

Assessment Blueprint for Respiratory Medicine

**Learning Objectives for Patient Orientated Subject Areas:**

Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
<b>1. Breathlessness (Page 31)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• Be competent to carry out specialist assessment of severity and form a structured differential diagnosis leading to appropriate further investigation and management.</li> <li>• Trainees must have experience in dealing with patients presenting with : a) chronic symptoms in OPD, b) acute symptoms in AMU (minimum of 2 years).</li> <li>• Be able to manage the breathless patient effectively.</li> </ul>								
K	Causes of breathlessness	X	X				X	
	Differentiate cardiac, respiratory, neuromuscular and metabolic causes	X	X				X	
	Know and understand pathogenesis of causes	X	X				X	
	Know and understand management/treatment	X	X				X	
	Pharmacology of drugs used	X	X				X	
	Relevant guidelines	X	X				X	
S	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpret other appropriate lung function tests (competence)	X	X			X	X	
	Interpretation of Chest radiology: Chest X-Ray, V/Q scans, Chest CT scans (competence)	X	X			X	X	
	Perform and interpret arterial blood gases (competence)	X	X	X		X		
	Use of inhaled and nebulised drug therapy (competence)	X	X				X	
AB	As outlined in generic curriculum		X		X		X	X
<b>2. Cough (Page 32)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• Be competent to carry out specialist assessment and form a structured differential diagnosis of causes leading to</li> </ul>								

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	<p>appropriate further investigation and management.</p> <ul style="list-style-type: none"> <li>• Trainees must have experience in assessing patients referred to OPD with cough (minimum of 2 years).</li> <li>• Be able to manage the patient with cough treat.</li> </ul>							
K	Causes of cough with: a) Normal CXR b) Abnormal CXR	X	X				X	
	How to formulate an appropriate differential diagnoses	X	X				X	
	Appropriate investigation of cough, including specialist studies	X	X				X	
	ENT causes	X	X				X	
	Management/treatment of cough linked to underlying diagnosis	X	X				X	
	Pharmacology of drugs used	X	X				X	
	Relevant guidelines	X	X				X	
S		X	X			X	X	
	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of appropriate other lung function tests (competence)	X	X			X	X	
	Interpretation of Chest radiology (competence)	X	X			X	X	
	Special investigations, including bronchoscopy (experience/competence)	X	X	X	X		X	
	Use of inhaled and nebulised drug therapy (competence)							
AB	As outlined in generic curriculum		X		X		X	X
<b>3. Haemoptysis (Page 33)</b>								
	<p><b>Objectives: -</b></p> <ul style="list-style-type: none"> <li>• Be competent to undertake specialist assessment and form a structured differential diagnosis in patients with haemoptysis leading to appropriate further investigation and management.</li> <li>• Trainee must have experience of patients presenting with: a) haemoptysis in OPD setting, b) acute severe haemoptysis in AMU setting (minimum of 2 years).</li> </ul>							

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	<ul style="list-style-type: none"> <li>Be able to manage the patient with haemoptysis effectively.</li> </ul>							
K	Causes of haemoptysis	X	X				X	
	How to assess severity and formulate a diagnostic strategy	X	X				X	
	How to formulate a management plan appropriate to degree of urgency	X	X				X	
	Need for interventional radiology/surgery	X	X				X	
	Relevant guidelines	X	X				X	
S	Interpretation of Chest radiology (competence)	X	X			X	X	
	Bronchoscopy (competence)	X	X	X	X		X	
	Resuscitation skills including basic airway skills (competence)	X	X			X (ALS)	X	
AB	As outlined in generic curriculum		X		X		X	X
<b>4. Pleuritic Chest Pain (Page 34)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>Be competent to undertake specialist assessment and form structured differential diagnosis in patients with pleuritic pain.</li> <li>Trainees must have experience in dealing with patients presenting with: a) chronic symptoms in OPD, b) acute symptoms in AMU (minimum of 2 years).</li> <li>Be able to manage the patient with pleuritic chest pain effectively.</li> </ul>								
K	Causes of pleuritic chest pain	X	X				X	
	Understand pathogenesis of causes	X	X				X	
	Differential diagnosis							
	Know how to formulate a plan of investigation, including appropriate use of ultrasound, closed and CT - guided pleural biopsy and medical and surgical thoracoscopy	X	X					X
	Pleural biopsy (competence)	X	X			X		
	Treatment/management	X	X					X
	Pharmacology of drugs used	X	X				X	

