Understanding and Application of Daptomycin-Susceptible Dose-Dependent Category for Enterococcus: A Mixed-Methods Study

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Background. In 2018, the Clinical Microbiology Laboratory at our institution adopted updated daptomycin Enterococcus-susceptible dose-dependent breakpoints. While the introduction of susceptible dose-dependent (SDD) was intended to guide practice toward optimal dosing, the understanding and application of daptomycin SDD breakpoints for enterococci were unknown.

Methods. This mixed-methods study combined a clinician survey with a retrospective pre–post prescribing analysis. An 8-question survey was distributed to infectious diseases (ID) and internal medicine (IM) clinicians. A retrospective chart review of hospitalized adults with infections due to Enterococcus spp. was conducted before (pre-SDD) and after (post-SDD) adoption of SDD reporting for enterococci.

Results. Survey response rates were 40 of 98 (41%) for IM and 22 of 34 (65%) for ID clinicians. ID clinicians scored significantly higher than IM clinicians in knowledge of SDD. Chart review of 474 patients (225 pre- vs 249 post-SDD) showed that daptomycin dosage following susceptibility testing was significantly higher post-SDD compared with pre-SDD (8.5 mg/kg vs 6.4 mg/kg; P < .001) with no difference in empiric dosing (6.3 mg/kg vs 6.2 mg/kg; P = .67). Definitive daptomycin use varied between the pre- and post-SDD periods (35.1% vs 16.9%; P < .001).

Conclusions. The survey revealed that ID clinicians placed more importance on and had more confidence in the SDD category over IM clinicians. SDD reporting was associated with a change in definitive daptomycin dosing. ID specialist involvement is recommended in the care of infections due to enterococci for which daptomycin is reported as SDD given their expertise.

Keywords. antimicrobial stewardship; daptomycin; Enterococcus; microbial sensitivity tests.

Daptomycin is a broad-spectrum, cyclic lipopeptide used to treat serious infections caused by gram-positive bacteria, including methicillin-resistant Staphylococcus aureus (MRSA) and Enterococcus species [1]. Studies have demonstrated daptomycin treatment failure in enterococci with elevated minimal inhibitory concentrations (MICs), leading to concerns that standard doses of 4–6 mg/kg may not attain pharmacodynamic targets for select enterococci. In 2018, the Clinical and Laboratory Standards Institute (CLSI) approved a susceptible dose-dependent (SDD) breakpoint range of 2–4 mcg/mL for Enterococcus spp., which was subsequently published in the M100 guidelines in 2019; the SDD breakpoints were based on a dosage regimen of 8–12 mg/kg administered every 24 hours for serious infections due to enterococci [2–6]. In 2020, the CLSI again revised the daptomycin breakpoints [3,5].

While the SDD category is intended to guide practice toward optimal dosing of daptomycin, it is unknown if the breakpoint changes and introduction of the SDD category have influenced clinical practice. We performed a mixed-methods study to assess infectious diseases (ID) and internal medicine (IM) clinicians’ understanding of daptomycin SDD as it relates to enterococci and its practice implications.

METHODS

The study was conducted at an academic medical center where daptomycin is restricted to use for MRSA and vancomycin-resistant Enterococcus (VRE) infections, situations of vancomycin intolerance, empiric therapy for neutropenic fever in VRE-colonized patients, or in accordance with ID consultation. All daptomycin orders are reviewed by antimicrobial stewardship program personnel on Monday–Friday as part of the...
Supplementary Data 1

A microbiology report identifying patients with an Enterococcus spp. isolate with daptomycin susceptibilities performed within the study time frame was reviewed for inclusion and exclusion criteria. The following were collected on patients who met study criteria: demographics, height/weight/laboratory values at the time of culture sample collection, concomitant use of serotonergic medications and/or statin therapy, species of Enterococcus when applicable, antimicrobial susceptibilities, poly- or monomicrobial infection, and empiric and definitive antibiotics administered. The doses (ie, total daily doses and
mg/kg doses) of daptomycin given before and after susceptibility results were reported, as well as record of ID consultation. Data were stored in a Research Electronic Data Capture (REDCap) database.

