Abstract P87 Table 1

Diagnosis	COPD			TIA/Stroke or ACS		
Period	1/7/08–30/9/08	1/11/08–31/1/09	1/4/10–30/6/10	1/7/08–30/9/08	1/11/08–31/1/09	1/4/10–30/6/10
Total patients attending	40	58	31	31 (5 with known COPD)	54 (2 COPD)	43 (1 COPD)
BTS guidelines followed at initial assessment	18/34 (53%)	25/50 (50%)	19/28 (68%)	19/31 (61%)	34/48 (71%)	27/39 (70%)
Number receiving oxygen	18/34 (53%)	30/49 (61%)	13/28 (46%)	11/31 (35%)	10/48 (21%)	6/39 (15%)
Oxygen indicated	5/34 (15%)	7/50 (14%)	3/28 (11%)	0/31(0%)	3/48 (6%)	3/39 (8%)
Inappropriately receiving excess oxygen	13/34 (38%)	23/50 (46%)	9/28 (32%)	11/31 (35%)	9/48 (19%)	6/39 (15%)
Inappropriately not receiving oxygen	2/5 (40%)	1/7 (14%)	0/3 (0%)	N/A	1/3 (33%)	1/3 (33%)
ABG performed	29	34	21	4	3	7
Target saturations altered by ABG results	13 (45%)	16 (47%)	12 (57%)	3 (75%)	1 (33%)	6 (86%)
Delivery device used:						
Nasal canula	10	23	13	1	0	1
Venturi	3	2	0	3	1	1
Hudson	0	1	0	0	0	2
Reservoir bag	1	2	0	6	7	2
Unrecorded	2	1	0	1	2	0
Nebuliser	2	1	0	0	0	0

COPD, chronic obstructive pulmonary disease; TIA, transient ischemic attack; ACS, acute coronary syndrome (angina, unstable angina, non-ST elevation myocardial infarction and myocardial infarction); ABG, arterial blood gas

REFERENCES

1. *Thorax* 2008;**63**(Suppl VI):vi1–vi68.
2. http://www.brit-thoracic.org.uk/Portals/0/Clinical%20Information/Emergency%20Oxygen/BTS%20Oxygen%20Audit%202008%20and%202009%20R%20ODriscoll.ppt.

P88 THE AINTREE HOSPITAL PLEURAL DISEASE TRAINING PROGRAMME: ACHIEVING COMPETENCY IN INTERCOSTAL DRAIN INSERTION AND IN MANAGEMENT OF PLEURAL PROBLEMS ON THE 'ACUTE TAKE'

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A key recommendation from the NPSA Rapid Response Report is that intercostal drains should only be inserted by staff who have received appropriate training. Aintree Hospitals NHS Trust has developed an educational programme to improve the management of pleural problems presenting on the 'Acute Take' which complies with this NPSA directive. This study evaluates this programme together with 'prior knowledge' from the BTS Education Hub e-learning programme (Pleural Aspiration and Insertion of a Seldinger Chest Drain).

The Aintree Pleural Disease Training Programme The programme, introduced in 2009, is a 4 h 'hands on' course consisting of:

a. Lectures covering the indications, technique and pitfalls of drain insertion coupled with real case histories focusing on common 'out of hours' scenarios.
b. 'Hands on' experience of 'Seldinger' and 'Blunt dissection' drain insertion using porcine ribcages fixed to resin torso models giving a 'lifelike' feel.
c. Practical management of underwater seals and suction. Candidates had to demonstrate competence in drain insertion to a Faculty member before receiving certificates of course completion.

Programme evaluation COPD, chronic obstructive pulmonary disease, TIA, transient ischemic attack, ACS, acute coronary syndrome (angina, unstable angina, non-ST elevation myocardial infarction and myocardial infarction), ABG, arterial blood gas. 19 candidates were provided with an individual licence to use the BTS module (£75 per licence) and were instructed to undertake the programme and on-line assessment before attending the practical session. Evaluation was with a VAS ranging from 5 ('very much') to 1 ('not at all'). All found the course and e-module high quality, the correct level, easy to use and felt it gave them confidence to safely perform pleural procedures and drain insertion (17 gave rating of 5 or 4). 18 gave 5 or 4 for the course fulfilling its objectives. Despite instructions to complete the e-assessment only 10 (53%) did so. Of these the mean test score was 64% (SD 21 range 11–91%).

Conclusion A programme combining e-learning, assessments, lectures and 'hands on' experience in intercostal drain insertion using animal models represents an effective means of training for the acute take. The BTS e-learning module proved to be a very useful prior knowledge resource but in future, satisfactory performance for the online test will be a pre-requisite to undertaking the clinical skills session.

P89 A DECADE ON STILL NOT ENOUGH TIME FOR ASTHMA

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Background The Northwest (and particularly the ********* conurbation) has a higher than average admission rate for asthma (NHS comparators 2009). We previously reported a poor level of training for practice nurses and a lack of use of personal asthma plans (Thorax 2000; 55(Suppl3) A29). We were interested to see if primary care has addressed these issues.

Methods 230 Practice Nurse's from three Primary Care Trust's were surveyed by anonymised postal questionnaire via a triple mail shot between January and June 2010. Practice nurses were asked if they had (a) a qualification in asthma management, (b) formulated written personal asthma plans, (c) saw patients independently and d) what barriers might prevent the use of personal asthma plans?