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	Relevant guidelines	X	X				X	
S	Interpretation of chest radiology, including Chest X-Ray, V/Q scans, chest CT scans and CTPA scans (competence )	X	X			X	X	
	Pleural biopsy (competence; optional)	X	X	X			X	
	Chest ultrasound (optional)	X	X			X	X	
	Medical Thoracoscopy (knowledge of; experience optional)	X	X			X	X	
AB	As outlined in generic curriculum		X		X		X	X
<b>5 Abnormal Chest X-Ray (Page 35)</b>								
Objectives: -								
<ul style="list-style-type: none"> <li>• Be competent to assess and form differential diagnosis in patients with: a) localised abnormalities on chest x-ray, for instance mass lesions, b) diffusely abnormal chest x-ray, for instance interstitial pulmonary fibrosis.</li> <li>• Trainees must have experience in dealing with patients presenting with the following throughout training: a) abnormal chest x-ray in OPD, b) abnormal chest x-ray in AMU</li> <li>• Be able to formulate an appropriate plan for investigation and management</li> </ul>								
K	Causes of abnormal Chest X-Ray	X	X			X	X	
	Differential diagnosis of causes	X	X			X	X	
	Know and understand pathogenesis of causes	X	X			X	X	
	Know how to formulate plan for further investigation and management	X	X			X	X	
S	Interpretation of Chest Radiology (competence )	X	X			X	X	
AB	As outlined in generic curriculum		X		X		X	X
<b>6 Respiratory failure (Page 36)</b>								
Objectives: -								
<ul style="list-style-type: none"> <li>• Be competent to carry out specialist assessment of severity and form a structured differential diagnosis leading to appropriate further investigation and management.</li> <li>• Trainees must have experience in dealing with patients presenting with acute as well as chronic symptoms (minimum</li> </ul>								

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2 years). • Be competent to manage effectively.								
K	Know and understand the causes of respiratory failure including respiratory, neuromuscular and others	X	X				X	
	Understand pathogenesis of causes	X	X				X	
	Know differential diagnosis of respiratory failure	X	X				X	
	Know appropriate investigations and their uses	X	X				X	
	Know and understand treatment and management strategies	X	X				X	
	Pharmacology of drugs used	X	X				X	
	Understand use of hospital and domiciliary oxygen inc LTOT, short burst and ambulatory	X	X				X	
	Know and understand principles and appropriate use of NIV and of intubation and ventilation	X	X	X		X	X	
	Knowledge and experience of HDU and ICU (note mandatory 60 day requirement)	X	X			X	X	X
S		X	X			X	X	
	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpret other appropriate lung function tests (competence)	X	X			X	X	
	Perform and interpret arterial blood gases (competence)	X	X			X	X	
	Interpretation of chest radiology (competence)	X	X			X	X	
	Basic airway skills and CPR (competence)	X	X			X (ALS)		X
	NIV (competence)	X	X	X			X	X
Invasive ventilation (experience)	X	X				X		
Assessment for hospital oxygen therapy and domiciliary short burst and long term oxygen therapy	X	X				X		
AB	As outlined in generic curriculum		X		X		X	X

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Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
<b>Learning Objectives for Clinical Subject Areas</b>								
<b>Subject: Clinical 1 - Asthma (Page 37)</b>								
Objectives: -								
<ul style="list-style-type: none"> <li>Be competent to undertake specialist assessment and management of adolescent and adult patients with asthma.</li> <li>Trainees must care for inpatients and outpatients with asthma during their clinical placements (minimum 2 years)</li> </ul>								
K	Causes of asthma	X	X				X	
	Investigation of asthma	X	X				X	
	Differential diagnosis of asthma, including from other causes of wheeze such as laryngeal, foreign body, tumour, COPD and obliterative bronchiolitis	X	X				X	
	Treatment and management of patients with asthma	X	X				X	
	Principles of mechanical ventilation in asthma	X	X				X	
	Pharmacology of drugs used	X	X				X	
	Complications	X	X				X	
	Relevant guidelines	X	X				X	
	Patient education and self management	X	X				X	
S	Skin testing (experience/competence)	X	X				X	
	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests (competence)	X	X			X	X	X
	Use of inhaled and nebulised drug therapy (competence)	X	X				X	
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 2 - COPD (page 38)</b>								
Objectives: -								
<ul style="list-style-type: none"> <li>Be competent to undertake specialist assessment and management of patients with COPD.</li> <li>Trainees must care for inpatients and outpatients with COPD during their clinical placements (minimum 2 years)</li> </ul>								
K	Causes of COPD	X	X				X	

