laboratories confirmed carbapenemase gene(s) using a molecular method. If an MBL gene was confirmed, aztreonam–avibactam minimum inhibitory concentrations (MICs) were reported back to submitters within 3 working days of receipt. Findings were reported to CDC using a REDCap database. Results: From March through August 2019, aztreonam–avibactam AST was requested for 32 clinical isolates across 16 states. These isolates included 15 *Escherichia coli*, 12 *Klebsiella pneumoniae*, 4 *Enterobacter cloacae* complex, and 1 *Proteus mirabilis*. Molecular detection identified 27 *bla*NDM-positive isolates, 2 *bla*OXA-48-like-positive isolates, and 3 *bla*OXA-48/*bla*NDM-positive isolates. Aztreonam–avibactam results were reported for 30 isolates; 5 displayed elevated aztreonam–avibactam MICs of 8/4 μg/mL (n = 4) or 16/4 μg/mL (n = 1). Results for 2 isolates were not reported because the isolates were MBL negative. Aztreonam-avibactam MICs ranged from 0.06/μg/mL to 16/4 μg/mL. The MIC50/MIC90 were 0.5/4 μg/mL and 8/4 μg/mL.

Conclusions: In the absence of effective FDA-approved treatments and lack of available AST for novel antibiotic combinations, CDC’s provision of AST for aztreonam-avibactam among MBL-producing CPE, offered through the AR Lab Network, helps fill a critical gap to inform patient treatment decisions. To date, our in vitro data suggest that aztreonam–avibactam could be a promising drug combination for use against infections caused by MBL-producing Enterobacteriaceae.

Funding: None

Disclosures: None

Doi:10.1017/ice.2020.563

---

### Table 1. The Effect on dSIR, and pSIR in the Setting of Changes in SUR Over the 2 Periods

<table>
<thead>
<tr>
<th>Change in</th>
<th>SUR</th>
<th>pSIR</th>
<th>%</th>
<th>dSIR</th>
<th>pSIR</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY17</td>
<td>FY17</td>
<td>%</td>
<td>FY17</td>
<td>FY17</td>
<td>%</td>
</tr>
<tr>
<td>SUR</td>
<td>25</td>
<td>0.0571</td>
<td>0.0814</td>
<td>-19.8%</td>
<td>0.0579</td>
<td>0.0739</td>
</tr>
<tr>
<td>Increase</td>
<td>13</td>
<td>0.0200</td>
<td>0.0311</td>
<td>11.2%</td>
<td>0.0202</td>
<td>0.0312</td>
</tr>
<tr>
<td>No change</td>
<td>10</td>
<td>0.0355</td>
<td>0.0365</td>
<td>0.7%</td>
<td>0.0359</td>
<td>0.0372</td>
</tr>
<tr>
<td>System</td>
<td>48</td>
<td>0.0200</td>
<td>0.0365</td>
<td>-7.5%</td>
<td>0.0201</td>
<td>0.0365</td>
</tr>
</tbody>
</table>

SUR decreased, the dSIR decreased by 15.9% from 0.88 to 0.74, and the pSIR decreased by 32.3% from 0.85 to 0.58 (Table 1). In 2019, the CAD for CAUTI to a target SIR of 1 was 133 for the dSIR compared to 181 for the pSIR, and 36% more events were avoided.

Conclusions: The traditional SIR (dSIR) underestimated improvements in infection rates compared to the pSIR because it failed to account for reduced device utilization associated with infection prevention interventions. The pSIR accounts for overall risk of infection associated with device exposure in a population and better reflects the efficacy of prevention efforts compared to dSIR. The pSIR should be considered in situations in which interventions have led to substantial reductions in device use.

