#### **LETTERS**

### Local guidelines for management of adult community acquired pneumonia: a survey of UK hospitals

There are continuing advances in severity assessment and antibiotic therapy for community acquired pneumonia (CAP). The British Thoracic Society (BTS) updated its national guidelines on adult CAP management in 2004. <sup>1</sup> <sup>2</sup> A study was undertaken to examine local and national influences on guidelines used in UK hospitals for the management of adult CAP.

#### **METHODS**

A questionnaire was sent to each of the 254 hospitals in the BTS directory in September 2006 (see fig 1 in online supplement). Data were analysed using Microsoft Excel. Differences in categorical variables were tested for statistical significance using the  $\chi^2$  test with the Fisher exact test.

#### **RESULTS**

The response rate was 60% (n = 152); 92% of hospitals (n = 140) had locally written CAP guidelines (although in only 100 were policies being used in the emergency department as well as the medical department), 5% (n = 7) used the national BTS CAP guidelines and 3% (n = 5) had no guideline. Sixtyeight guidelines (49%) had been updated in the previous year and 88% (n = 123) had been updated since the BTS 2004 CAP guideline.

Self-reported concerns over healthcare acquired infections influenced local guidelines in 57 hospitals (*Clostridium difficile* (n = 57), meticillin-resistant *Staphylococcus aureus* (MRSA) (n = 22)). Other influences included the BTS 2004 guideline (n = 96), cost of antibiotics (n = 26) and local antibiotic profiles (n = 15).

Using severity assessment for planning management was recommended in 94% of guidelines (n = 131/140) including CURB65 tools<sup>3</sup> in 76% (n = 106), CURB<sup>4</sup> in 18, other tools in 9 and clinical judgement only in 9.

First-line antibiotic recommendations for non-severe and severe CAP as stated in local CAP guidelines are shown in table 1. For managing non-severe CAP, 61% of hospitals (n = 85) recommended amoxicillin plus macrolide and 24% (n = 34) recommended amoxicillin alone. For severe CAP, recommended first-line antibiotics were consistent with BTS recommendations in 87% of guidelines (113/130; no data from 10 hospitals) including a β-lactamase stable β-lactam plus a macrolide in 101 and the alternative BTS recommendation of a quinolone and  $\beta$ lactam in 12. A simple  $\beta$ -lactam, such as amoxicillin or penicillin, plus a macrolide was recommended in 12 guidelines and

other antibiotic choices in 5. In hospitals with C difficile concerns, cephalosporins were less commonly recommended as preferred treatment for CAP than in other hospitals (26% vs 47%, p = 0.01). As alternative therapy for severe CAP, 19% of hospitals (n = 27) recommended  $\beta$ -lactamase stable β-lactam plus macrolide combinations and 36% (n = 51) recommended quinolones (most commonly levofloxacin (n = 33), ciprofloxacin (n = 11) and moxifloxacin (n = 4)), mostly as combination therapy (n = 27). In 35 guidelines no alternative regime was stated, 6 recommended microbiology advice and 21 recommended other choices.

#### **DISCUSSION**

This survey of 152 hospitals confirms that UK local guidelines for the management of adult CAP are widespread (but not always used in the emergency department), up-todate, use severity assessment tools and are influenced by both national evidence-based guidelines and local factors, especially healthcare acquired infections, cost and local antibiotic profiles. Compared with 1999,5 the proportion of hospitals reporting C difficile infection as an influence on local CAP guidelines has increased significantly (from 19% (39/213) in 1999 to 41% (57/140) in 2006;  $\chi^2 = 21$ , p<0.001). The response rate for this survey was only 60%, but there was no obvious difference between responders and non-responders.

This survey confirms the value of having national guidelines for common conditions,

**Table 1** First-line antibiotic recommendations for non-severe and severe CAP as stated in local CAP guidelines (n = 140)

	n (%)
Non-severe CAP	
$\begin{array}{lll} \beta\text{-Lactam} + \text{macrolide} \ (\beta\text{-lactam was} \\ \text{amoxicillin in 81, penicillin V in 2,} \\ \text{benzylpenicillin in 2)} \end{array}$	85 (61)
Amoxicillin alone	34 (24)
Quinolone ± other	8 (5)
Others*	8 (5)
Not stated	5 (4)
Severe CAP	
Stable $\beta$ -lactam + macrolide combination	101 (72)
Cephalosporin + macrolide	54 (39)
Coamoxiclav + macrolide	33 (24)
Either cephalosporin/coamoxiclav + macrolide	14 (10)
Quinolone + β-lactam	12 (9)
β-Lactam + macrolide	12 (9)
Others†	5 (4)
Not given	10 (7)

<sup>\*</sup>Benzylpenicillin/clarithromycin, ceftriaxone+clarithromycin, coamoxiclav, coamoxiclav+erythromycin,  $\beta$ -lactam+doxycycline (×2), moxifloxacin/benzylpenicillin/ertapenem+clarithromycin (×2)

†Cefotaxime alone, ceftazidime+clarithromycin, tazocin+clarithromycin, ertapenem+clarithromycin  $\times 2$ .

which can act as a framework to be adapted for local use.

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Competing interests: JTM was chairman of the BTS committee which published the 2001 and 2004 CAP guidelines. WSL is chairman of the current BTS CAP Guidelines Committee.

► The questionnaire is published online only at http://thorax.bmj.com/content/vol64/issue2

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#### REFERENCES

- Macfarlane JT, Boswell T, Douglas G, et al. BTS guidelines for the management of community acquired pneumonia in adults. Thorax 2001;56(Suppl 4):1–64.
- Macfarlane JT, Boldy D. 2004 update of BTS pneumonia guidelines: what's new? *Thorax* 2004;59:364–6.
- Lim WS, van der Eerden MM, Laing R, et al. Defining community acquired pneumonia severity on presentation to hospital: an international derivation and validation study. Thorax 2003;58:377–82.
- Lim WS, Lewis S, Macfarlane JT. Severity prediction rules in community acquired pneumonia: a validation study. *Thorax* 2000;56:296–301.
- Woodhead M, Macfarlane J. Local antibiotic guidelines for adult community-acquired pneumonia (CAP): a survey of UK hospital practice in 1999. J Antimicrob Chemother 2000;46:141–3.

# The role of specialist lung cancer nurses in the UK: a national survey

The role of the lung cancer nurse specialist in the UK is a recent development in response to initiatives aimed at improving the delivery of lung cancer services and it has now become integral to the lung cancer multidisciplinary team (MDT). A small survey in 20001 indicated that there was little strategic planning and evaluation of the role, and until recently definition and training requirements have been lacking. Recent guidelines<sup>2</sup> state that all lung cancer units should have at least one specialist lung cancer nurse to support patients and coordinate care between primary and secondary care teams. Despite this, the number, workload and exact duties of these practitioners remain undefined. We therefore conducted a questionnaire survey to determine the current profile of lung cancer nurses working in the UK, which should help plan future roles of these clinical nurse specialists.

A three section questionnaire (focusing on manpower, clinical and non-clinical activities) developed and piloted with members