**Statistical Analysis**

Data were summarized using frequencies and percentages for categorical variables and medians and interquartile ranges (IQRs) for continuous variables. Comparisons were made between time periods using the chi-square test or Fisher exact test for categorical data and the Wilcoxon rank-sum test for continuous data. Univariable and multivariable logistic regression was used to assess the association between time period and daptomycin prescribing rates. In the multivariable model, we adjusted for serotonergic medication use, allergies, statin use, and ID consultation. These variables were chosen a priori. Associations were summarized using odds ratios (ORs) and 95% CIs. A multivariable linear regression model was used to evaluate the variables of time period (pre or post), ID consultation, culture source, and MIC on daptomycin dosing. All tests were 2-sided, and P values ≤.05 were considered statistically significant. All analyses were performed using SAS, version 9.4 (SAS Institute, Inc., Cary, NC, USA).

**RESULTS**

**Part 1: Clinician Survey**

**Clinician Recruitment**

Thirty-five ID clinicians and 111 IM clinicians were identified as potential survey participants based on an organizational report provider by our institution’s department of human resources. One and 13 clinicians from ID and IM were excluded, respectively, due to inactive practice status. This resulted in 34 ID clinicians and 98 IM clinicians who were approached as possible survey participants. The response rate among ID clinicians was 65% (22/34), and among IM clinicians it was 41% (40/98). Of all clinicians who started the survey, there were a total of 6 surveys (4 from IM and 2 from ID) that were left with at least 1 incomplete response. There were no significant differences in credentials (MD/DO, APRN, PA) between ID and IM clinicians (P = .17) or in the years of experience in their respective specialty training (P = .12).

**Knowledge-Based Questions**

Overall, ID clinicians scored significantly higher in 3 of 4 knowledge-based questions compared with IM (Figure 1A). The single multiple-choice question (Question 1, Supplementary Data 2) in which IM and ID clinicians performed similarly related to the ability to correctly define SDD, where 36 of 39 (92%) IM and 20/21 (95%) ID clinicians answered correctly (P = .99). More ID clinicians than IM clinicians correctly answered the question focused on dose selection for treatment of infections due to isolates reported as SDD (Questions 5 and 6) and the questions assessing case-based application (Questions 7 and 8) of knowledge (Table 1). In total, more ID clinicians answered all 4 knowledge-based questions correctly compared with IM clinicians (Table 1).

**Attitude-Based Questions**

Based on the 4 attitude questions (Supplementary Data 2), ID clinician responses significantly differed from IM clinician responses (Figure 1B). ID clinicians answered “agree” or “strongly agree” to attitude-based questions at a higher rate, indicating that they placed more importance on and had more confidence in using the SDD category compared with IM clinicians (Figure 1B).

**Part 2: Retrospective Chart Review**

**Demographics**

A total of 2118 enterococcal isolates were identified by microbiology report; these included all Enterococcus spp. with daptomycin susceptibility testing results from 5/1/2017 to 5/1/2018 and 9/1/2019 to 9/1/2020. Following application of inclusion/exclusion criteria (Figure 2), 474 patients were included in the final analysis—225 patients in the pre-SDD period and 249 patients in the post-SDD period. Patient demographics were similar between the 2 groups, with the exception of the median age being higher in the post-SDD group (65 years vs 62 years; P = .022) (Table 2A).

**Enterococci Characteristics**

A difference in the number of Enterococcus spp. was identified between the pre- and post-SDD periods (Table 2B). There was a higher number of Enterococcus faecium isolates observed in the post-SDD period (55.1% vs 66.7%). Penicillin susceptibility was significantly increased in the post-SDD period as compared with the pre-SDD period, and no difference in linezolid susceptibility patterns was noted. No statistically significant difference was identified in vancomycin susceptibilities in the pre- vs post-SDD cohorts. There was a significantly higher percentage of isolates with a daptomycin MIC of 4 mcg/mL in the post-SDD period.

