



Disclosures. All authors: No reported disclosures.

2070. Assessing Primary Care Physicians' Attitudes and Perceptions Toward Antibiotic Resistance and Outpatient Antibiotic Stewardship: A National Survey Rachel M. Zetts, MPH<sup>1</sup>; Andrea Garcia, JD, MPH<sup>2</sup>; Jason Doctor, PhD<sup>3</sup>; Jeffrey Gerber, MD, PhD<sup>4</sup>; Jeffrey A. Linder, MD, MPH, FACP<sup>5</sup>; David Y. Hyun, MD<sup>1</sup>; <sup>1</sup>The Pew Charitable Trusts, Washington, DC; <sup>2</sup>American Medical Association, Chicago, Illinois; 3University of Southern California, Calabasas, California; <sup>4</sup>Children's Hospital of Philadelphia, Philadelphia, Pennsylvania; <sup>5</sup>Northwestern University Feinberg School of Medicine, Chicago, Illinois

Session: 238. Antibiotic stewardship: Non-Inpatient Settings Saturday, October 5, 2019: 12:15 PM

Background. At least 30% of outpatient antibiotic prescriptions are unnecessary. Outpatient antibiotic stewardship can improve prescribing and minimize the threat of antibiotic resistance. We assessed primary care physicians' (PCPs) perceptions of antibiotic resistance, inappropriate antibiotic use, and the need for and impact of antibiotic stewardship activities.

We conducted a national survey of 1,550 internal and family medicine physicians and pediatricians recruited from a medical market research panel. Quotas were established to recruit participants by geographic region and specialty. For sample representativeness, survey weights were generated according to these characteristics using the American Medical Association's Masterfile.

Among respondents, 94% agreed that resistance is a problem in the United States, but only 55% felt it was a problem for their practice; 65% of respondents agreed they had seen an increase in resistant infections in their patients over the past 5 years. Responses about inappropriate antibiotic use were similar: 91% agreed that it was a problem, but 37% agreed that it is a problem in their practice. Additionally, 60% felt they prescribed antibiotics more appropriately than their peers. For antibiotic stewardship, 91% felt it was appropriate for office-based practices, but 53% believed that discussions with patients on the appropriate use of antibiotics is sufficient to address the problem. The majority of respondents indicated they were likely, very likely, or extremely likely to implement stewardship interventions in response to feedback or incentives from payers or health departments. The activities with the strongest likelihood to spur stewardship adoption included the state health department publishing local resistance patterns (82%), a payer creating a stand-alone incentive program for stewardship (80%), or a payer including it in a broader quality incentive program (76%).

Conclusion. PCPs feel that antibiotic resistance, inappropriate prescribing, and stewardship are important in the United States, but not for their own practices. This disconnect poses a challenge for the success of outpatient stewardship programs. Incentive or data feedback activities may help encourage stewardship uptake.

Disclosures. All authors: No reported disclosures.

## 2071. A Survey of Antibiotic Prescribing Practices Among Adult Primary Care Physicians in Idaho

Anubhav Kanwar, MD1; Susan Heppler, BSN2;

Karl Madaras-Kelly, PharmD, MPH<sup>2</sup>; Martha Jaworski, BSN, CIC, MS<sup>4</sup>; Curtis Donskey, MD<sup>5</sup>; <sup>1</sup>Tri-State Memorial Hospital, Clarkston, Washington; <sup>2</sup>Idaho Department of Health, Boise, Idaho; <sup>3</sup>Idaho State University, Pocatello, Idaho; <sup>4</sup>Qualis Health, Boise, Idaho; 5Cleveland VA Medical Center, Cleveland, Ohio

Session: 238. Antibiotic stewardship: Non-Inpatient Settings Saturday, October 5, 2019: 12:15 PM

Background. Prescribing an antibiotic is a complex process involving an interplay of prescriber's knowledge, diagnostic acumen and patient factors. Understanding the prescriber rationale is key to provide feedback which might improve appropriateness of antibiotic prescribing. Currently, there are limited data on prescribing and test ordering practices among primary care physicians.

We surveyed primary care physicians taking care of adults (age 18 years and above). Physicians were contacted through the Idaho State Medical Board by a one-time email containing the survey link. The survey consisted of 25 questions under 2 major themes of diagnostic and antimicrobial stewardship (AS). It assessed physicians' practice setting, ordering of diagnostic tests and antibiotics for common infections, delivery of patient education regarding antibiotics, availability of antibiogram and antimicrobial stewardship services, and assessment of penicillin allergy. Two infectious diseases physicians independently reviewed the results for appropriateness of testing and antibiotic prescribing per IDSA guidelines.