Results 131 responses (56%) were received from 230 questionnaires. 83 (63%) of respondents had a formal asthma qualification and 77

(59%) provided written asthma plans for patients. Of these asthma plans 55 (71%) recommend increasing inhaled steroids during a worsening. When using peak expiratory flow to guide the plan, 47% included advice on when to consult the GP and 51% advice on when to seek emergency hospital treatment. The major barrier to writing plans was stated to be 'time' by 69 (53%).

Discussion There is no NHS database of nurses doing asthma clinics. We contacted all practices and would be concerned that the 44% of non-respondents may have less enthusiasm for asthma care. Despite chronic disease management clinics being recommended for over 20 years over one third of nurses delivering asthma care have no formal asthma qualification and 31% report they do not provide personal asthma plans. This is little different from year 2000 when 52% used plans. If asthma admission rates are to be reduced, ensuring staff are asthma trained and can enable patients to self-manage and control their lives, should be a quality standard.

P90 SIMULATED BRONCHOSCOPY TRAINING DELIVERED BY EXPERIENCED PEERS IMPROVES CONFIDENCE OF NEW TRAINEES

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Introduction and objectives Simulation training is widely employed by several medical and surgical specialties for inexperienced practitioners to acquire and consolidate practical skills. This approach is not routinely employed in respiratory medicine to train bronchoscopists. Survey data indicates a lack of confidence in performing bronchoscopy among new registrars. This study examined whether a 1-day simulated bronchoscopy course designed and delivered by experienced SpRs could improve this.

Methods Most of the 1-day course was divided in to three stations:

1. Hands-on use of two simulators (Accutouch, Immersion Corporation, USA), each trainee had at least 45 min of 1:1 tuition.
2. A slideshow of airway anatomy and pathology followed by MCQs addressing BTS guidelines.
3. Hands-on flexible bronchoscopy through a static bronchial tree model.

Trainees completed the Bronchoscopy Self-Assessment Tool (http://www.bronchoscopy.org), including an 8-item questionnaire (5-point Likert scale) measuring confidence at the beginning and end of the course. The questionnaire included identification of further training needs (I would like to learn more about: anatomy, abnormalities, technique, equipment, interpretation of findings).

Results 11 trainees (Male:Female, 8:3) attended the course, having performed a median of five bronchoscopies (interquartile range 5–30). Nine trainees had completed <3 months of StR training, two trainees had completed <12 months. Confidence scores were normally distributed, therefore are presented as mean ±standard deviation. Confidence in all eight aspects improved, significantly in 7/8 (see Abstract P90 Table 1). Every trainee reported an overall increase in confidence (median 1.5 points on the 5 point scale, interquartile range 1.1–1.8, $p<0.001$). Seven attendees identified fewer further training needs at the end of the course. Overall, trainees identified 36% fewer of the five further training choices they were given, indicating that these had been fully met.

Abstract P90 Table 1

	Pre-course score (mean±SD out of 5)	Post-course score (mean±SD out of 5)	Difference	Significance (paired t-test)
Ability to identify airway anatomy	2.55±0.69	3.40±0.70	+18%	p=0.004
Ability to identify mucosal abnormalities	2.27±0.79	3.50±0.71	+25%	p=0.001
Ability to describe secretions and other airway abnormalities	2.55±0.82	3.10±0.88	+11%	p=0.052
Ability to manoeuvre the flexible bronchoscope	2.64±1.03	3.90±0.57	+25%	p=0.006
Ability to do a BAL through the flexible scope	2.30±0.82	3.70±0.82	+28%	p<0.001
Ability to use a brush through the flexible bronchoscope	1.73±0.90	3.50±0.53	+35%	p<0.001
Ability to use biopsy forceps through the scope	1.64±0.81	3.70±0.67	+41%	p<0.001
I would now feel comfortable performing this case in patient	1.50±0.55	3.56±0.88	+41%	p=0.022

Conclusions A training course focusing on hands-on simulation run by experienced registrars for new registrars clearly increases confidence in technical aspects of performing bronchoscopy and interpreting findings. Although a proportion of training needs for most trainees appear to have been met by the course, it is not sufficient to meet them all. Early peer-to-peer simulated bronchoscopy training is a helpful addition to the current 'on-the-job' model.

P91 CAN HEALTHCARE PROFESSIONALS IN A RESPIRATORY UNIT CORRECTLY SET AN OXYGEN FLOW RATE ON A STANDARD OXYLITRE MEDICAL REGULATOR?

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Background It is known that prescribing practice in UK hospitals for oxygen is often suboptimal. In our Trust we are already working towards improving oxygen prescription practice. However, if we improve prescribing but do not ensure administration is also robust then patient safety will not be achieved. There is potential for serious harm and even death if oxygen management is incorrect (National Patient Safety Agency 2009/RRR006). We investigated how accurate our oxygen administration practice is.

Method Between January and March 2010 we randomly approached 100 healthcare professionals working on our respiratory wards. They were asked (1) to demonstrate where they would position the ball on a standard oxylitre medical regulator to set a flow rate of 2 l of oxygen per minute, (2) whether they had received training in the use of oxygen flow metres and (3) if they had completed the Trusts self-assessment competency form for the use of oxygen flow metres.

Results Of the 100 staff approached 49 were nurses (various grades), 25 doctors (various grades), six physiotherapists, 19 nursing and one medical student. 65 staff set the flow rate correctly, with 33 setting it too high, that is, above the appropriate line and two too low, that is, below the line. 24 (24%) staff had received either formal (medical or nursing school) or informal (from a colleague) training in the use of flow metres. Only seven of the staff had completed the Trusts self-assessment competency form; they all set the flow correctly.

Discussion The NPSA report 2009 identified a national problem regarding the inappropriate administration and management of