**Antibiotic Administration**

There is a notable distinction when taking into consideration whether a susceptibility report was available at the time of administration. Before susceptibility reporting (ie, empiric antimicrobial administration), daptomycin was used with equal frequency in the pre- and post-SDD time periods (14.7% vs 14.5%; P = .95). When daptomycin use was empiric, the median dose did not differ between the pre-SDD and post-SDD periods (6.3 mg/kg vs 6.2 mg/kg; P = .67). After susceptibility reporting was made available, daptomycin was used significantly less often in the post-SDD time period as compared with the pre-SDD period (16.9% vs 35.1%; P < .001). When used...
for definitive treatment (ie, after susceptibility reports were released), the median daptomycin dose was significantly higher in the post-SDD group (6.4 mg/kg vs 8.5 mg/kg; \( P < .001 \)). Additionally, dosing in the post-SDD period when the isolates were stratified by MIC displayed a slightly higher dose utilized in isolates with an MIC of 2 mcg/mL (8.2 mg/kg) vs 4 mcg/mL (9.0 mg/kg). However, in both the pre- and post-SDD periods, a trend toward high dosing was observed in isolates with an MIC of 4 mcg/mL compared with 2 mcg/mL (7.6 mg/kg vs 6.5 mg/kg). Overall, the median daptomycin dose differed significantly by culture source comparing blood, urine, and other in the pre period (overall \( P = .003 \)) but not in the post period (overall \( P = .71 \)). ID was consulted in 60.8% of all patients, and in 93.4% of patient cases when daptomycin was utilized. In both pre- and post-SDD periods, the median daptomycin dose was significantly higher when an ID consult was present (pre-SDD period, 5.2 mg/kg vs 6.4 mg/kg; \( P = .040 \); post-SDD period, 6.2 vs 8.7 mg/kg; \( P = .041 \)). When evaluating cases for which

Figure 1. A, Responses to knowledge-based questions. B, Responses to Likert-scale attitude-based questions. Abbreviations: ID, infectious disease clinicians; IM, internal medicine clinicians; SDD, susceptible dose-dependent.
Daptomycin was utilized, rates of ID specialist involvement were similar between the 2 time periods. Uni- and multivariable analyses showed a higher likelihood of receipt of daptomycin in the pre-SDD period or when ID was consulted (Table 3). There was no significant effect of serotonergic medication use, antibiotic allergy reported, or statin use on the utilization of daptomycin. The associated time period (pre vs post) was found to remain a statistically significant variable when the data were analyzed using a multivariable linear regression model for daptomycin dosing (P < .001) (Supplementary Data 3).

**DISCUSSION**

Proper daptomycin dosing for enterococcal infections with an SDD susceptibility result is an important facet of ensuring appropriate antibiotic therapy. Despite the release of the new SDD interpretive criteria several years ago, little is known about how well this information is understood and practically applied by clinicians. The current study was developed to evaluate ID and IM clinicians’ understanding and attitudes toward the SDD interpretive criteria for daptomycin in enterococcal isolates and to assess the integration of this into real-world clinical practice. The novel mixed-methods study design allowed us to evaluate current knowledge and attitudes of clinicians and assess whether changes in practice occurred following implementation of SDD reporting, thereby allowing an assessment of both quantitative and qualitative data on the criteria’s use [7].

In Part 1 of this study, a significant difference was identified between ID and IM clinicians in both the knowledge of the SDD interpretive category as it applies to daptomycin and enterococci and the subjective attitudes of utilizing this category. While this may be anticipated given the additional training that ID clinicians receive, there are still important observations from these results. Notably, at an institution such as our study site, there is guidance provided on the susceptibility report as to how daptomycin doses should be optimized in the case of an SDD isolate. Even with the presence of this guidance in clinical practice, IM clinicians were less knowledgeable of the interpretation of the SDD category when presented with a patient case in the absence of a guiding statement provided within the patient case. This observation is potentially of greater importance at institutions without a specialty ID service to assist with antibiotic optimization. In such institutions, the clinical practice may benefit from increased provider education as well as from pharmacist involvement in daptomycin dosing.
Table 2. Part 2 Characteristics

### A. Patient Demographics

|                      | Pre-SDD Period (n = 225) | Post-SDD Period (n = 249) | Total (n = 474) | P Value |
|----------------------|--------------------------|---------------------------|-----------------|---------|
| **Age**              |                          |                           |                 |         |
| Median (IQR), y      | 62 (52–71)               | 65 (57–73)                | 64 (54–72)      | .022    |
| **Gender**           |                          |                           |                 |         |
| Female               | 97 (43.1)                | 101 (40.6)                | 198 (41.8)      | .57     |
| Male                 | 128 (56.9)               | 148 (59.4)                | 276 (58.2)      |         |
| **Weight**           |                          |                           |                 |         |
| Median (IQR), kg     | 78.3 (66.5–91.5)         | 81.8 (66.8–96.1)          | 80.1 (66.6–95.2) | .16     |
| **BMI**              |                          |                           |                 | .28     |
| Median (IQR), kg/m²  | 26.7 (22.5–31.8)         | 27.6 (22.9–32)            | 27.2 (22.8–31.9)| .10     |
| **Statin use, No. (%)** | 72 (34.6)            | 67 (27.2)                 | 139 (30.6)      | .10     |
| **>1 serotonergic medication, No. (%)** | 11 (4.9)          | 15 (6.0)                  | 26 (5.5)        | .69     |
| **Any antibiotic allergy reported, No. (%)** | 74 (32.9)       | 82 (32.9)                 | 156 (32.9)      | .99     |

