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# A Retrospective Regional Audit of Compliance with Urinary Tract Infection Treatment Guidelines in Secondary Care

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## Background

- Recent strategies to tackle antimicrobial resistance have identified antimicrobial stewardship as key to encouraging prudent prescribing
- Public Health initiatives such as the Strategy for Tackling Antimicrobial Resistance (2012-2017) cite the establishment and maintenance of systems to monitor antimicrobial usage and surveillance of resistance as key objective<sup>1</sup>

## Objective

- This study focuses on urinary tract infections (UTI), currently the second most common indication for empirical antimicrobial treatment in both primary and secondary care<sup>2</sup>

## Design

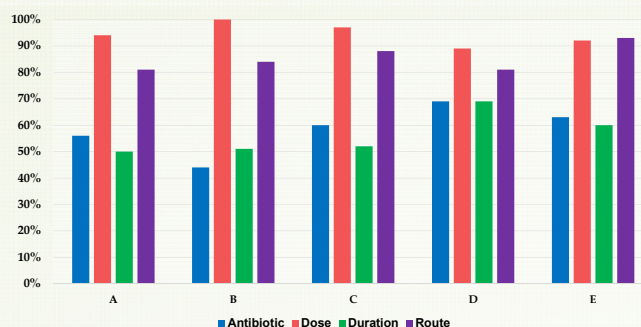
- The study is a retrospective audit across the five Health and Social Care Trusts in N. Ireland
- 303 patients, with a diagnosis of uncomplicated, complicated or catheter associated UTI, were randomly selected from all patients admitted from January to August 2016
- The primary aim was to assess compliance with empirical guidelines for the treatment of uncomplicated, complicated and catheter associated UTI
- Secondary aims were:
  - Documentation of clinical symptoms
  - Obtaining and recording of appropriate cultures
  - Documenting intended duration or review date of antibiotic therapy

## References

- Department of Health, Social Services, and Public Safety. Strategy for Tackling Antimicrobial Resistance (STAR) 2012-2017
- Scottish Intercollegiate Guidelines Network. Management of suspected bacterial urinary tract infections in adults: a national clinical guideline. Edinburgh: SIGN; 2012

## Results

- Overall Trust-wide compliance with regional guidelines was 31%
- Of 303 patients, 57% were prescribed an antibiotic compliant with regional guidelines
- Two of the hospital trusts met target of 95% compliance for correctly prescribed dose of antibiotic
- Of 303 patients, 54% had a documented review date or duration on their Kardex
- 42% had a documented review or duration in their medical notes



Percentage Compliance of the 5 Northern Ireland Healthcare Trusts (A-E) with Regional Antibiotic Substitution

## Conclusion

- None of the five Trusts met target of 95% compliance to regional guidelines
- Based on the findings of this audit the following recommendations are proposed to improve compliance to the guidelines:
  - Promotion of the Regional Guidelines
  - Revising the Regional Kardex to include a dedicated section for recording intended duration of antibiotic
  - A regional algorithm to aid diagnosis and classification of UTI
  - Education for the management of asymptomatic bacteria
  - Education on urinalysis and culture results to guide treatment

## Acknowledgements

- Regulation & Quality Improvement Authority

