

An evaluation of Victorian emergency department doctors' knowledge of community-acquired pneumonia management guidelines

Background

In 2003, a revised version of the Therapeutic Guidelines: Antibiotic[†] (*Guidelines*) was released, detailing new recommendations for the management of community-acquired pneumonia (CAP). These included updated antibiotic recommendations coupled with the use of a severity assessment tool, the Pneumonia Severity Index (PSI).

In response to the new *Guidelines* and also to recent evidence that antibiotic therapy prescribed for lower respiratory tract infections in hospital emergency departments (EDs) was suboptimal,[‡] the National Prescribing Service committed to support a national multi-centre drug usage evaluation study aimed at introducing and implementing the new CAP recommendations in EDs. Prior to the commencement of this initiative, Community-Acquired Pneumonia: Towards Improving Outcomes Nationally (CAPTION), the Victorian project team firstly conducted a survey to assess ED doctors' knowledge of the *Guidelines*.

Aims

- To evaluate ED doctors' knowledge of CAP recommendations contained within the *Guidelines*
- To determine ED doctors' preferred intervention(s) to assist in CAP prescribing

Methods

- A paper-based survey was conducted in Victorian CAPTION hospitals (seven major metropolitan public hospitals, one metropolitan private hospital)
- Surveys were distributed to ED doctors by hospital coordinators who later returned completed forms to the state project team for analysis
- Surveys comprised five questions relating to *Guideline* recommendations, including two CAP case studies, and one question asking doctors to choose their preferred intervention

Results

A total of 118 surveys were completed. Responses to questions relating to *Guideline* recommendations (Q1-Q5) are presented in Table 1 and responses to the question regarding preferred intervention (Q6) are presented in Table 2.

Discussion

Despite most ED doctors indicating familiarity with the *Guidelines*' new CAP recommendations including the use of the PSI, less than half suggested concordant therapy for the CAP case studies. Given this result, the planned CAPTION education program in CAP prescribing was likely to be beneficial. Of note, the survey was limited by its distribution within project hospital EDs that, by participation in CAPTION, had already agreed to support the implementation of *Guideline* recommendations. Response rates were not recorded.

Conclusions

- ED doctors' knowledge of the *Guidelines*' CAP recommendations was varied and would most likely benefit from the planned targeted education program
- The intervention most preferred by ED doctors to assist prescribing was a laminated PSI scoring ID card

Recommendations

- That the survey results be fed back to the national CAPTION project team
- That the information on preferred CAP prescribing aids be used to inform the development of the project's suite of intervention tools

References

[†]Antibiotic Writing Group. Therapeutic Guidelines: Antibiotic, version 12. Melbourne: Therapeutic Guidelines, 2003:407.

[‡]Victorian Drug Usage Evaluation Group. Antibiotic treatment of lower respiratory tract infection in emergency departments, Melbourne: VDUEG, 2003. Available at: www.health.vic.gov.au/vmac/vdue.htm (accessed May 2006)

Acknowledgement

This study was funded and supported by the National Prescribing Service.

Table 1. *Guideline* recommendations for CAP management

Q1. First choice empiric antibiotic therapy for treatment of mild CAP?	
Penicillin/amoxicillin	26%
Roxithromycin or doxycycline	9%
Both	57% (correct response)
Other	9%
Q2. Factors determining prescription of ceftriaxone/cefotaxime?	
Severity	45%
Co-morbidity	6%
Both	33%
Other (e.g. penicillin allergy)	16%
Q3. Familiarity with the <i>Guidelines</i> recommendations regarding the use of the PSI and antibiotic prescribing for CAP?	
74% of respondents indicated that they were familiar with these.	
Q4. First source of information if unfamiliar with a prescribing regimen?	
88% of respondents indicated that the Therapeutic Guidelines was their first choice.	
Q5a. CAP case study of 42 year old farmer with moderate to severe disease (PSI Class IV)	
44% of respondents suggested therapy concordant with the <i>Guidelines</i> .	
Q5b. CAP case study of 38 year old mother with mild disease (PSI Class I)	
49% of respondents suggested therapy concordant with the <i>Guidelines</i> .	

Table 2. ED doctors' preferred intervention type to aid CAP prescribing

Q6. First/equal first preference for type of intervention in ED to assist in CAP prescribing?	
Laminated PSI scoring ID card	36%
Easier access to Therapeutic Guidelines	22%
PSI calculator form / stamp / windows based	21%
Web-based antibiotic approval system	12%
Academic detailing ¹	10%
Posters	6%
Care plan	<1%

¹ a face-to-face 1:1 interactive education session

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