



The Importance of a Strong Handshake: Expanding Antimicrobial Stewardship to Engage Frontline Providers in Adult Medicine

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Julia Sapozhnikov, PharmD, Brian Hoff, PharmD, Jenna Adams, PharmD,
Maressa Santarossa, PharmD, Sonali Kalathiya, PharmD, Fritzie Albarillo, MD

Loyola University Medical Center, Maywood IL

Background

- The Joint Commission highlighted handshake stewardship (HS) as a leading practice in antimicrobial stewardship (AMS)¹; however, intervention and outcomes data in adult populations are lacking.
- Additionally, limited human resources remain a barrier to widespread implementation of HS services.
- In February 2022, our antimicrobial stewardship program (ASP) expanded to include a HS service supporting adult internal medicine patients managed by hospitalist staff at an academic medical center.
- Here, we aim to describe the interventions made to support and improve care in this population.

Methods

❖ Study Design

- This was a single-center, retrospective quality improvement initiative at a 547-bed academic center

❖ Setting and Intervention

- All prescribed antimicrobials were prospectively reviewed Monday-Friday by the ID pharmacist and recommendations to improve quality, safety, and transitions of care were discussed in-person during daily rounds with hospitalists.
- Interventions were documented daily and data generated between 2/1/22 and 7/30/22 were reviewed to categorize the impact of the expanded service.

- A total of 469 interventions were made for 162 unique patients over a 5-month period.
- We observed 385 accepted interventions (90.2%) during the intervention period.
- On average, the HS pharmacist reviewed 24 charts per day and spent 67 minutes in chart review, 14 minutes in rounds, and 21 minutes in other direct communication with providers per day.
- Since implementation, the HS service has contributed to an estimated cost savings of \$81,510 for our hospital

Figure 1. Intervention by Indication (N=469)