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	Investigation of COPD	X	X				X	
	Differential diagnosis of COPD, including asthma and obliterative bronchiolitis	X	X				X	
	Treatment and management of patients with COPD	X	X				X	
	Principles of mechanical ventilation in COPD	X	X				X	
	Principles of oxygen therapy	X	X				X	
	Pharmacology of drugs used	X	X				X	
	Complications	X	X				X	
	Relevant guidelines	X	X				X	
	Smoking cessation methods	X	X				X	
S	Skin testing (experience/competence)	X	X				X	
	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests (competence)	X	X	X		X	X	X
	Performance and interpretation of arterial blood gases (competence)	X	X			X	X	
	Use of inhaled and nebulised drug therapy (competence)	X	X			X	X	
	Assessment for domiciliary oxygen therapy - LTOT, short burst, ambulatory competence)	X	X			X	X	
	Non-invasive ventilation (competence)	X	X	X			X	X
	Sleep studies (competence in screening studies; experience of more advanced studies)	X	X			X	X	X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 3 - Thoracic oncology (Page 39)</b>								
<b>Objectives: -</b>								
<ul style="list-style-type: none"> <li>• <b>Be competent to undertake specialist assessment and management of patients with lung cancer, mesothelioma and other thoracic malignancies.</b></li> <li>• <b>Trainees must care for inpatients and outpatients with lung cancer during their clinical placements (minimum 2 years)</b></li> </ul>								
K	Causes of lung cancer	X	X				X	

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	Investigation of lung cancer, including newer modalities such as PET-CT scanning	X	X				X	
	Differential diagnosis of lung cancer	X	X				X	
	Treatment and management of patients with lung cancer, including the role of surgery, radiotherapy, chemotherapy and best supportive care	X	X			X	X	
	Skills of physicians, radiologists, surgeons, medical and clinical oncologists and of the multi-disciplinary team in management	X	X				X	X
	Pharmacology of drugs used	X	X				X	
	Complications of lung cancer and of its treatment	X	X			X	X	
	Palliative care	X	X				X	
S	CXR and CT interpretation (competence)	X	X			X	X	
	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests (competence)	X	X			X	X	X
	Bronchoscopy (competence)	X	X	X			X	X
	Pleural aspiration and biopsy (competence)	X	X	X			X	X
	Medical Thoracoscopy (knowledge of; experience optional)	X	X			X	X	
	Staging and performance status (competence)	X	X			X	X	X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 4 - Pulmonary infections (Page 40)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• <b>Be competent to undertake specialist assessment and management of patients with pulmonary infections including the common cold, influenza, pneumonia, bronchitis.</b></li> <li>• <b>Trainees must care for inpatients and outpatients with pulmonary infections during their clinical placements (minimum 2 years)</b></li> </ul>								
K	Causes of pulmonary infections; micro-biology	X	X				X	
	Investigation of pulmonary infections	X	X				X	
	Differential diagnosis of pulmonary infections	X	X				X	

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	Treatment and management of patients with pulmonary infections, including principles of non-invasive and invasive mechanical ventilation	X	X				X	
	Pharmacology of drugs used	X	X				X	
	Complications	X	X				X	
	Relevant guidelines	X	X				X	
	Infection control	X	X				X	
<b>S</b>	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests (competence)	X	X			X	X	
	Bronchoscopy (competence)	X	X	X			X	X
	NIV (competence)	X	X	X			X	X
	Mechanical ventilation (experience)	X	X			X	X	X
<b>AB</b>	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 5 - Tuberculosis (TB) and Opportunist mycobacterial disease (OMD) (Page 41)</b>								
<b>Objectives: -</b>								
<ul style="list-style-type: none"> <li>• <b>Be competent to undertake specialist assessment and management of patients with tuberculosis/ OMD.</b></li> <li>• <b>Trainees must care for inpatients and outpatients with TB/OMD during their clinical placements (minimum 1 year).</b></li> <li>• <b>Trainee must have knowledge of multi-drug resistant TB, including use of negative pressure rooms</b></li> </ul>								
<b>K</b>	Causes of TB/OMD	X	X				X	
	Investigation of TB/OMD, including imaging and use of various pleural biopsy techniques, skin tests and gamma interferon tests	X	X				X	
	Differential diagnosis of TB/OMD	X	X				X	
	Treatment and management of patients with TB/OMD	X	X				X	
	Pharmacology of drugs used	X	X				X	
	Complications	X	X				X	
	Relevant guidelines	X	X				X	
	Infection control	X	X				X	

