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. ¹ ² 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 χ^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 tools³ in 76% (n = 106), CURB⁴ 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 β lactam in 12. A simple β -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 β -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 β -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)

^{*}Benzylpenicillin/clarithromycin, ceftriaxone+clarithromycin, coamoxiclav, coamoxiclav+erythromycin, β -lactam+doxycycline ($\times 2$), moxifloxacin/benzylpenicillin/ertapenem+clarithromycin ($\times 2$) †Cefotaxime alone, ceftazidime+clarithromycin,

tazocin+clarithromycin, ertapenem+clarithromycin ×2.

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

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

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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 guidelines² 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

Table 1 Clinical activities performed by lung cancer nurse specialist

Activities	MDTs where the activity existed	Proportion involving nurses
Routine MDT follow-up	87/115 (76%)	82 (94%)
Diagnosis/results at a general clinic	84/113 (74%)	78 (93%)
Dedicated diagnosis/result clinic	60/110 (55%)	55 (92%)
Ward visits/review	121/126 (96%)	111 (92%)
Managing investigations	93/117 (79%)	84 (90%)
Stock taking clinic	42/103 (41%)	38 (90%)
Nurse led telephone review	90/118 (76%)	81 (90%)
Home visits	60/106 (57%)	53 (88%)
New patient clinic	84/117 (72%)	74 (88%)
Palliative care	111/122 (91%)	97 (87%)
In treatment reviews	93/117 (79%)	79 (85%)
Support groups	64/120 (53%)	53 (83%)
Rapid referral clinic	61/109 (56%)	48 (79 %)
Nurse led follow-up	34/102 (33%)	27 (79%)
Chemotherapy assessments	63/107 (59%)	46 (73%)
Breathlessness clinics	27/102 (26%)	19 (70%)
Pre assessment clinic	11/93 (12%)	5 (45 %)
Chemotherapy administration	33/99 (33%)	13 (39%)

MDT, multidisciplinary team.

of the Scottish Lung Cancer Nurse Interest Group Committee, was sent to all 250 lung cancer nurses identified through the National Lung Cancer Nurses Forum and the Roy Castle database: 212 responded (85%).

Of the 130 lung cancer units represented by this survey in 2005, 15 (12 %) had three or more nurses, 47 (36%) two nurses and the remaining 68 employed one or less whole time equivalent (WTE) nurse. Of those who worked in isolation, only 18 (26%) had formal arrangements for holiday or sickness cover. Although the median number of new cases seen per WTE nurse was 142 per year (interquartile range 117–200), nurses in 49 (38%) units admitted that they had insufficient capacity to enable all referrals to be seen. Only 96 (45%) had any secretarial support (median 5 h per week).

The 125 nurses (66%) working in cancer units carried out more varied duties than those in cancer centres (p<0.01). Table 1 shows the most to the least frequent clinical activities and the degree of involvement by the specialist nurses. Of the non-clinical activities, nearly all (>90%) were involved in education, audit, service and personal development. However, only half were able to carry out research because of a lack of dedicated time and pressure of work. Approximately 50% had management responsibility for other colleagues, and a similar number spent time collecting clinical data for and coordinating the MDT meetings. For a number of nurses, this included populating clinical databases.

Following implementation of the UK National Cancer Plan in the wake of the Calman–Hine Report,³ there has been a rapid expansion in services aimed at improving the care of lung cancer patients. As part of this, there has been an increase in the number of lung cancer nurses, from 130 in

20001 to 250 identified in the current study. The results of our survey show a wide variation in the duties and allocation of lung cancer nurse specialists within cancer services in the UK. Many nurses have a large workload, poorly structured job plans with inadequate secretarial support. Although most were involved in "front end" activities, their lack of involvement in the ongoing care of lung cancer patients post diagnosis was disappointing, especially since nurse led follow-up clinics4 and the establishment of nurse run breathlessness clinics⁵ have been shown to be effective means of improving the quality of life for lung cancer patients. Nevertheless, the survey did demonstrate the wide range of services that lung cancer specialist nurses can now provide and there is scope for rolling out these skills to more nurses in more MDTs, easing the burden on hard pressed medical staff. However, the current culture of the NHS makes it difficult for health care commissioners to sanction the appointment of new nurses unless this is linked to an improvement in the achievement of targets, which are not usually quality based. The development of a national job specification tailored to lung cancer patient's needs may help to improve this aspect of care for these patients, and would help commissioners to support this aspect of the Cancer Reform Strategy.

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GOLD stage 1 is crying wolf

Nine out of 10 people with GOLD stage 1 chronic obstructive pulmonary disease (COPD) do not have lung disease and are not at substantially increased risk of developing lung disease during the next decade. The SAPALDIA investigators recently described the outcomes after 11 years of follow-up of 519 adults with GOLD stage 1 COPD, comparing them with 6061 with normal spirometry. 1 More than one-third of these adults, both at the baseline and followup examinations, would have had normal spirometric results if the investigators had used the appropriate lower limit of the normal range for the ratio of the forced expiratory volume in 1 s/forced vital capacity (FEV₁/FVC) instead of a fixed 0.70,2 and had taken the time to measure post-bronchodilator spirometry.3 About half of those with GOLD stage 1 COPD at the baseline examination (N = 224) reported either a chronic cough, chronic phlegm, chronic bronchitis or dyspnoea. However, in adults with a normal FEV1 (especially in neversmokers), these non-specific symptoms are usually not due to COPD. A chronic cough is often due to gastro-oesophageal reflux (often due to obesity) or asthma (not yet diagnosed by a doctor). Chronic phlegm is often due to rhinosinusitis with postnasal drainage. Dyspnoea with a normal FEV1 is usually due to cardiac deconditioning, obesity or over-reporting, and sometimes is