but they were associated with a clinical diagnosis of VAI. These findings suggest that positive tracheal aspirate cultures may not aid clinicians in the diagnosis of VAI, and they highlight the opportunity for improved diagnostic stewardship.

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Poster Presentation
Subject Category: Diagnostic/Microbiology

Microbiological Identification and Susceptibility Testing Using an Automated Method in a Tertiary-Care Public Hospital in Brazil

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Background: The use of the automated system for identification and susceptibility tests can improve antimicrobial stewardship. The reduction in the time of identification of the pathogen and the correct dose of antibiotic are factors that contribute significantly to institutional programs and patient outcomes. **Objective:** We identified and evaluated the susceptibility tests of microorganisms for common pathogens through antibiograms that accounted for the minimum inhibitory concentration (MIC), in a tertiary-care public hospital in Brazil. **Methods:** This retrospective, cross-sectional study was performed to identify microbiologic profiles after the implementation of a VITEK 2 system at a tertiary-care public hospital in Curitiba, Brazil. Based on data from the medical records, patients with positive cultures of clinical samples from August to December 2017 were included in this study. The analysis included culture results, susceptibility profiles, and MICs of 5 antibiotics: amikacin, cefepime, ciprofloxacin, meropenem and vancomycin. **Results:** In total, 545 antibiograms were evaluated using VITEK 2. The following microorganisms were isolated: 345 gram-negative bacilli (63.3%), 187 gram- positive cocci (34.3%), 9 unidentified microorganisms (1.7%), and 4 yeasts (0.7%). Among the analyzed antibiograms, amikacin was tested in 371 isolates (68.1%), with an MIC of 2 mg/L being the most prevalent value, with a frequency of 224 results (41.1%). Cefepime was tested in 319 isolates (58.5%), with an MIC of 1 mg/L being the most prevalent, with a frequency of 177 results (32.5%). Ciprofloxacin was tested in 470 isolates (86.2%), with an MIC of 0.25 mg/L being the most prevalent value, with frequency of 189 results (34.7%). Meropenem was tested in 318 isolates (58.3%), with an MIC of 0.25 mg/L being the most prevalent value, with a frequency of 223 results (40.9%). Vancomycin was tested in 157 isolates (28.8%), with an MIC of 1 mg/L being the most prevalent value, with frequency of 87 results (16%). **Conclusions:** When analyzing the most frequently isolated microorganisms and their predominant sensitivity profiles in our institution, amikacin proved to be a good therapeutic option, considering the epidemiological profile, as gram-negative bacilli showed greater sensitivity. Furthermore, VITEK 2 systems provided early access to appropriate antimicrobial therapy for patients, which is a known factor for reducing bacterial resistance.

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Using Low-Heat Decontamination to Allow N95 and PPE Reuse During the COVID-19 Pandemic

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Background: US healthcare facilities experienced significant personal protective equipment (PPE) shortages, including N95 masks, in the spring and summer of 2020. The Centers for Disease Control and Prevention issued guidance for extended use, reprocessing, and reuse of N95s. Eskenazi Health (EH) implemented a program to reprocess N95s and other PPE on-site using low-heat decontamination (LHD). EH considered large-scale and small-scale ultraviolet (UV), hydrogen peroxide vapor, and LHD for on-site reprocessing of N95s. All of these methods allowed up to 3 reprocessing cycles according to most literature available at the time. However, each method differed in feasibility and acceptability to staff. EH chose to implement LHD based on both considerations. **Methods:** Numerous small-group meetings were held in April 2020 to determine the feasibility and acceptability of N95 reprocessing methods. Staff wanted a method that was easy for the end user, had quick turnaround, and allowed them to retrieve their own N95s. They favored a method that could be used for all PPE. EH had deployed numerous small UV machines that individuals could use for N95s. The UV machines could not be scaled up easily. To scale up, a multidisciplinary team comprising infection prevention, biomedical engineering, and sterile processing representatives reviewed available methods and implemented LHD. Biomedical engineers determined that existing blanket warmers could be reprogrammed and repurposed for low-heat decontamination. Food warmers were also available but were not needed. Biomedical engineers reprogrammed the blanket warmers to 70°C and developed a wicking system using a towel and water tray to maintain humidity; decontamination took 30 minutes. Testing runs determined that both N95s and eye protection tolerated LHD without apparent damage. Infection prevention staff developed a workflow in which staff deposited all PPE in a paper bag; the PPE bag was centrally reprocessed, marked (Figure 1), and returned to designated locations (Figure 2) for staff to retrieve their original PPE. Sterile processing staff facilitated the reprocessing workflow, and elective surgeries were canceled during the COVID-19 surge. **Results:** From April 20, 2020, to July 19, 2020, 7,512 units were decontaminated with LHD. If each N95 was sterilized thrice (4 uses per N95), then LHD reduced the need to purchase 22,536 N95s. Restarting elective surgeries decreased staff and support from sterile processing; the space was needed for other purposes; and N95 availability increased. All of these factors led to the discontinuation of LHD. **Conclusions:**

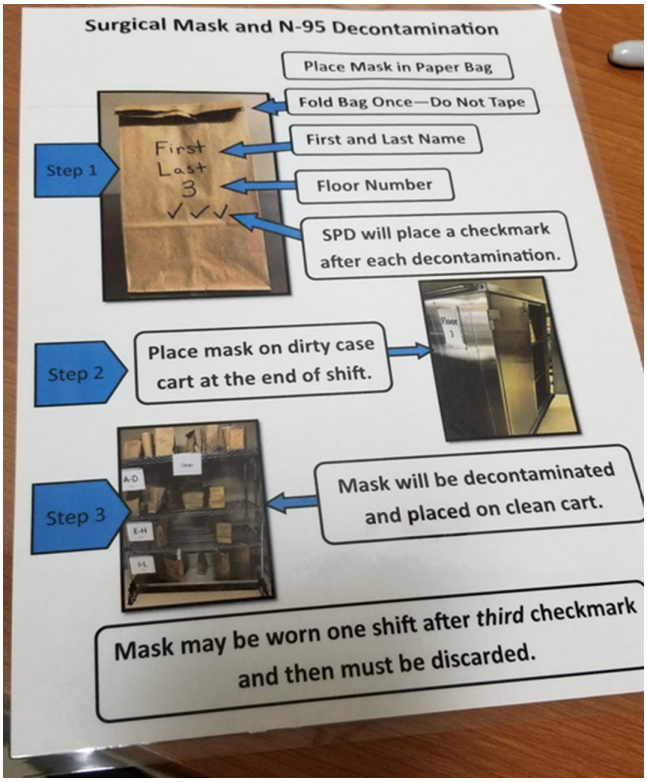

Figure 1.