Conclusion. Standardized ratio methods did not provide clear and actionable information, even with perfect adjustment. Statistically significant fluctuations occurred due to chance which could be mistakenly been attributed to actions taken by the hospital. Several methods, such as the use of percentiles rather than p-values, or presenting simulation-based projections of facility data, may help alleviate these problems.

Disclosures. **All authors:** No reported disclosures.

2160. Benchmarking Healthcare-Associated Infections for Prevention in Developing Countries

Gregory Lauar E. Souza, Medical Student[1]; Handerson Dias Duarte De Carvalho, Medical Student[2]; Cristóvão De Deus Martins Oliveira, Medical Student[1]; Andressa Do Nascimento Silveira, Medical Student[1]; Bráulio Couto, PhD[2]; Edna Leite, MD[3]; Estevão Silva, MD[4] and Carlos Starling, MD[5]; [1]Faculdade de Medicina do Centro Universitário de Belo Horizonte, Belo Horizonte, Brazil, [2]Centro Universitario de Belo Horizonte, Belo Horizonte, Brazil, [3]Hospital Risoleta Tolentino Neves, Belo Horizonte, Brazil, [4]Hospital Madre Teresa e Instituto Biocor, Belo Horizonte, Brazil, [5]Hospital Lifecenter, Belo Horizonte, Brazil

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Background. Applying benchmarks from high resource countries on low resource countries may result in misleading conclusions, thus improvements can be made in order to refine the precision of external benchmarks in developing countries.

Methods. The NOIS Project uses SACIH software to retrieve data from different hospitals at Belo Horizonte, Brazil. The hospitals use prospective Healthcare-Associated Infections—HAI surveillance according to the NHSN/CDC protocols. The objective is to calculate benchmarks for HAI rates from intensive care units, ICU, and surgical procedures. Benchmarks were defined as the 10 percentile and 90 percentile, considering data from 11 hospitals and 13 ICUs, collected between 2013 and 2017.

Results. Hospital-wide and ICUs benchmarks: HAI risk [1.5%; 4.7%]; HAI incidence per 1,000 patient-days [4.4; 12.6]; ICU infection risk [4.0%; 23.8%]; ICU incidence density rate of HAI per 1,000 patient-days [10.8; 35.7]; risk of urinary catheter-associated urinary tract infections[0.0%; 6.3%]; incidence density rate of urinary catheter-associated urinary tract infections per 1,000 urinary catheter-days [0.0; 9.4]; risk of central line-associated primary bloodstream infections [0.0%; 10.3%]; incidence density rate of central line-associated primary bloodstream infections per 1,000 central line-days [0; 16]; risk of ventilator associated pneumonia [0.0%; 13.5%]; incidence density rate of ventilator associated pneumonia per 1,000 ventilator-days [0.0; 20.6]. Surgical site infection benchmarks: Cesarean section [0,6%;0,9%]; open reduction of fracture [3,3%;3,9%]; Gallbladder surgery [0,7%;1%]; herniorrhaphy [1,1%;1,6%]; peripheral vascular bypass surgery [0,6%;1%]; gastric surgery [1,7%;2,4%]; appendix surgery [1,1%;1,8%]; colon surgery [3,0%;4,1%]; exploratory abdominal surgery [4,1%;5,3%]; craniotomy [5%;6,5%]; abdominal hysterectomy [0,7%;1,4%]; limb amputation [4,1%;6,1%]; thoracic surgery [0,8%;1,5%]; hip prosthesis [3%;4,3%]; knee prosthesis [2,3%;3,5%]; pacemaker surgery [1,9%;3,1,0%]; breast surgery [0,3%;0,9%]; bile duct, liver or pancreatic surgery [7%;11%]; ventricular shunt [3,3%;6,5%].

Conclusion. The benchmarks proposed can be used by infection preventionists that decide to monitor selected surgical procedures and/or ICUs, especially in developing countries.

Disclosures. **All authors:** No reported disclosures.

2161. Pilot Implementation of a Nationwide Automated Multidrug-Resistant Organism Tracking and Alert System in Veterans Affairs

