Poster # 198

Pharmacist-Led Antimicrobial Prompting During Interdisciplinary Team Rounds as a Novel Antimicrobial Stewardship Intervention

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Introduction

- There is a need to develop successful antimicrobial stewardship interventions that do not require ID physicians
- We implemented a pharmacist-driven intervention to prompt critical assessment of antimicrobial regimens during interdisciplinary team rounds with the goal of increasing concordance with institution specific antimicrobial guidelines surrounding urinary tract infections, skin and soft tissue infections and pneumonia.

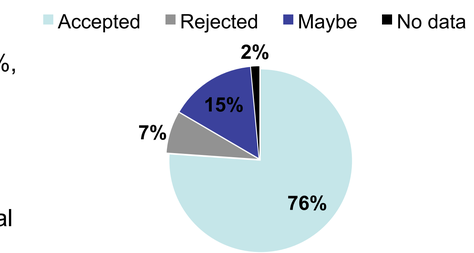
Methods

- **Setting:** Level I trauma urban public safety-net hospital during interdisciplinary rounds on the medicine service.
- **Timeline:** Intervention November 2016 – June 2017
- **Methods:**
  - Prior to rounds, the clinical pharmacist reviewed charts for patients with urinary tract infections, skin and soft tissue infections and pneumonia
  - During daily interdisciplinary team rounds, if the medicine team's antimicrobial choice was not concordant with institutional prescribing guidance, the clinical pharmacist made a recommendation.
  - Acceptance and rejection of recommendations were documented by the clinical pharmacist
  - The medical charts of thirty patients treated for urinary tract infections, skin and soft tissue infections and pneumonia were reviewed in both the pre and post intervention periods for concordance with institutional prescribing guidance.

Results

- **Acceptance of clinical pharmacist recommendations:**
  - Recommendations were made on 63% (92/146) days and 31% (205/664) patients on antimicrobials and accepted in 76% (156/205) cases
- **Antimicrobial prescription concordance with institutional prescribing guidance:**
  - There was a non-statistically significant improvement in concordance with inpatient (70% to 83%, p= 0.22) and discharge (64% to 86% p= 0.35) antimicrobial choices in the post-intervention period
  - There were similar concordance with duration of therapy (number of days on an antibiotic) between the pre and post intervention periods (76% to 77% p=0.94)
  - There was a non-statistically significant improvement in overall concordance with the institutional prescribing guidance in the post-intervention period (53% to 63%, p=0.43)

Acceptance of Pharmacist Recommendations

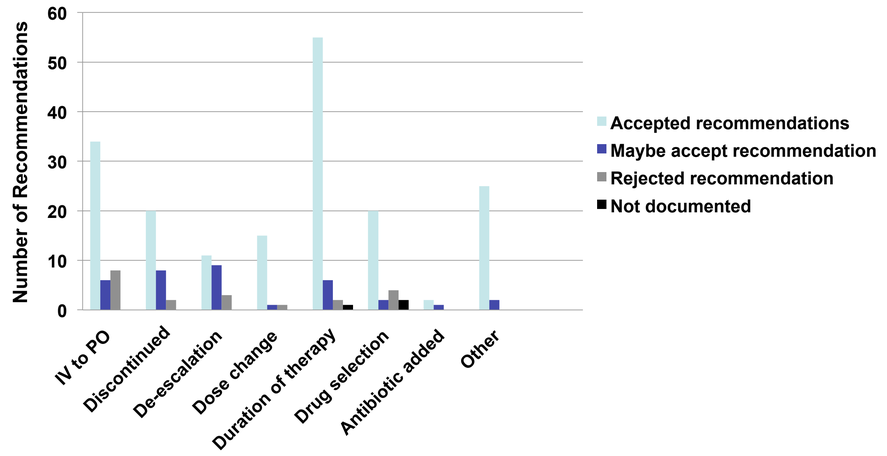


Conclusion

- During interdisciplinary rounds, prompting by clinical pharmacists to critically assess antibiotic regimens is a feasible antimicrobial stewardship intervention that does not require Infectious Disease expertise, is generally accepted by physicians and may increase guideline concordant antibiotic selection

Data

Clinical Pharmacist Recommendations During Interdisciplinary Team Rounds



Antimicrobial Prescription Concordance with Institutional Prescribing Guidance

	Baseline (N=30)	Intervention (N=30)	p-value
Concordance rate with DH guidelines			
Inpatient antibiotic choice	21/30 (70%)	25/30 (83%)	0.22
Outpatient antibiotic choice	7/11 (64%)	12/14 (86%)	0.35
Duration of therapy	22/29 (76%)	23/30 (77%)	0.94
Overall concordance with guideline (antibiotic + antibiotic course of therapy)	16/30 (53%)	19/30 (63%)	0.43