### B. Isolate Species Characteristics & Antibiotic Administration

|                      | Pre-SDD Period (n = 225) | Post-SDD Period (n = 249) | Total (n = 474) | P Value |
|----------------------|--------------------------|---------------------------|-----------------|---------|
| **Pathogens, No. (%)** |                          |                           |                 | .82     |
| Polymicrobial        | 145 (64.4)               | 158 (63.5)                | 303 (63.9)      |         |
| Monomicrobial        | 80 (35.6)                | 91 (36.5)                 | 171 (36.1)      |         |
| **Species of Enterococcus, No. (%)** |                        |                           |                 | <.001*  |
| E. faecalis          | 67 (29.8)                | 72 (28.9)                 | 139 (29.3)      |         |
| E. faecium           | 124 (55.1)               | 166 (66.7)                | 290 (61.2)      |         |
| Enterococcus spp.    | 25 (11.1)                | 0 (0)                     | 25 (5.3)        |         |
| Other species        | 9 (4)                    | 11 (4.4)                  | 20 (4.2)        |         |
| **Daptomycin MIC, No. (%)** |                        |                           |                 | .004    |
| 2 mcg/mL             | 163 (72.4)               | 149 (59.8)                | 312 (65.8)      |         |
| 4 mcg/mL             | 62 (27.6)                | 100 (40.2)                | 162 (34.2)      |         |
| **Linezolid susceptibility, No. (%)** |                      |                           |                 | .14     |
| Susceptible          | 111/112 (99.1)           | 248/240 (100)             | 351/352 (99.7)  |         |
| Resistant            | 1/112 (0.9)              | 0/240 (0.0)               | 1/352 (0.3)     |         |
| **Penicillin susceptibility, No. (%)** |                     |                           |                 | .092    |
| Susceptible          | 107/225 (47.6)           | 142/247 (57.5)            | 249/472 (52.8)  |         |
| Resistant            | 118/225 (52.4)           | 105/247 (42.5)            | 223/472 (47.2)  |         |
| **Vancomycin susceptibility, No. (%)** |                     |                           |                 | .092    |
| Susceptible          | 242/221 (55.1)           | 163/248 (65.7)            | 287/469 (61.2)  |         |
| Intermediate         | 2/221 (0.9)              | 0/248 (0.0)               | 2/469 (0.6)     |         |
| Resistant            | 95/221 (43.0)            | 84/248 (33.9)             | 179/469 (38.2)  |         |
| **Empiric antibiotic, No. (%)** |                     |                           |                 |         |
| Daptomycin           | 15 (6.7)                 | 8 (3.2)                   | 23 (4.9)        | .081    |
| Vancomycin           | 92 (40.9)                | 96 (38.6)                 | 188 (39.7)      | .6      |
| Piperacillin-tazobactam | 85 (37.8)            | 86 (34.5)                 | 171 (36.1)      | .46     |
| Ampicillin           | 4 (1.8)                  | 1 (0.4)                   | 5 (1.1)         | .14     |
| Linezolid            | 6 (2.7)                  | 6 (2.4)                   | 12 (2.5)        | .98     |
| Ampicillin-sulbactam | 1 (0.4)                  | 3 (1.2)                   | 4 (0.5)         | .37     |
| **Antibiotics administered during course of therapy, No. (%)** |                     |                           |                 |         |
| Vancomycin           | 137 (60.9)               | 125 (50.2)                | 262 (55.3)      | .019    |
| Piperacillin-tazobactam | 112 (49.8)           | 115 (46.2)                | 227 (47.9)      | .43     |
| Ampicillin           | 9 (4)                    | 14 (5.6)                  | 23 (4.9)        | .41     |
| Linezolid            | 19 (8.4)                 | 25 (10)                   | 44 (9.3)        | .55     |
| Ampicillin-sulbactam | 2 (0.9)                  | 8 (3.2)                   | 10 (2.1)        | .079    |
| **Daptomycin use before susceptibility reporting, No. (%)** |                     |                           |                 | .95     |
| Yes                  | 33 (14.7)                | 36 (14.5)                 | 69 (14.6)       |         |
| **Daptomycin dose before susceptibility reporting** |                   |                           |                 | .67     |
| Median (IQR), mg/kg  | 6.3 (6.1–7.0)            | 6.2 (6.0–6.8)             | 6.3 (6.0–7.0)   |         |
| **Daptomycin use after susceptibility reporting, No. (%)** |         |                           |                 | <.001   |
| Yes                  | 79 (35.1)                | 42 (16.9)                 | 121 (25.5)      |         |
| **Daptomycin dose after susceptibility reporting** |                   |                           |                 | <.001   |
| Median (IQR), total, mg/kg | 6.4 (6.0–7.1)       | 8.5 (6.4–10.0)            | 6.6 (6.1–8.3)   |         |
| Median (IQR), excluding Enterococcus identified to genus level only, mg/kg | 6.4 (6.1–7.0) | 8.5 (6.4–10.0) | 6.5 (6.1–8.3) | <.001   |
In Part 2 of this study, a change in practice was observed in which higher doses of daptomycin were used in definitive therapy in the post-SDD group. Specifically, the median dose utilized did fall within the recommended range of 8–12 mg/kg, albeit on the lower end of the recommended range and with some patients receiving continued use of 6 mg/kg of daptomycin despite displaying SDD susceptibility. When distinguishing isolates with an MIC of 2 vs 4 mcg/mL, there was a trend toward higher dosing being prescribed for the MIC 4 mcg/mL subgroup (Table 2B). This finding may demonstrate MIC-tailored dosing in these patient scenarios, recognizing that higher MICs within the SDD interpretation require increased daptomycin dosing. Interestingly, before the release of susceptibility results, the dosing in both periods demonstrates a dosing strategy closer to 6 mg/kg. Consideration may be given whether there are situations in which an empiric dosing strategy of 8–12 mg/kg should be indicated to target an Enterococcus sp. with an SDD susceptibility. This appears to be a limitation of directing antimicrobial dosing using susceptibility results that are not available empirically.