Christopher Pfeiffer, MD, MHS[1,2]; Makoto Jones, MD, MS[3,4]; J. Stacey Klutts, Md, PhD[5,6]; Rachael A. Lee, MD[7,8]; Holly B. Williams, BA[9]; Katelyn A. West, BS[9]; Judith M. Strymish, MD[10,11]; Nasia Safdar, MD, PhD[12,13]; Bryan D. Harris, MD, MPH[14,15]; Michael A. Gelman, MD, PhD[16,17]; Brooke K. Decker, MD, CIC[18,19]; Adrienne Murray, PharmD[4,20]; Nefi Aguilar, MS[21] and Martin E. Evans, MD, FIDSA, FSHEA[22,23,24]; [1]Oregon Health and Science University, Portland, Oregon, [2]Veterans Affairs Portland Health Care System, Portland, Oregon, [3]University of Utah School of Medicine, Salt Lake City, Utah, [4]VA Salt Lake City Health Care System, Salt Lake City, Utah, [5]University of Iowa Carver College of Medicine, Iowa City, Iowa, [6]Iowa City VA Health Care System, Iowa City, Iowa, [7]Birmingham VA Medical Center, Birmingham, Alabama, [8]University of Alabama at Birmingham, Birmingham, Alabama, [9]VA Portland Health Care System, Portland, Oregon, [10]VA Boston Healthcare System, West Roxbury, Massachusetts, [11]Harvard Medical School, Boston, Massachusetts, [12]University of Wisconsin, Madison, Wisconsin, [13]William S Middleton Memorial Veterans Hospital, Madison, Wisconsin, [14]VA Tennessee Valley Healthcare System, Nashville, Tennessee, [15]Vanderbilt University Medical Center, Nashville, Tennessee, [16]Icahn Mount Sinai School of Medicine, New York, NY, [17]James J Peters Veteran Affairs Medical Center, Bronx, NY, [18]Veterans Affairs Pittsburgh Healthcare System, Pittsburgh, Pennsylvania, [19]University of Pittsburgh, Pittsburg, Pennsylvania, [20]University of Utah, Salt Lake City, Utah, [21]Va Salt Lake City Health Care System, Salt Lake City, Utah, [22]National Infectious Diseases Service, Department of Veterans Affairs, Washington, DC, [23]Lexington Veterans Affairs Medical Center, Lexington, Kentucky, [24]University of Kentucky College of Medicine, Lexington, Kentucky

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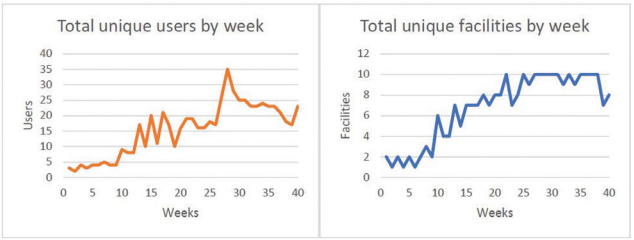
Background. Regional spread of multidrug-resistant organisms (MDROs), including carbapenem-resistant *Enterobacteriaceae* (CRE), can occur when carriers present unbeknownst to healthcare facilities and thereby delay appropriate infection control interventions. Herein, we describe pilot implementation of a novel national system that automatically alerts local facility staff to newly admitted patients with any history of CRE or methicillin-resistant *Staphylococcus aureus* (MRSA) in VA.

Methods. From December 2016 to November 2017, we implemented the alert system in 10 VA medical centers. The system continually monitors the VA Corporate Data Warehouse for new facility admissions nationwide among patients with archived CRE and MRSA data. When such admissions occur, an alert is emailed to Infection Prevention personnel at the local facility. During implementation, we upgraded to a faster, more accurate report, "MDRO Tracker", that provided alerts within 4 hours of admission. We evaluated system utility in three ways: (1) assessing user data and feedback; (2) comparing a dataset identifying all unique patients harboring CRE and MRSA to the subset of patients whose most recent positive result was identified at a different VA facility; and (3) enrolling a convenience sample of CRE and MRSA patients to validate system accuracy and assess whether the new system or existing infrastructure identified the MDRO first. IRB approval was obtained at each site.

Results. The number of users increased over time and are shown in Figure 1. User feedback data are shown in Figure 2; 71/256 (28%) responses indicated that alert data were new and/or timely. Of all CRE- and MRSA-positive patients identified during the study period, 11/101 (11%) and 214/2,390 (9%), respectively, had positive MDRO results originating from a different VA facility. Of the 61 CRE and 1,720 MRSA patients enrolled by research staff, 21% (n = 13) of CRE and 7% (n = 71) of MRSA cases were first identified by the automated system.

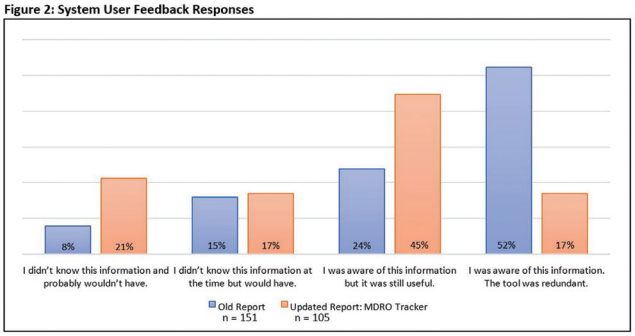
Conclusion. This pilot implementation of a novel automated MDRO alert system shows feasibility and potential for substantial utility of such a system. Further refinement and expanded β-testing of the system is underway.

Figure 1: System Use Data*



*Weeks 1-40 represent consecutive weeks from March through Nov, 2017. **Total unique users per week** displays the total number of unique users across the 10 pilot sites accessing the system during that week. **Total unique facilities per week** represents the same user data but pooled and then stratified by each of the 10 pilot sites.

Figure 2: System User Feedback Responses



Disclosures. **M. A. Gelman**, Cepheid: Speaker, Speaking Fee.

2162. Factors Affecting the Geographic Variability of Antibiotic-Resistant Healthcare-Associated Infections in the United States Using the CDC's Antibiotic Resistance Patient Safety Atlas

Julianne Kubes, MPH[1] and Scott Fridkin, MD[2]; [1]Epidemiology, Emory University Rollins School of Public Health, Atlanta, Georgia, [2]Medicine, Emory University School of Medicine, Atlanta, Georgia

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