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S	Tuberculin skin testing (experience/competence)	X	X			X	X	
	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Performance and interpretation of other appropriate lung function tests	X	X			X	X	X
	Bronchoscopy (competence)	X	X	X			X	X
	Pleural aspiration and biopsy (competence)	X	X	X (biopsy only)			X	X (biopsy only)
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 6 - Pulmonary disease in the immuno-compromised host (Page 42)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• Be competent to carry out specialist assessment and management of of immuno-compromised patients with pulmonary disease e.g. HIV/AIDS, transplant patients, patients on immunosuppressive drugs, immunodeficiency patients.</li> <li>• Trainees may care for inpatients and outpatients with pulmonary disease in the immuno-compromised host during their clinical placements but may have to be seconded to a specialised unit to gain experience as this is not available in all placements</li> </ul>								
K	Causes of immuno-compromise in patients	X	X				X	
	Causes of lung disease in immuno-compromised patients (ICP)	X	X				X	
	Investigation of lung disease in ICP	X	X				X	
	Differential diagnosis of lung disease in ICP	X	X				X	
	Treatment and management of lung disease in ICP	X	X				X	
	Pharmacology of drugs used	X	X				X	
	Complications	X	X				X	
	Relevant guidelines	X	X				X	
S	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests (competence)	X	X			X	X	X

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	Bronchoscopy (competence)	X	X	X			X	X
	Non-invasive ventilation (competence)	X	X	X		X	X	X
	Mechanical ventilation (experience)	X	X			X	X	X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 7 - Bronchiectasis (Page 43)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• <b>Be competent to undertake specialist assessment and management of patients with bronchiectasis.</b></li> <li>• <b>Trainees must care for inpatients and outpatients with bronchiectasis during their clinical placements (minimum 2 years)</b></li> </ul>								
K	Causes of bronchiectasis	X	X				X	
	Microbiology	X	X				X	
	Investigation of bronchiectasis	X	X				X	
	Differential diagnosis of bronchiectasis	X	X				X	
	Treatment and management of patients with bronchiectasis	X	X				X	
	Pharmacology of drugs used	X	X				X	
	Complications	X	X				X	
	Relevant guidelines	X	X				X	
S		X	X			X	X	
	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests (competence)	X	X			X	X	X
	Use of inhaled and nebulised drug therapy (competence)	X	X			X	X	
	Bronchoscopy (competence)	X	X	X			X	X
	NIV (competence)	X	X				X	X
AB	As outlined in generic curriculum		X		X		X	X

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<b>Subject: Clinical 8 - Diffuse parenchymal lung disease (DPLD) (Page 44)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• <b>Be competent to undertake specialist assessment and management of patients with diffuse parenchymal lung disease.</b></li> <li>• <b>Be competent in the management of the common disease entities in this category</b></li> <li>• <b>Have knowledge/experience of the less common diseases entities including orphan lung diseases.</b></li> <li>• <b>Trainees must care for inpatients and outpatients with DPLD during their clinical placements (minimum 2 years)</b></li> </ul>								
<b>K</b>	Knowledge of the common diseases included in this category	X	X				X	
	Causes of DPLD	X	X				X	
	Investigation of DPLD	X	X				X	
	Differential diagnosis of DPLD	X	X				X	
	Treatment and management of patients with DPLD	X	X				X	
	Pharmacology of drugs used	X	X				X	
	Complications	X	X				X	
	Relevant guidelines	X	X				X	
<b>S</b>	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests (competence)	X	X			X	X	X
	Bronchoscopy/TBB/BAL (competence)	X	X	X			X	X
	CXR/CT/HRCT interpretation (competence)	X	X			X	X	X
	NIV (competence)	X	X	X		X	X	X
	Mechanical ventilation (experience)	X	X			X	X	X
<b>AB</b>	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 9 - Sleep Breathing related disorders (Page 45)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• <b>Be competent to undertake specialist assessment and management of patients with sleep related disorders.</b></li> <li>• <b>Trainees must care for inpatients and outpatients with sleep</b></li> </ul>								