While the median definitive therapy daptomycin dose was increased following SDD implementation, the overall rate of daptomycin administration was decreased. Compared with the pre-SDD period, there was an increase in both penicillin and vancomycin-susceptible isolates in the post-SDD period. This variability in susceptibilities, coupled with provider unfamiliarity surrounding the SDD interpretive criteria or a preference for use of an antimicrobial reported as susceptible over SDD (eg, linezolid), may have impacted the agent selected for definitive therapy. A similar finding was seen in a small retrospective analysis of cefepime SDD Enterobacteriaceae isolates wherein most infections were treated with a carbapenem instead of cefepime [8]. However, in that study all cefepime SDD isolates were dosed in accordance with CLSI guidance, whereas daptomycin was not always dosed to SDD specifications in our findings. Interestingly, we did not identify a statistically significant shift to a single daptomycin alternative for definitive therapy (eg, linezolid, vancomycin, or ampicillin-based regimens) in the post-SDD period. This considered, definitive antimicrobial therapy selection is a multifactorial decision impacted by the interplay between patient and/or organism characteristics, clinician preferences, and more. Therefore, a singular reason for

### Table 2. Continued

| A. Patient Demographics | Pre-SDD Period (n = 225) | Post-SDD Period (n = 249) | Total (n = 474) | PValue |
|-------------------------|-------------------------|--------------------------|----------------|------|
| Median (IQR), MIC 2 mcg/mL, mg/kg | 6.3 (6.0–6.9) | 8.2 (6.2–9.4) | 6.5 (6.1–8.0) | <.001 |
| Median (IQR), MIC 4 mcg/mL, mg/kg | 6.4 (6.1–7.7) | 9.0 (7.9–10.2) | 7.6 (6.2–9.0) | .002 |
| Median (IQR), source = blood, mg/kg | 6.9 (6.2–8.3) | 8.8 (8.0–10.0) | 7.9 (6.4–8.7) | .005 |
| Median (IQR), source = urine, mg/kg | 5.2 (4.3–7.0) | 8.6 (6.3–9.8) | 6.2 (4.3–9.4) | .20 |
| Median (IQR), source = other, mg/kg | 6.3 (6.0–6.6) | 8.3 (6.3–9.7) | 6.4 (6.1–7.9) | <.001 |
| Median (IQR), ID consult, mg/kg | 6.4 (6.1–7.2) | 8.7 (7.9–10.0) | 6.6 (6.1–8.4) | <.001 |
| Median (IQR), no ID consult, mg/kg | 5.2 (5.2–6.0) | 6.2 (6.0–8.1) | 6.0 (5.2–7.2) | .18 |

**Table 2B:**

**Patient Demographics**

| ID consultation, No. (%) | Pre-SDD Period (n = 225) | Post-SDD Period (n = 249) | Total (n = 474) |
|-------------------------|-------------------------|--------------------------|----------------|
| Pre: n = 76; post: n = 42. | 158 (70.2) | 130 (52.2) | 288 (60.8) |
| Pre: n = 42; post: n = 5. | 76 (96.2) | 37 (88.1) | 113 (93.4) |

Abbreviations: BMI, body mass index; ID, infectious diseases; IM, internal medicine; IQR, interquartile range; MIC, minimum inhibitory concentration; SDD, susceptible dose-dependent.