Funding: None

Disclosures: None

Doi:10.1017/ice.2020.564

---

### Presentation Type:
Top Rated Posters

### Population Standardized Infection Ratio (pSIR): A More Meaningful Reflection of Performance With Reduction in Device Use

Mamta Sharma, St. John Hospital; Angelo Bufalino, Ascension Data Sciences Institute; Ascension, St. Louis, Missouri; Ren-huai Huang, Ascension Data Sciences Institute; Ascension; Lisa Sturr, Clinial & Network Service; Ascension Healthcare; Thomas Erlinger, Ascension Data Science Institute;Mohamad Fakih, Ascension Healthcare

**Background:** Interventions to reduce unnecessary device use may select a higher-risk population, leading to a paradoxical increase in SIR for some high-performing facilities. The standardized utilization ratio (SUR) adjusts for device use for different units and facilities. We evaluated the performance of a population SIR (pSIR) metric compared to device SIR (dSIR) in the situations of increased, decreased, and no change in SUR for a large system.

**Methods:** We evaluated hospitals that had a reduction, increase, and no substantial change (±5% relative change) in their SUR in FY2019 (July 2018–June 2019) compared to baseline FY2017 (July 2016–June 2017). The dSIR (defined as Σ observed events divided by Σ predicted events based on actual device days) and pSIR (defined as Σ observed events divided by Σ predicted events based on predicted device days). We calculated the cumulative attributable difference (CAD) for catheter-associated urinary tract infections (CAUTIs) for the same facilities based on dSIR and pSIR.

**Results:** Overall, the system SUR dropped from 0.92 in 2017 to 0.85 in 2019 (7.3% decrease). Of the 48 hospitals included, 25 (52%) exhibited a drop, 13 (27%) exhibited an increase, and 10 (21%) had no change in SUR during 2019. For hospitals in which
Results: Investigations into antimicrobial use and the burden of healthcare-associated infections (HAIs) within larger urban acute-care settings, but similar data have investigated AROs and healthcare-associated infections with greater disease severity and poor outcomes. Previous studies of HAIs in rural acute-care settings have been limited. In this study, we (1) established provincial baseline data for burden of disease in these facilities due to HAIs and (2) demonstrated that antimicrobial use is common, though most patients who were prescribed an antimicrobial did not meet study definitions for infection. It will be important to continue this type of surveillance in this understudied population to monitor the burden of HAIs over time, to establish antimicrobial utilization trends, and to continue to identify potential antimicrobial stewardship initiatives.

Funding: None

Disclosures: None

Presentation Type: Top Rated Posters
Public Health Oversight of Interfacility Transfers During a Candida auris Outbreak—Orange County, California, 2019

Kathleen O’Donnell, California Department of Public Health; Ellora Karmarkar, Epicdemic Intelligence Service, Division of Scientific Education and Professional Development, Centers for Disease Control and Prevention; Brendan R Jackson, US Centers for Disease Control and Prevention; Erin Epson, California Department of Public Health, Healthcare-Associated Infections Program; Matthew Zahn, Orange County Health Care Agency

Background: In February 2019, the Orange County Health Care Agency (OCHCA) identified an outbreak of Candida auris, an emerging fungus that spreads rapidly in healthcare facilities. Patients in long-term acute-care hospitals (LTACHs) and skilled nursing facilities that provide ventilator care (vSNFs) are at highest risk for C. auris colonization. With assistance from the California Department of Public Health and the Centers for Disease Control and Prevention, OCHCA instituted enhanced surveillance, communication, and screening processes for patients colonized with or exposed to C. auris. Method: OCHCA implemented enhanced surveillance by conducting point-prevalence surveys (PPSs) at all 3 LTACHs and all 14 vSNFs in the county. Colonized patients were identified through axilla/groin skin swabbing with C. auris detected by PCR and/or culture. In facilities where >1 C. auris colonized patient was found, PPSs were repeated every 2 weeks to identify ongoing transmission. Retrospective case finding was instituted at 2 LTACHs with a high burden of colonized patients; OCHCA contacted patients discharged after January 1, 2019, and offered C. auris screening. OCHCA tracked the admission or discharge of all colonized patients, and facilities with ongoing transmission were required to report transfers of any patient, regardless of colonization status. OCHCA tracked all patients discharged from facilities with ongoing transmission to ensure that accepting facilities conducted admission