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<b>related disorders during their clinical placements</b>								
<b>K</b>	Causes of sleep related disorders	X	X				X	
	Investigation of sleep related disorders	X	X				X	
	Differential diagnosis of sleep related disorders	X	X				X	
	Treatment and management of patients with sleep related disorders, including "sleep hygiene," mandibular advancement devices, surgery, nasal CPAP and NIV	X	X				X	
	Complications	X	X				X	
	Relevant guidelines	X	X				X	
	Pharmacology of drugs used	X	X				X	
	Role of the ENT surgeon	X	X				X	
	Medicolegal aspects	X	X				X	
<b>S</b>	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests	X	X			X	X	X
	Performance and interpretation of arterial blood gases (competence)	X	X			X	X	
	Interpretation of screening sleep studies (competence) and of more advanced sleep studies (experience)	X	X			X	X	X
	Nasal CPAP (competence)	X	X	X		X	X	X
	Non-invasive ventilation (competence)	X	X	X		X	X	X
<b>AB</b>	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 10 - Pulmonary vascular diseases (page 46)</b>								
<b>Objectives: -</b>								
<ul style="list-style-type: none"> <li>• Be competent to undertake specialist assessment and management of patients with of pulmonary vascular diseases, including pulmonary embolism and infarction, secondary pulmonary hypertension, pulmonary haemorrhage and pulmonary vasculitides.</li> <li>• Have knowledge/experience of the management of primary pulmonary hypertension.</li> <li>• Trainees must care for inpatients and outpatients with pulmonary vascular diseases during their clinical placements</li> </ul>								

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<b>(minimum 2 years for thrombo-embolic disease)</b>								
K	Causes of pulmonary vascular diseases	X	X				X	
	Investigation of pulmonary vascular diseases, including D-dimer, V/Q scanning, CTPA	X	X				X	
	Differential diagnosis of pulmonary vascular diseases	X	X				X	
	Treatment and management of patients with pulmonary vascular diseases	X	X				X	
	Pharmacology of drugs used	X	X				X	
	Complications	X	X				X	
	Relevant guidelines	X	X				X	
S	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests (competence)	X	X			X	X	X
	Performance and interpretation of arterial blood gases	X	X			X	X	
	Interpretation of CXR/CTPA/HRCT (competence)	X				X	X	X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 11 – Allergic lung disorders and anaphylaxis Page 47)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• <b>Have knowledge/experience of the specialist assessment and management of patients with allergic lung disorders and anaphylaxis.</b></li> <li>• <b>Trainees may care for inpatients and outpatients with allergic lung disorders and anaphylaxis during their clinical placements but trainees may have to be seconded to a specialised unit to gain experience as this is not available in all placements</b></li> </ul>								
K	Causes of allergic lung disorders and anaphylaxis	X	X				X	
	Investigation of allergic lung disorders and anaphylaxis	X	X				X	
	Differential diagnosis of allergic lung disorders and anaphylaxis	X	X				X	
	Treatment and management of patients with allergic lung disorders and anaphylaxis, including the role of desensitisation	X	X				X	
	Pharmacology of drugs used	X	X				X	

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### Assessment Blueprint for Respiratory Medicine

Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
	Complications	X	X				X	
	Relevant guidelines	X	X				X	
S	Skin testing (experience/competence)	X	X				X	
	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Performance and interpretation of other lung function tests (competence)	X	X			X	X	X
	Use of inhaled and nebulised drug therapy (competence)	X	X				X	
	Use of self-administered adrenaline (competence)	X	X				X	
	Advanced life support (competence)	X	X			X	X	
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 12 - Disorders of pleura and mediastinum, including Pneumothorax (Page 48)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• <b>Be competent to undertake specialist assessment and management of patients with disorders of pleura and mediastinum.</b></li> <li>• <b>Trainees must care for inpatients and outpatients with disorders of pleura and mediastinum during their clinical placements (minimum 2 years for pneumothorax)</b></li> </ul>								
K	Causes of disorders of pleura and mediastinum	X	X				X	
	Investigation of disorders of pleura and mediastinum	X	X				X	
	Appropriate use of various pleural biopsy techniques	X	X				X	
	Differential diagnosis of disorders of pleura and mediastinum	X	X				X	
	Treatment and management of patients with disorders of pleura and mediastinum	X	X				X	
	Role of Medical Thoracoscopy and VATS	X	X			X	X	
	Pharmacology of drugs used	X	X				X	
	Complications of diseases and therapy	X	X				X	
Relevant guidelines	X	X				X		
S	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests (competence)	X	X			X	X	X

