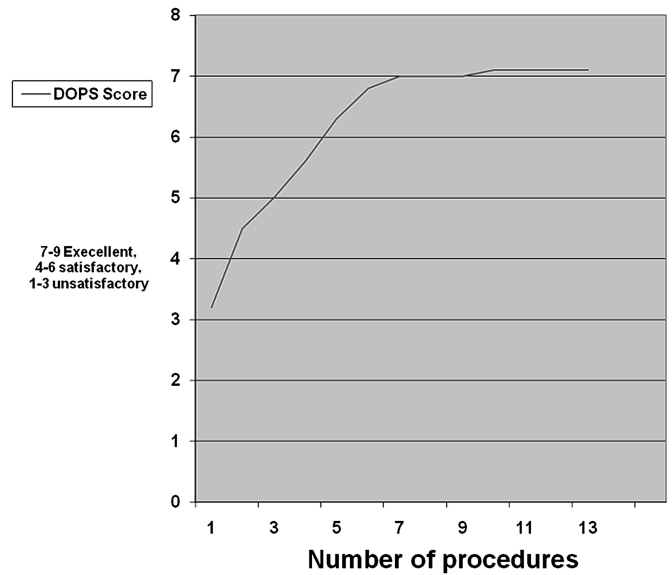


though 26/71(37%) reported that it aided communication. Most learned their behaviour from senior colleagues (22/76), own observation (16/76) or medical school (27/76). The closest associations were for Pictures C (77/78 responses, 99%=normal) and E (94/102,92%=wheeze/rhonchi combined). Crosses were commonly interpreted as crepitations in Pictures B (89/101,88%=fine and bibasal combined) and F (66/94, 70%=coarse). Pleural effusion was most commonly linked to Pictures A (35/107, 33%) and D (75/98, 77%) though both of these had an additional eight and four interpretations respectively.

**Conclusion** The majority of doctors use pictorial representation to record respiratory examination. Lack of standardisation leads to variation in annotation and potentially alternative interpretation by others. With the exception of Picture C, the use of pictures alone is unreliable. Reassuringly for patient safety, most doctors also write down their findings. Pictorial representation is most often informally learned and appears to be well established in UK medical practice.



**P86 CHEST DRAIN INSERTION TRAINING; IS SIMULATION TRAINING THE ANSWER?**

doi:10.1136/thx.2010.150979.37

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**Background** The West Midlands Deanery is running a training module in Chest Drain insertion for all CMT trainees using Simulation training in a Porcine-Resin Model. Between Feb 2009 and Feb 2010, 176 trainees have completed the training module. Universal feedback (95%) was good. Our concerns were that analogous to driving, experience on the road is necessary to produce a competent trainee. We present this study evaluating two cohorts of trainees derived from the original pool after 6 months of their simulation training.

**Methods** One cohort consisted of 12 CMT Trainees who were paired with a trainer who is a Consultant or SpR in Respiratory Medicine. The trainees were selected depending on the availability of trainer rather than their enthusiasm to participate. The other cohort of 18 trainees was randomly selected from the general pool, which was originally advised to seek experience in their trust during routine work. Both cohorts were asked about their confidence in chest drain insertion as well as number of procedures they have done in the last 6 months. In the supervised cohort, we have analysed the DOPS score and plotted the learning curve for chest drain insertion.

**Results** On average the trainees in the mentored group have done 10.5 procedures in the last 6 months while trainees from the general cohort have done only 2.2 procedures. Disappointingly universal feedback from the general cohort was that they quickly lost the confidence and skill. They have pointed out number of reasons; the prominent ones are lack of opportunity, radiologists taking the routine work, lack of supervision. It took about five procedures for trainees in the mentored group to get up to satisfactory level in the DOPS score and after seven procedures there was a definite plateau in the learning curve.

**Conclusion** Simulation training imparts confidence and familiarisation with the seldinger chest drain insertion but at least five to seven further supervised insertions on patients is required to do the procedure with out direct supervision. This needs further work on a larger group which is on going. What is clear is that close mentoring is essential to master the skill and Consultant time must be set aside formally to sustain the training programmes.

**P87 EVIDENCE-BASED EMERGENCY OXYGEN GUIDELINES ARE NOT BEING FOLLOWED IN THE EMERGENCY DEPARTMENT**

doi:10.1136/thx.2010.150979.38

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**Introduction and objectives** The first Emergency Oxygen Guidelines were published by the BTS in October 2008<sup>1</sup> and were endorsed by 21 professional bodies, including the College of Emergency Medicine. The 2009 BTS audit<sup>2</sup> showed improvement in the use of target saturations in the inpatient setting. We are concerned that uptake has been less impressive in the emergency department (ED).

**Methods** A retrospective cohort study was performed in a London Hospital of patients aged 16–70 attending the ED. Three time periods were chosen; immediately prior to and after guideline publication (1/7/08–30/9/08 and 1/11/08–31/1/09, respectively) and 18 months after publication (1/4/10–30/6/10). Oxygen use was reviewed for all patients attending the ED with acute coronary syndromes (ACS), stroke, transient ischaemic attack (TIA) or with a known diagnosis of COPD. Patients requiring emergency intubation or on home long-term oxygen therapy (LTOT) were excluded. Patients with known COPD with a diagnosis of ACS/stroke/TIA on that attendance were included in ACS/stroke/TIA category to avoid double counting.

**Results** A total of 253 individual attendances were reviewed. Initial observations of 58 (23%) patients were performed on oxygen. Abstract P87 Table 1 summarises the use of oxygen in the groups studied.

**Conclusions** Oxygen is frequently used inappropriately in the ED and there has been no improvement since the guideline publication. Excess use of oxygen is the most common reason for not following the guidelines. This is consistent with historical practice in the ACS/stroke/TIA group, although there appears to be a non-significant (p=0.09) trend towards improvement. One third of COPD patients also inappropriately received excess oxygen. Many patients have their first recorded saturations performed on oxygen which may suggest that guideline adherence within the ambulance service is also sub-optimal. Uptake of the guidelines has not been as good as in the inpatient setting. This may be due to lack of awareness outside the medical specialities. This trust currently has no oxygen champion, and this appointment should improve the situation, as would a programme of education within the ED, which we intend to instigate.

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

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

doi:10.1136/thx.2010.150979.38

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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.

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### A DECADE ON STILL NOT ENOUGH TIME FOR ASTHMA

doi:10.1136/thx.2010.150979.40

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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