

Participation in the Antimicrobial Use (AU) Option as of November 2019

1. CDC- Centers for Disease Control and Prevention 2. VA - Veteran's Affairs Informatics, Decision-Enhancement and Analytic Sciences 3. CARB -Combating Antibiotic Resistant Bacteria 4. MU3 - Meaningful Use State 3 5. DoD - Department of Defense 6. SAAR - Standardized Antimicrobial Administration Ratio

Fig. 1.

implement risk-adjusted antimicrobial use benchmarking withinand between- facilities using the standardized antimicrobial administration ratio (SAAR) and to evaluate use over time. The SAAR can be used for public health surveillance and to guide an organization's stewardship or quality improvement efforts. Methods: Antimicrobial Use Option enrollment grew through partner engagement, targeted education, and development of data benchmarking. We analyze enrollment over time and discuss key drivers of participation. Results: Initial 2011 Antimicrobial Use Option enrollment efforts awarded grant Funding: to 4 health departments. These health departments partnered with hospitals, which encouraged vendors to build infrastructure for electronic antimicrobial use reporting. CDC supported vendors through outreach and education. In 2012, with CDC support, Veterans' Affairs (VA) Informatics, Decision-Enhancement, and Analytic Sciences Center and partners began implementation of Antimicrobial Use Option reporting and validation of submitted data. These early efforts led to enrollment of 64 facilities by 2014 (Fig. 1). As awareness of the antimicrobial use option grew, we focused on facility engagement and development of benchmark metrics. A second round of grant Funding: in 2015 supported submission to the Antimicrobial Use Option from additional facilities by Funding: a vendor, a healthcare system, and an antimicrobial stewardship network. In 2015, CMS recognized the Antimicrobial Use Option as a choice for public health registry reporting under Meaningful Use Stage 3, resulting in an increase in participating hospitals. Antimicrobial Use Option enrollment increased in 2015 (n = 120), coinciding with national prioritization of antimicrobial stewardship. In 2016, the SAAR, was released in NHSN. We leveraged the SAAR to encourage participation from additional facilities and began quarterly calls to encourage continued participation from existing users. In 2016, the Department of Defense began submitting data to the Antimicrobial Use Option, resulting in 207 facilities enrolled in 2016, which grew to 616 in 2017. As of November 2019, 12 vendors self-report submission capabilities and 1,470 facilities, of ~6,800 active NHSN participants, are enrolled in the Antimicrobial Use Option. Two states have passed requirements regulating Antimicrobial Use Option reporting with Tennessee's requirement going into effect in 2021. **Conclusions:** The Antimicrobial Use Option offers evidence that collaboration with partners, and leveraging of benchmarking metrics available to a national surveillance system can lead to increased voluntary participation in surveillance of high-priority public health data. Moving forward, we will continue expanding analytic capabilities and partner engagement.

Funding: None Disclosures: None Doi:10.1017/ice.2020.877

Presentation Type:

Poster Presentation India Antimicrobial Stewardship and Resistance (INTEREST): A Needs Assessment Survey

Aditya Shah, Mayo Clinic; John OHoro, Mayo Clinic College of Medicine; Varun Shah, Krupa Orthopedic Hospital; Taru Dutt, Hennepin Healthcare; Sanjiv Shah, Krupa Orthopedic Hospital Vikas Bansal, Other; Rahul Kashyap, Mayo Clinic

Background: The emergence and spread of antimicrobial resistance is a major problem in India with significant knowledge on whether this is a systems-based, prescriber and patient characteristic based or diagnostic technologies-based issue. **Methods:** An electronic survey was sent to select distribution list of intensive care units (ICU) and hospital inpatient (medicine ward) providers from India. Survey questions included antimicrobial clinical practice data, access to electronic medical records, microbiological diagnostic techniques, and access to microbiology data. The survey focused on antimicrobial prescription trends and their association with

2020;41 Suppl 1

\$297

CrossMark



Patient gets started on antibiotics



Antibiotic De-escalation



Antimicrobial prescription, resistance and stewardship

Fig. 1.

diagnostic techniques. Results: There were 90 responses from 18 states in 65 ZIP codes. They had median of 187.5 beds (IQR, 40-470). Representative responders had a median age of 40 years (IQR, 31-53). Among the responders, 73 (81%) were men. Of the 90 responses, 48 providers (52%) practiced solely in ICUs (medical and surgical) and 40 providers (45%) practiced solely on the medical ward or floor, with the rest practicing in other units. In total, 31 centers (34%) reported full access to electronic medical records, and 53 centers (59%) had access to wi-fi or Internet. Interestingly, 27 centers (30%) needed to use personal provider phone data for Internet access. Only 26 centers (29%) had electronic microbiological data. Also, 63 respondents (70%) agreed to de-escalation behavior after receiving microbiological data. In addition, 55 respondents (61%) agreed that patients have easy access to outpatient antibiotics without an appropriate prescription, over the counter. Furthermore, 58 responders (64%) said that antibiotic resistance was a major problem at their center, and 61 responders (68%) were familiar with antimicrobial stewardship programs. Among the centers, 69 (77%) had no access to formal infectious disease programs at their center. Only 27 centers (30%) had a formal Clostridium difficile-associated infection reporting and control program. Only 28 centers (31%) had a formal occupational health program. Conclusions: In a large-scale, semistructured, online survey, most issues related to easy availability of antibiotics and lack of "electronization" of medical and microbiological records. It was reassuring that most providers

Infection Prevention Programs



Infection prevention programs

Hospital associated infection tracking/reporting



Fig. 2.

expressed knowledge of the existing antimicrobial stewardship program. Funding: None Disclosures: None Doi:10.1017/ice.2020.878

Presentation Type:

Poster Presentation

Inequities and Barriers to Routine Immunization Coverage in Urban and Rural Areas of Sindh, Pakistan

Tariq Masood, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST), Karachi Pakistan; Subhash Guriro, Sindh Madressatul Islam (SMI) University, Karachi, Pakistan; <u>Jaishri Mehraj</u>, The Task Force for Global Health, TEPHINET Program, Pakistan

Background: Child mortality has remained a major challenge in developing countries. Annually, many children <5 years of age die prematurely due to vaccine-preventable diseases. In South Asia, Pakistan has struggled to achieve global standards of vaccination. **Objective:** Therefore, we sought to determine barriers to vaccination coverage among children aged 12–23 months and inequities in rural and urban settings of the Sindh province of Pakistan. **Methods:** We conducted a cross-sectional study in the rural and urban settings of the Sindh province of Survey was conducted following the WHO guidelines, and 300 children were recruited from each study setting: Lyari, Karachi (urban area) and Umerkot (rural area). Information on the pretested questionnaire