Background

Clinical interventions increased from 20 per month at Duke University Hospital (DUH) to 45 per month in January 2015. DUH is a 957-bed academic medical center with approximately 400 patients on antimicrobials per day.

Methods

1. Development and implementation of Clinical Decision Support Systems (CDSSs) to increase quality of care and improve safety among patients receiving antimicrobials.
2. Development and implementation of CDSSs can be challenging and require considerable resources.

Results

1. Epic Antibiotic Monitoring Navigator was used to guide build.
2. System used to identify patients qualifying for review.

Abstract

Epic AS Navigator in an Academic Hospital: A Wealth of Real-Time Data

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Background

• Antimicrobial stewardship programs utilize CDSSs to increase quality of care and improve safety among patients receiving antimicrobials.
• Development and implementation of CDSSs can be challenging and require considerable resources.

Methods

1. Development and implementation required a collaborative effort between administration, AST, and Epic pharmacists, including meetings, review, and feedback up to twice per week. The navigator was instituted hospital-wide for all inpatients in April 2015. Approximately 250 hours were required to build the navigator, including alerts for Bug-Drug mismatches, Antimicrobial IV to PO switches, De-Escalation opportunities, and Drug-Lab mismatches. Documentation of the build was estimated at 120 hours and testing of build took approximately 100 hours with an additional 40 hours refining after the original release date. The Broad Spectrum Antibiotic Patient List was designated as the primary Antimicrobial Stewardship Program (ASP) list and contains an integrated scoring system used to identify patients qualifying for review. A restricted antimicrobial list was also created for all patients on antimicrobials requiring Infectious Disease approval. Both lists populate in real-time based on antimicrobial, laboratory, and diet orders, as well as microbiology results in the EMR. After rollout, ASET now efficiently utilizes CDSSs to increase quality of care and improve safety among patients receiving antimicrobials.

Conclusions

• Implementation of the Epic antimicrobial stewardship navigator required significant resources.
• 1 dedicated Epic Willows pharmacist required 500 hours of time over 4-5 months.
• Clinical interventions increased from 20 per month to 50 per month; this represents a 150% increase in the number of interventions.

DISCLOSURES The authors of this presentation have no disclosures to provide concerning possible conflicts of interest. No financial or personal relationships with commercial entities that may have direct or indirect interest in the subject matter of this presentation were declared.