mechanisms of contamination of surfaces outside patient rooms. Nares, skin, and clothing of patients in contact precautions for MRSA were cultured for MRSA, and high-touch surfaces in the residents' room were contaminated with the live virus bacteriophage MS2 and cauliflower mosaic virus DNA. The participants were observed during activities and medical appointments outside their rooms for 3 days, and sites that were contacted were sampled for recovery of MRSA, bacteriophage MS2, and cauliflower mosaic virus DNA. **Results:** As shown in Fig. 1, bacteriophage MS2 and cauliflower mosaic virus DNA was transferred to 1 or more surfaces outside the resident's room by 5 of the 7 participants, and MRSA was recovered from surfaces touched by 6 (86%) participants. MRSA was recovered during 16 of 35 episodes (46%) where sampling was performed, and recovery was similar for medical appointments (eg, hemodialysis, physical therapy) and nonmedical activities (eg, using the dining room or activity center). Moreover, MRSA, MS2, and the viral DNA marker were recovered both from sites contacted

only by participants' hands and from sites contacted only by clothing. Bacteriophage MS2 and the viral DNA marker were also recovered from portable equipment and from the nursing station. **Conclusions:** MRSA-colonized LTCF residents frequently disseminated MRSA and viral surrogate markers to surfaces outside their rooms through contact with contaminated hands and clothing. Efforts to reduce contamination of hands and clothing might reduce the risk for pathogen transmission.

**Funding:** None

**Disclosures:** None

Doi:10.1017/ice.2020.733

**Presentation Type:**

Poster Presentation

**Does Blood on "Dirty" Instruments Interfere With the Effectiveness of Sterilization Technologies?**

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**Table. Effectiveness of the microbicidal activity of sterilization technologies in the presence of blood on "dirty" instruments<sup>1</sup>**

| Test Organism                                  | Method of Sterilization | Instruments "dirty" (non-cleaned) with or without blood | Instrument Quantitation (Mean) | No. of Positives/No. of Runs (% Positive) |
|--|-------------------------|---|--------------------------------|---|
| <i>Geobacillus stearothermophilus</i> (spores) | Steam Sterilization     | Dirty   | ~ 1.56x10 <sup>5</sup>         | 0/10 (0)                                  |
|  |                         | Dirty with blood  | ~ 1.82x10 <sup>5</sup>         | 0/15 (0)                                  |
|  | ETO                     | Dirty   | ~ 1.53x10 <sup>5</sup>         | 0/10 (0)                                  |
|  |                         | Dirty with blood  | ~ 2.35x10 <sup>5</sup>         | 0/11 (0)                                  |
|  | HPGP                    | Dirty   | ~ 1.58x10 <sup>5</sup>         | 5/10 (50)                                 |
|  |                         | Dirty with blood  | ~ 2.35x10 <sup>5</sup>         | 9/15 (60)                                 |
| <i>Mycobacterium terrae</i>                    | Steam Sterilization     | Dirty   | ~ 4.25x10 <sup>6</sup>         | 0/10 (0)                                  |
| <i>Bacillus atrophaeus</i> (spores)            | ETO                     | Dirty   | ~ 2.30x10 <sup>7</sup>         | 6/10 (60)                                 |
|  |                         | Dirty with blood  | ~ 4.08x10 <sup>7</sup>         | 9/10 (90)                                 |
| MRSA   | ETO                     | Dirty   | ~ 2.62x10 <sup>6</sup>         | 0/10 (0)                                  |
|  |                         | Dirty with blood  | ~ 1.72x10 <sup>6</sup>         | 0/10 (0)                                  |
|  | HPGP                    | Dirty   | ~ 1.13x10 <sup>6</sup>         | 4/15 (27)                                 |
|  |                         | Dirty with blood  | ~ 1.27x10 <sup>6</sup>         | 4/10 (40)                                 |
| VRE  | ETO                     | Dirty   | ~ 2.27x10 <sup>6</sup>         | 0/10 (0)                                  |
|  |                         | Dirty with blood  | ~ 3.59x10 <sup>6</sup>         | 0/10 (0)                                  |
|  | HPGP                    | Dirty   | ~ 2.42 x10 <sup>6</sup>        | 3/15 (20)                                 |
|  |                         | Dirty with blood  | ~ 2.34x10 <sup>6</sup>         | 9/10 (90)                                 |

<sup>1</sup>Study conditions not representative of practice or manufacturer's recommendations

Abbreviations: ETO, ethylene oxide; HPGP, hydrogen peroxide gas plasma; MRSA, methicillin-resistant *Staphylococcus aureus*; VRE, vancomycin-resistant *Enterococcus*