Of 929 physicians surveyed, 157 (17%) responded. Of the respondents, 95 (61%) were male, the mean age was 50 years, and 72% worked in outpatient settings and were family medicine specialists. Only 55% of physicians reported having an AS program at their healthcare facility. Test-of-cure for C. difficile infection (24%) and UTI (13%) and use of superficial culture data to guide the treatment of osteomyelitis (27%) were the most common reasons for inappropriate testing. Longer than recommended duration, antibiotic combinations with overlap of spectrum, and guideline-discordant indications for prescribing antibiotics were the main reasons for inappropriate antibiotic use. The main factors influencing the decision to prescribe an antibiotic were diagnostic uncertainty (42%), being unsure of patient follow-up (23%) and cost of testing (21%).

Conclusion. The survey results highlight the need for prescriber education for decreasing inappropriate test ordering and antibiotic prescribing. Additional studies involving a review of patient records, lab and prescription data are needed to confirm these practices.

Disclosures. All authors: No reported disclosures.

## 2072. Do ID and Non-ID Clinicians Agree on IV to PO Switch Criteria? Results from Phase I of the INForming IV to ORal MEdication Report (INFORMER) Project

Rachael Bosma, PhD<sup>1</sup>; Reem Haj, PharmD<sup>2</sup>; David Dai, MSc<sup>3</sup>; Muhammad Mamdani, PharmD, MA, MPH3; Michaelia Young, BA3;

Kevin Gough, MD, FRCPC, MEd<sup>4</sup>; Bradley J. Langford, PharmD<sup>5</sup> Mark Downing, MD, FRCPC<sup>5</sup>; Kevin L. Schwartz, MD MSc FRCPC<sup>6</sup>; Jane Topolovec-Vranic, PhD<sup>3</sup>; Michele Mccall, RD, MSc<sup>7</sup>;

Linda R. Taggart, MD MPH FRCPC8

Elizabeth Leung, PharmD, MsCI, BCPS AQID9; 1Women's College Hospital, Toronto, ON, Canada; <sup>2</sup>St. Michael's, Unity Health, Toronto, ON, Canada; <sup>3</sup>St. Michael's Hospital, Toronto, ON, Canada; <sup>4</sup>St. Michael's Hospital/University of Toronto, Toronto, ON, Canada; 5St. Joseph's Health Centre, Toronto, ON, Canada; 6St Joseph Health Centre, Toronto, ON, Canada; <sup>7</sup>Medical Surgical ICU, St. Michael's Hospital, Mississauga, Toronto, ON, Canada; 8St. Michael's Hospital & University of Toronto, Toronto, ON, Canada; 9University of Toronto, Toronto, ON, Canada

Session: 238. Antibiotic stewardship: Non-Inpatient Settings Saturday, October 5, 2019: 12:15 PM

Background. Converting intravenous (IV) antibiotics to an oral (PO) route is an important stewardship activity to reduce patient harm, including extravasation, thrombophlebitis, and catheter-related infections. The INFORMER Project aims to develop a "smart" electronic tool to streamline IV to PO conversion in eligible patients using an algorithm derived from patient-level data. In designing the algorithm, we noted significant clinician subjectivity in reviewing PO eligibility criteria. To support algorithm development and frontline clinician buy in for future e-tool use, an initial step of our project explored agreement level for IV to PO switch between general internal medicine (GIM) vs. ID clinicians.

A convenience sample of GIM patients (tertiary teaching hospital) were reviewed in a 4-month pilot. Patients were still on the ward and received a target IV antibiotic (fluoroquinolone, sulfamethoxazole/trimethoprim, clindamycin, metronidazole, linezolid, fluconazole, voriconazole, azithromycin). To mimic real-time decision-making, clinicians (MD and PharmDs) retrospectively assessed IV to PO eligibility of the last IV antibiotic dose on admission for (1) GI/absorption, (2) clinical stability and (3) global review (but not given specific thresholds/criteria). Agreement level was compared for ID vs. non-ID reviews.

Overall, 52 patients' IV to PO eligibility was assessed by multiple clinicians; 5 GIM teams and 6 ID MDs or PharmDs participated. ID vs. GIM respective assessment of Global eligibility was 61% vs. 48% (agreement in 71% of cases). ID vs. GIM assessment of acceptable absorption was 82% vs. 67%; acceptable clinical stability was 64% vs. 62% (Fig 1). Clinician comments were reviewed to identify algorithm improvements and areas for frontline education.

Our results are consistent with prior data suggesting up to 40-50% of Conclusion. patients may be eligible for IV to PO conversion, even at institutions that have IV to PO protocols. Our data also shows that overall, ID clinicians were more likely to assess a patient as ready for PO antibiotics vs. non-ID clinicians. Our findings are important as understanding