of Infectious Diseases, Emory University School of Medicine, Atlanta, Georgia; 2Centers for Disease Control and Prevention, Atlanta, Georgia; 3Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, Georgia

**Session:** 223. Antimicrobial Stewardship: Qualitative Research
**Date:** Saturday, October 6, 2018: 12:30 PM

**Background.** We sought to gauge provider perceptions to prepare an intervention which featured audit-feedback reports, academic detailing, and communication training to improve antibiotic treatment of acute respiratory infections (ARIs).

**Methods.** One-on-one interviews with providers (n = 20) from five VA Medical Centers were conducted in May–July 2017. Participants were recruited from emergency departments, primary care and community-based outreach clinics by e-mail. Interviews were conducted by telephone, audio-recorded, and transcribed. The Theory of Planned Behavior was used to develop semi-structured interview questions to capture antemortem, subjective norms (peer practices), planned future behaviors for managing ARIs, and intervention tools. Interviews were analyzed using codes developed from participant responses and categorized via consensus among authors. Codes were categorized into themes to map mental models.

**Results.** Beliefs and Attitudes: Providers were open to audit-feedback and tools to improve prescribing practices. Barriers to appropriate prescribing were perceived to include patient demand, time and resource limitations. Unfamiliarity with receipt of personal feedback and undetermined roles of personnel to provide feedback within the clinic were anticipated to impede successful implementation. Behavior Control: Providers felt they had control to withhold or prescribe antibiotics. Social norms: Peer practices and lack of patient knowledge were perceived to drive patient demand. Planned future behaviors: The use of audit-feedback and communication strategies to address perceived patient demand were viable solutions to improve prescribing practices. Providers were unsure of 3As (Aware, Accept or (accept) antibiotic) antibiotic resistance and harms perceived varied due to provider expertise that antibiotics were not indicated for most ARIs; patient gaps in knowledge, and perceived patient insistence for an antibiotic.

**Conclusion.** Providers often intend to prescribe antibiotics appropriately yet barriers to antemortem are present. Potential interventions to provide tailored feedback, address perceived patient demand, and support clinic structure to provide feedback. Strategies should consider time and resources available to address barriers.

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

---

**1890. Healthcare Professionals’ Knowledge, Attitudes, and Beliefs Regarding Factors That Contribute to Inappropriate Antibiotic Use**

Jennifer O. Spencer, MD; MPH¹; Austyn W. Dukes, MA²; Kelly E. O’Neill, ABI, BA³; Rosa Herrera, BS⁴; and Lauri A. Hicks, DO⁵; ¹Department of Medicine, Division of Infectious Diseases, Emory University School of Medicine, Atlanta, Georgia; 2Centers for Disease Control and Prevention, Atlanta, Georgia; 3Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, Georgia

**Session:** 223. Antimicrobial Stewardship: Qualitative Research
**Date:** Saturday, October 6, 2018: 12:30 PM

**Background.** In 2003, the Centers for Disease Control and Prevention (CDC) launched Get Smart: Know When Antibiotics Work, a campaign to improve antibiotic usage for acute respiratory infections. Antimicrobial resistance was the most important goals of antimicrobial stewardship. We sought to identify factors that influence antibiotic prescribing among healthcare professionals (HCPs).

**Methods.** We conducted semistructured interviews with 21 HCPs using purposive sampling to target geographic regions and provider types with the highest anti- bactericidal prescribing rates. We recorded, transcribed, and analyzed interviews using emergent thematic analysis.

**Results.** The HCPs interviewed included nine family practitioners (four physicians, three nurse practitioners, and two physician assistants), four emergency medicine physicians, three urgent care providers, and five hospitalists. One new theme emerged: HCPs report that concern for adverse drug events does not affect whether HCPs prescribe an antibiotic but rather which antibiotic they choose. We also identified four themes that have been previously described: (1) HCPs recognize inappropriate prescribing occurs but deny doing it frequently themselves; (2) diagnostic uncertainty and the “fear of missing something” influence HCPs’ decisions to initiate antibiotics; (3) absence of antibiotic cost largely impacts antibiotic prescribing decisions; and (4) strength and continuity of the provider–patient relationship influences how antibiotics are prescribed. Each theme is categorized into themes to map mental models, although some themes were more prevalent among certain specialties.

**Conclusion.** Adverse drug event messaging may be most effective if the focus is on improving antibiotic selection rather than the decision to prescribe. Similar principles influence antibiotic prescribing patterns of HCPs in different practice settings, which may suggest that similar messaging can be used across specialties.

**Disclosures.** All authors: No reported disclosures.
Conclusion. Nursing staff at our institution have the greatest need for orientation with the ASP. The ASP is highly valued across prescribers and pharmacists, but all disciplines desire further education. Resource allocation toward education is an important need.

Disclosures. C. McCoy, Merck Inc.: Scientific Advisor, Consulting fee. Allergan: Scientific Advisor, Consulting fee.

