Introduction

The ‘Start Smart· Then Focus’ toolkit is an antimicrobial stewardship programme led by Public Health England to combat the increasing threat of antibiotic resistance on patient safety in the 21st century. One key aspect of this is to promote proper documentation of antibiotic prescriptions including: indication, stop/review date & a 48-72 hour intravenous antibiotic review. Poor documentation can lead to prolonged courses of antibiotics beyond therapeutic benefit & thus: resistance selection, associated illnesses (Clostridium Difficile), increased side effects & healthcare costs.

Aims

- To audit antibiotic prescribing documentation against current guidelines
- Create intervention to educate prescribers & to inform allied health professionals of the standards
- Re-audit to evaluate for improvement
- Establish ongoing audit for successive junior doctors to continue

Guidelines

Start Smart Then Focus

ANTIMICROBIAL STEWARDSHIP Treatment algorithm

DO NOT START ANTIBIOTICS IN THE ABSENCE OF CLINICAL EVIDENCE OF BACTERIAL INFECTION

1. Take through drug history
   - If no evidence: antibiotic treatment will stay one year of diarrhoea (or as long as possible) if patient with severe sepsis or life-threatening infection
   - Continue with standard prescribing guidelines

2. Do not use inappropriate indication (e.g. if inappropriate, start & discuss on day shift & medical control)
   - Include review of drug or duration
   - Avoid leaving out therapy where possible (but do not delay therapy)

3. Document all decisions
   - Complete antimicrobial prescribing audit tool
   - Add comments
   - Include antimicrobial prescribing information
   - Include information from the guidelines

CLINICAL REVIEW & DECISION AT 48-72 HOURS

Clinical review, check microbiology & make a clear plan: Document this decision

DOCUMENT ALL DECISIONS

resulting in a reduced risk of antibiotic resistance

Intervention

Informative Posters

Education

MDT: Nursing & Auxiliary Staff

Q&A Open Forum

An image of the educational posters presented to the multidisciplinary staff, displaying the 1st cycle audit results

Stage 1: Planning - Literature search, national guidelines, & problem identification in clinical setting
Stage 2: 1st Cycle: All inpatient prescription charts were reviewed for: Indication Stop/review date IV 72 hr review
Stage 3: Intervention: 3 tier educational awareness campaign aimed towards the multidisciplinary team members
Stage 4: 2nd Cycle: Prescription charts were re-audited
Stage 5: Analysis, Conclusions, presentation & future sustainability plan

Results

Indication for Antibiotic

Stop/Review Date for Antibiotic

72hr IV Review for Antibiotic

Documentation rate improved from 9 > 85%

Documentation rate improved from 21 > 81%

Documentation rate improved from 3 > 81%

Conclusion

1) Improvement of antibiotic prescribing in all three categories achieved in time efficient audit
2) Raises awareness of importance of appropriate antibiotic prescribing
3) Potential economical impacts (reduced length of stay and monetary expenditure)
4) Positive impact on patient safety short term: reduced risk of C. difficile infection, side effects & long term: reduced risk of antibiotic resistance
5) Sustainability: We will re-audit at 6 months, & then once yearly to ensure the trends are sustained. The project will be continued by both a consultant lead & a junior doctor lead.

References


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