

Right Antibiotic, Every Time: Appropriate prescribing for Skin and Soft Tissue in Rural areas

Background

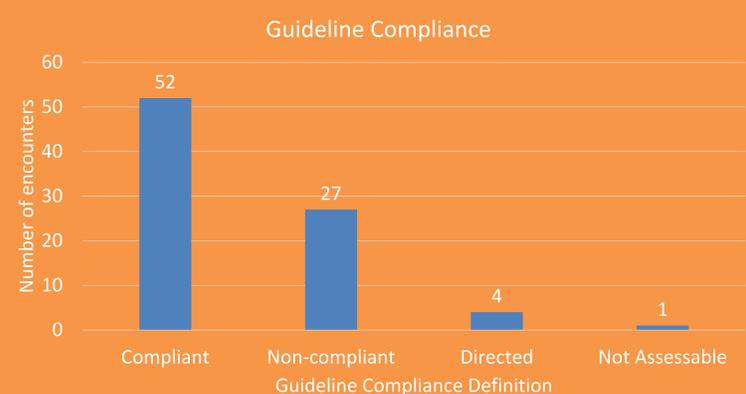
Optimal antimicrobial prescribing has been associated with improved patient and economic outcomes.^{1,2} Australian hospitals must demonstrate that they meet Preventing and Controlling Infections Standard requirement to review antimicrobial prescribing and use. Skin and Soft tissue infections (SSTIs) are one of the most common infections in rural and regional facilities accounting for 40% of Queensland's Infectious Diseases.¹

Method

A retrospective audit was conducted to monitor the appropriateness of antimicrobial prescribing across four facilities in a rural Queensland HHS between March 2021 and February 2022. Patient medical charts were reviewed for clinical documentation, antibiotics prescribed, and pathology utilising the National Antimicrobial Prescribing Survey (NAPS). The assessment was conducted by two independent reviewers and if there was any discrepancy, this was resolved by an infectious disease specialist. The Hospital NAPS appropriateness definitions were utilised to determine if prescribing was appropriate, inappropriate or not assessable.

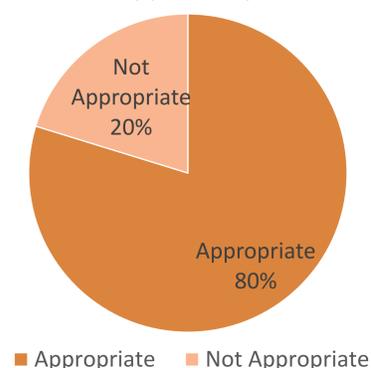
Results

- Eighty-four prescribing episodes from 37 patients with a diagnosis of SSTIs
- 61.90% episodes were compliant with guidelines
- 80% was appropriate, whilst 20% was not appropriate
 - This is above the national average
- Most common reason for not being appropriate was "Too Narrow Spectrum" at 50% followed by "Too Broad Spectrum" at 25%



Reasons Prescribing Episodes Were Not Appropriate	
Reason	Frequency
Too narrow spectrum	12
Too broad spectrum	6
Incorrect dose/frequency	5
Microbiology mismatch	1

Antimicrobials prescribed appropriately vs not appropriately



Conclusion

Inappropriate use of antimicrobials contributes to the development of antibiotic-resistant pathogens and poor patient outcomes. Rural and regional facilities often have limited resources and/or skill sets to implement onsite antimicrobial stewardship (AMS) programmes. Identifying and implementing local strategies to support clinicians in optimal antibiotic prescribing may improve antimicrobial prescribing such as partnering with a State-wide AMS service.

References

1. Isturiz RE. Optimizing antimicrobial prescribing. International Journal of Antimicrobial Agents. 2010;36:S19-S22.
2. O'Neill J. Tackling drug-resistant infections globally: final report and recommendations. 2016 May 2016.
3. Care ACoSaQIH. Antimicrobial Usage and Resistance in Australia 2021. Internet; 2021.

