

barriers and facilitators to the implementation of electronic decision support (EDS) in antimicrobial stewardship. **Objective:** To examine prescriber and antimicrobial steward perceptions of EDS using an ISTA approach in the preimplementation phase of an antimicrobial stewardship intervention. **Methods:** We conducted semistructured interviews with prescribers and stewards from 4 hospitals in 2 health systems in the context of a multi-component intervention to improve the use of fluoroquinolones and extended-spectrum cephalosporins. Sites planned to implement various EDS elements including order sets, antimicrobial time outs, and audit with feedback stewardship notes in the medical record. Interviews elicited respondent perceptions about the planned intervention. Two analysts systematically coded transcripts using an ISTA framework in NVivo12 software. **Results:** Interviews with 64 respondents were conducted: 38 physicians, 7 nurses, 6 advanced practice providers, and 13 pharmacists. We identified 4 key sociotechnical interaction types likely to influence stewardship EDS implementation. First, EDS changes the communication patterns and practices of antimicrobial stewards in a way that improves efficiency but decreases vital social interaction with prescribers to facilitate behavior change. Second, there is a gap between what stewards envision for EDS and that which is possible to build in a timely manner by hospital information technology specialists. As a result, there is often a months- to years-long delay from proposal to implementation, which negatively affects intervention acceptance. Third, prescribers expressed great enthusiasm for stewardship EDS that would simplify their workload, allow them to complete important work tasks, and save time. They strongly objected to stewardship EDS that was disruptive without a compelling purpose or did not integrate smoothly with pre-existing technology infrastructure. Fourth, physician prescribers attributed social and emotional meaning to stewardship EDS, suggesting that these tools can undermine professional authority, autonomy, and confidence. **Conclusions:** Implementing stewardship EDS in a way that improves the use of antimicrobials while minimizing unintended negative consequences requires attention to the interplay between new EDS and an organization's existing workflow, culture, social interactions and technologies. Implementing EDS in stewardship will require attention to these domains to realize the full potential of these tools and to avoid negative unintended consequences.

Funding: None

Disclosures: None

Doi:10.1017/ice.2020.622

Presentation Type:

Poster Presentation

Analyzing Healthcare Workers' Perspectives on Healthcare-Associated Infections and Infection Control Practices Using Video Reflexive Ethnography (VRE)

Esther Paul, King Khalid University; Ibrahim Alzaydani, Abha Maternity and Children's Hospital; Ahmed Hakami, King Khalid University; Harish C. Chandramoorthy, King Khalid University

Background: This study explores the perspectives of healthcare workers on the healthcare-associated infection (HAI) and infection control measures in a tertiary-care unit, through a self-administered questionnaire, semi-structured interviews, and reflexive sessions based on video-recorded sterile procedures performed in respondents' work contexts. Video reflexive ethnography (VRE) is a method

that provides feedback to medical practitioners through reflection analysis, whereby practitioners identify problems and find solutions.

Methods: Quantitative questionnaire data were used to assess the knowledge of HAI among 50 healthcare workers and their attitude toward practice of infection control measures. Semistructured interviews based on an interview guide were used to collect qualitative data from 25 doctors and nurses. The interviews were audio recorded and transcribed verbatim immediately. Also, routine sterile procedures in the wards and intensive care unit were video recorded, and the footage was discussed by the infection control team and the personnel involved in the videos. This discussion was video recorded and transcribed. Both interview data and reflexive discussion of video-graph were analyzed using a thematic analysis. The quantitative data were analyzed using the Kruskal–Wallis test.

Results: The quantitative data revealed no difference in the knowledge, attitude, and practice scores used to evaluate the infection control practices among the healthcare workers. We identified 4 themes from the qualitative data: (1) knowledge of HAI and infection control, (2) infection control measures in practice, (3) the shortfall in infection control measures and HAI, and (4) required implementation. Although the qualitative data indicated that the participants had excellent compliance with hand hygiene and personal protective equipment (PPE) use, the VRE and reflexive sessions indicated otherwise. Some astounding lapses were revealed, like failure to engage in boundary maintenance between sterile and nonsterile areas, failure to observe proper hand hygiene measures, and use of traditional hijab face covers (used in an unsterile environment as well) instead of surgical masks. These findings demonstrate the advantage of combining VRE with qualitative and quantitative methodology to deduct the lapses in the practice of infection control among healthcare workers.

Conclusions: Introduction of training programs focused on HAI and infection control measures in the educational system will help better inform medical and nursing students. Live video demonstrations of appropriate infection control practices during sterile procedures would be highly beneficial to educate the healthcare workers on correct infection control practices. Lapses in the use of PPE can be a possible reason for the outbreak of MERS-CoV, an endemic disease, in this part of Saudi Arabia.

Disclosures: None

Funding: None

Doi:10.1017/ice.2020.623

Presentation Type:

Poster Presentation

Analysis of National Healthcare Safety Network *Clostridioides difficile* Infection Standardized Infection Ratio by Test Type

Qunna Li, Centers for Disease Control and Prevention; Andrea Benin, Centers for Disease Control and Prevention; Alice Guh, Centers for Disease Control and Prevention; Margaret A. Dudeck, Centers for Disease Control and Prevention; Katherine Allen-Bridson, Centers for Disease Control and Prevention; Denise Leaptrot, Centers for Disease Control and Prevention; Lawrence McDonald, Centers for Disease Control and Prevention; Daniel Pollock, Centers for Disease Control and Prevention; Jonathan Edwards, Centers for Disease Control and Prevention

Background: The NHSN has used positive laboratory tests for surveillance of *Clostridioides difficile* infection (CDI) LabID events since 2009. Typically, CDIs are detected using enzyme immunoassays (EIAs), nucleic acid amplification tests (NAATs), or various test combinations. The NHSN uses a risk-adjusted, standardized