1892. Preparing for an Antibiotic Stewardship Intervention Through Nursing Surveys of Knowledge and Safety
Barbara W. Trautner, MD, PhD, FIDSA 1; Dimitri M. Drekonja, MD, MS, FIDSA 1; Payal Patel, MD, MPH 1; Christopher J. Graber, MD, MPH, FIDSA 1; Timothy Gauthier, PharmD, BCPS-AQ ID 1; Tracey Rosen, MPH 1; Lasse Dillon, MS 1; Paola Lichtenberger, MD 1; Aanand Naik, MD 1 and Larissa Grigoryan, MD, PhD 1
1Bayor College of Medicine, Houston, Texas, 2Department of Medicine, Infectious Diseases, Minneapolis Veterans Affairs Health Care System, Minneapolis, Minnesota, 3III (Infectious Diseases), Ann Arbor VA, Ann Arbor, Michigan, 4Infectious Diseases Section, VA Greater Los Angeles Healthcare System, Los Angeles, California, 5Miami Veterans Affairs Healthcare, Miami, Florida, 6Infectious Diseases, Miami Veterans Affairs Healthcare System, Miami, Florida, 7Department of Veterans Affairs, Health Services Research and Development Center of Excellence, Michael E. DeBakey VA Medical Center, Houston, Texas, Houston, Texas, 7Family and Community Medicine, Baylor College of Medicine, Houston, Texas

Session: 223. Antimicrobial Stewardship: Qualitative Research
Saturday, October 6, 2018: 12:30 PM

Background. We designed an intervention to reduce unnecessary antibiotic treatment of asymptomatic bacteriuria (ASB), by decreasing unnecessary urine cultures. Nurses and clinical nurse assistants (CNAs) play important roles in requesting urine cultures. As preparation for the intervention, we assessed knowledge of the appropriate indications for urine cultures among these personnel while measuring their safety climate.

Methods. Surveys were administered to licensed nursing personnel (RN, LPN, and NP) as well as to CNAs on all acute medical and long-term care units of two VA facilities across the nation. Surveys combined two validated subcomponents: knowledge of ASB and safety attitudes. Knowledge questions, which differed in emphasis between the licensed personnel and the CNAs, focused on indications for urine cultures. Safety questions were the teamwork climate and safety climate domains from the Safety Attitudes Questionnaire. Surveys were administered on paper during January–April 2018.

Results. We received 110 responses from licensed nursing personnel and 40 from CNAs. The response rate on distributed surveys was 110/140 (79%) for licensed personnel and 40/50 (80%) for CNAs. 94% of nurses and 73% of CNAs correctly recognized fever as an indication for urine culture. Many also endorsed incorrect triggers for urine cultures: cloudy urine (80% of nurses, 55% of CNAs), foul-smelling urine (87% of nurses, 85% of CNAs), and a change in color (44% of nurses, 73% of CNAs). 50% of nurses endorsed screening urine cultures on admission of catheterized patients. Scores on the teamwork climate (highest possible score 100) were 70 for nurses and 79 for CNAs; scores on the safety climate were 70 for nurses and 78 for CNAs.

Conclusion. This multicenter survey identified actionable gaps in knowledge about when to send urine cultures among nursing personnel in acute medical and long-term care units. However, scores on teamwork and safety climate were high, suggesting that these personnel have an effective voice in patient safety. Together our survey results indicate that empowering the personnel at the bedside to discourage unnecessary urine culturing should be a key component of our stewardship intervention.

Disclosures. B. W. Trautner. Paratek: Consultant, Consulting fee. Zambon: Consultant, Consulting fee and Research grant.

1893. Barriers and Facilitators to Nursing (RN) Involvement in Antibiotic Stewardship (AS): Multisite Qualitative Study of Prescribers
William Greenhut, MD 1; Zachariah Furuya, MD, MS, RN-BC, FNP-BC 1; Philip Zachariah, MD, MS 1; Eyo Furuya, MD, MS 2 and Eileen J. Carter, PhD, RN 1
1Infection Prevention and Control, NewYork-Presbyterian Hospital, New York, New York, 2New York Presbyterian/Lower Manhattan Hospital, 170 William Street, Rm 5-55, New York, 3Pediatrics, Columbia University Medical Center, New York, New York, 4Columbia University School of Nursing, New York, New York, New York-Presbyterian Hospital, New York, New York

Session: 223. Antimicrobial Stewardship: Qualitative Research
Saturday, October 6, 2018: 12:30 PM

Background. The Centers for Disease Control and Prevention and the American Nurses Association (CDC/ANA) outline specific responsibilities for RNs in AS efforts. Responsibilities expand traditional RN roles and are perceived to require prescriber engagement. We explored prescribers’ attitudes toward RNs’ involvement in AS and barriers and facilitators to the following RN responsibilities specified by the CDC/ANA: (1) RNs facilitate accurate antibiotic allergy histories; (2) RNs encourage the switch from intravenous (IV) to oral (PO) antibiotics; and (3) RNs initiate an antibiotic time out with prescribers.

Methods. Four focus groups and two interviews with 37 prescribers (10 medicine residents, 10 adult hospitalists, nine pediatricians, and eight critical care nurse practitioners) were conducted between July 2017 and March 2018 at two academic adult and pediatric hospitals. Transcripts were coded using a conventional content analysis in NVivo 11.