### Table 3. Variable Analyses

| Time period (pre vs post) | Odds Ratio (95% CI) | PValue | 95% CI | PValue |
|--------------------------|---------------------|--------|-------|--------|
| Serotonergic medication use | 0.87 (0.34–2.22) | .77 | 0.96 (0.34–2.73) | .94 |

### Table 3. Variable Analyses

| Allergy reported | Odds Ratio (95% CI) | PValue | 95% CI | PValue |
|------------------|---------------------|--------|-------|--------|
| 0.10 (0.88–2.08) | .17 | 1.08 (0.66–1.77) | .77 |

| Statin use | Odds Ratio (95% CI) | PValue | 95% CI | PValue |
|------------|---------------------|--------|-------|--------|
| 1.02 (0.64–1.62) | .94 | 0.84 (0.50–1.40) | .50 |

| ID consulted | Odds Ratio (95% CI) | PValue | 95% CI | PValue |
|--------------|---------------------|--------|-------|--------|
| 14.36 (6.81–30.30) | .001 | 13.80 (6.20–30.73) | <.001 |

Abbreviations: ID, infectious diseases; OR, odds ratio.

*OR >1 means more likely to have had daptomycin administered following susceptibility reports.
the decrease in definitive daptomycin use in the post period was not able to be clearly determined in this study.

Current literature supports the involvement of ID specialists to aid with antimicrobial management in patients with enterococcal infections. Specifically, ID consultation in the treatment of enterococcal bacteremia was associated with lower 30-day mortality compared with patients who did not receive ID consultation, especially when Enterococcus faecium was isolated [9]. An additional retrospective analysis assessed the impact of ID consultation in children with enterococcal bacteremia [10]. This analysis showed ID specialist involvement to be associated with a significant improvement in outcomes, such as higher rates of appropriate empiric therapy, appropriate definitive therapy, and increased survival at 1 year [10]. These additional studies emphasize that ID involvement improves patient outcomes for serious enterococcal infections. Our study adds to this literature by demonstrating the importance of ID specialist involvement in the selection of optimal daptomycin doses.

This study has several limitations. First, it was conducted at a single academic medical center and may not be representative of the knowledge, practices, and resources at other institutions. Second, the involvement of ID specialists, clinical pharmacists, and clinical microbiologists in the day-to-day practice may have impacted chart review results, whereas these clinicians were excluded from the survey. Third, an interrupted time series is vulnerable to confounding. Additionally, while survey response rates were similar to those reported in the literature, there were fewer participants in the IM group relative to ID. Next, while the current study evaluated changes and current attitudes in practice, it was not designed to evaluate clinical outcomes. Another limitation is that this study does not assess the 2020 CLSI revised daptomycin breakpoints. Our institution has since adopted these updated breakpoints, but they are not assessed in this study.

The current study was able to identify critical gaps in the understanding and implementation of SDD interpretive criteria when applied to Enterococcus spp. and daptomycin. Further studies are needed to evaluate clinical outcomes of both efficacy and toxicity in patients treated with daptomycin 8–12 mg/kg for enterococcal infections. With the most recent CLSI guidance on daptomycin breakpoints, there is now no “susceptible” breakpoint for E. faecium for daptomycin, only “SDD” and “resistant,” highlighting the importance more than ever of proper understanding and application of SDD [3]. The impact of reporting of SDD interpretive categories at institutions without ID specialty practices and/or without antimicrobial stewardship guidance comments to specify dosages upon which the breakpoints were developed merits further exploration.

CONCLUSIONS
ID clinicians demonstrated better understanding and higher confidence in daptomycin SDD interpretive criteria for Enterococcus spp. as compared with IM clinicians. SDD reporting resulted in a modest change in definitive daptomycin dosing and no change in empiric dosing at our institution. ID specialist involvement is recommended when daptomycin is used to treat enterococci with a daptomycin MIC in the SDD range.

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