Patient Factors Predicting Appropriateness of Antibiotic Prescribing

Grace Welham¹, Mozdeh Bahrainian¹, Tim Hess¹, Chris Crnich¹,²

INTRODUCTION

Resident Factors
- Baseline characteristics
- Knowledge, beliefs, and attitudes

Facility Factors
- Structure and processes
- Staff knowledge, beliefs, and attitudes

Prescriber Factors
- Individual factors
- Practice characteristics

Clinical Situation

The decision to prescribe an antibiotic to a resident at a skilled nursing facility is complex.²

METHODS

Data Collection

Data on antibiotic use in five skilled nursing facilities in Wisconsin were collected prospectively.

Outcomes Measurement

Appropriateness was defined using Loeb criteria.

RESULTS

Demographics

Patient Factors Predicting Appropriateness

CONCLUSIONS

- Clinical and non-clinical resident factors influence appropriateness.
- Cognitive impairment alone increased the likelihood of appropriate antibiotic prescribing.
- When in combination with physical frailty, cognitive impairment decreased the likelihood of appropriateness.

Limitations

- This study includes only resident factors. Future studies should include prescriber and facility factors.
- This study was not intended to draw condition-specific conclusions. The findings of this study may be used to conduct a power analysis for condition-specific analysis.

Acknowledgements

This study was supported by AHRQ Grant Number 1R11HS022450-1 and the State of Wisconsin Civil Monetary Penalty Fund Program. Contents are the authors’ sole responsibility and do not necessarily represent official AHRQ views or those of the State of Wisconsin.

References


Grace Welham ¹, Mozdeh Bahrainian ¹, Tim Hess ¹, Chris Crnich ¹,²
1. University of Wisconsin-Madison, School of Medicine and Public Health, Department of Medicine, Madison, WI.
2. William S. Middleton Veterans Hospital, Madison, WI.