Impact of Two Hours/day of Intensive Weekend Antimicrobial Stewardship Coverage

The Problem

- 2014 graduating first-year ID fellows expressed concerns about weekend Antimicrobial Stewardship Team (AST) pager coverage
- Ongoing concerns from ID Division regarding the role of first-year ID fellows in AST pager coverage [service function (ACGME), distraction, morale, recruiting]
- ID-trained PharmDs and more senior ID staff are more effective than first-year ID fellows in the Stewardship role

Aim/Goal

The goals of this initiative were:

- Continue the process of transferring coverage of the AST Approval pager from 1st-year ID fellows to the Antimicrobial Stewardship Team
- Improve antibiotic utilization to enhance care
- Document patient-specific interactions with prescribers ("interventions") as one metric for AST activities to justify AST resources
- Allow first-year fellows to focus on consult service workflow on weekend and holiday mornings with additional benefits of improved morale

The Team

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The Interventions

- Proposal - using moonlighting senior ID fellows and ID PharmDs:
  - Cover AST approval pager 8AM-10AM on weekends and holidays
  - Actively work the AST cPOE Receive/Approve queue to clear orders
  - Log interventions using the Pharmacy System to show ROI
- AST requested and received funding in FY15 IC budget
- Launched December 2014
- Intervention trends used to identify areas for improvement
- Monitoring of the quantity and quality of interventions

The Results/Progress to Date

- Reviewed two 3-month periods before and after initiative launched
- 294 patients had orders that required AST review during the 3-month period in 2014 and 343 patients required AST review in 2015
- Days of therapy (per 1000 patient days) rose from 28 in 2014 to 33 in 2015
- Documentation of stewardship interventions on weekends increased from 0 in 2014 to 214 during the 3-month period in 2015
- Average of 4.93 interventions per hour of moonlighting coverage

Number of Total Stewardship Interventions in 3-Month Period in 2014 and 2015

Lessons Learned and Next Steps

- A focused AST effort on weekends by senior ID fellows and PharmDs increased interventions on choice and duration of antimicrobial drug therapy
- Despite the modest cost of this targeted coverage (~$20,000/year), it improved workflow, morale and educational experience of trainees, anecdotally
- More formal analysis of ROI will be performed. Based on prior analysis of cost avoidance of AST interventions, ROI should be high (at least 4x)

For More Information Contact
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