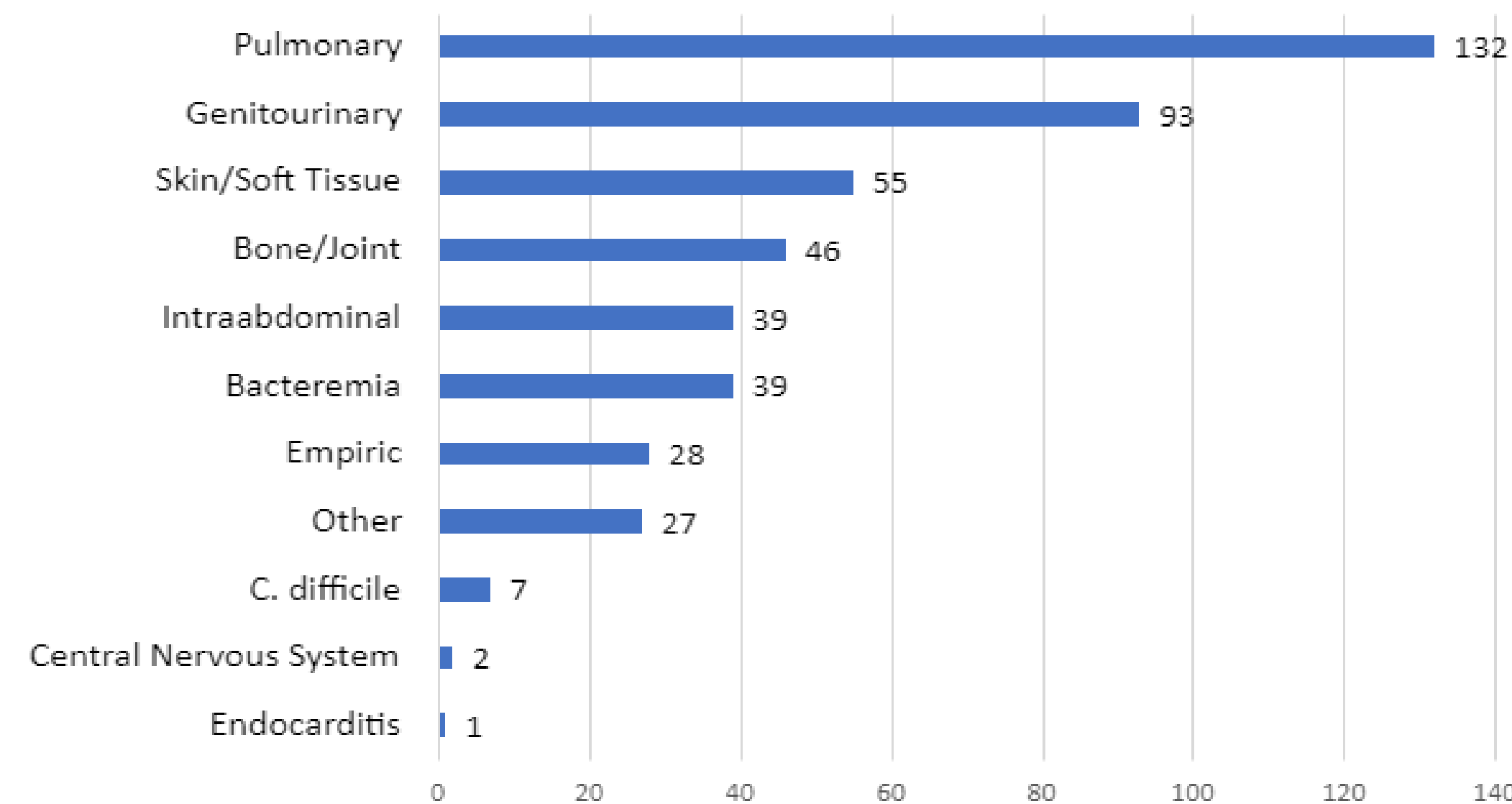


Table 1. Broad Spectrum Antibiotic Days of Therapy Avoided

Antibiotic	Cefepime	Piperacillin-tazobactam	Meropenem	Ceftriaxone	Vancomycin
Days Avoided	107	106	6	99	103

Results

Table 2. Intervention by Type (N=469)

Intervention Type	N (%)	Cost Savings Estimate ²
Labs or diagnostics recommended	49 (15.5)	\$18,627.84
Discontinuation	62 (13.0)	\$5,047.94
Intravenous to oral switch	56 (11.9)	\$3,130.84
Dose recommendation	50 (10.7)	\$8,239.00
Provider education	44 (9.4)	\$4,868.60
Duration of therapy recommendation	40 (8.5)	\$1,026.11
De-escalation	30 (9.5)	\$1,866.96
Antibiotics re-ordered	28 (6.0)	\$2,995.44
Antibiotic streamlining	20 (4.3)	\$12,050.40
ID consult recommended	12 (2.6)	\$7,230.24
Initiation of antibiotics	12 (2.6)	\$7,230.24
Dose Adjustment	12 (2.6)	\$1,977.36
Escalation	4 (0.9)	\$2,410.08
Allergy assessment and narrowing	3 (0.6)	\$1,140.48
Antibiotic Avoidance	3 (0.6)	\$1,807.56
Bug-Drug mismatch	2 (0.4)	\$1,205.04
Adverse drug reaction prevention	1 (0.2)	\$380.16
Counseling	1 (0.2)	\$110.65
Dose (Renal Replacement Therapy)	1 (0.2)	\$164.78
Total	469 (100)	\$81,509.72

Conclusions

- Implementation of HS in two adult internal medicine teams was associated with many interventions with high acceptance by hospitalist staff
- Interventions led to tangible reductions in broad spectrum antibiotic days of therapy and cost.

Disclosures: None



References

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- Rech MA, Gurnani PK, Peppard WJ, et al. Pharmacist Avoidance or Reductions in Medical Costs in Critically Ill Adults: PHARM-CRIT Study. Crit Care Explor 2021;3:e0594