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	TB skin testing (experience/competence)	X	X				X	
	Pleural aspiration (competence)	X	X				X	
	Chest drain insertion (competence)	X	X	X			X	X
	Chemical pleurodesis (competence)	X	X	X			X	X
	Bronchoscopy (competence)	X	X	X			X	X
	Medical thoracoscopy (knowledge/experience)	X	X			X	X	
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 13 - Pulmonary manifestations of systemic disease (Page 49)</b>								
<b>Objectives: -</b>								
<ul style="list-style-type: none"> <li>• <b>Be competent to undertake specialist assessment and management of patients with pulmonary manifestations of systemic disease.</b></li> <li>• <b>Trainees must care for inpatients and outpatients with pulmonary manifestations of systemic disease during their clinical placements</b></li> </ul>								
K	Systemic diseases which have significant systemic manifestations	X	X				X	
	Pulmonary manifestations of systemic diseases	X	X				X	
	Investigation of pulmonary manifestations of systemic disease	X	X				X	
	Differential diagnosis of pulmonary manifestations of systemic disease	X	X				X	
	Treatment and management of patients with pulmonary manifestations of systemic disease	X	X				X	
S	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests (competence)	X	X			X	X	X
	Pleural aspiration (competence)	X	X				X	
	Bronchoscopy (competence)	X	X	X			X	X
AB	As outlined in generic curriculum		X		X		X	X

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### Assessment Blueprint for Respiratory Medicine

Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
<b>Subject: Clinical 14 - Cystic fibrosis (CF) (Page 50)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• Have knowledge/experience of the specialist assessment and management of adolescent and adult patients with cystic fibrosis.</li> <li>• Trainees may care for inpatients and outpatients with CF during their clinical placements but may have to be seconded to a specialised unit to gain experience as this is not available in all placements</li> </ul>								
K	Causes of CF	X	X				X	
	Investigation of CF	X	X				X	
	Differential diagnosis of CF	X	X				X	
	Treatment and management of patients with CF	X	X				X	
	Pharmacology of drugs used	X	X				X	
	Complications of CF and their management	X	X				X	
	Relevant guidelines	X	X				X	
	Infection control ( <i>Burkholderia cepacia</i> )	X	X				X	
	Role of the multidisciplinary team	X	X		X		X	X
	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests (competence)	X	X			X	X	X
	Use of inhaled and nebulised drug therapy (competence)	X	X				X	
	Non-invasive ventilation (competence)	X	X	X		X	X	X
	Bronchoscopy (competence)	X	X	X			X	X
	Chest drain insertion (competence)	X	X	X			X	X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 15 - Pulmonary disease in the HIV patient (Page 51)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• Be competent to carry out specialist assessment and management of pulmonary problems in patients with HIV</li> <li>• Trainees may care for inpatients and outpatients with HIV during their clinical placements but may have to be seconded to a specialised unit to gain experience as this is not available</li> </ul>								

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### Assessment Blueprint for Respiratory Medicine

Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
<b>in all placements</b>								
K	Causes of HIV lung disease	X	X				X	
	Investigation of HIV lung disease	X	X				X	
	Differential diagnosis of HIV lung disease	X	X				X	
	Treatment and management of patients with HIV lung disease	X	X				X	
	Role of multidisciplinary team	X	X				X	X
	Pharmacology of drugs used	X	X				X	
	Complications	X	X				X	
	Relevant guidelines	X	X				X	
	Infection control	X	X				X	
S	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests (competence)	X	X			X	X	X
	Ventilation (competence in NIV; experience of mechanical ventilation)	X	X	X		X	X	X
	Bronchoscopy (competence)	X	X	X			X	X
	Pleural aspiration (competence)	X	X				X	
	Chest drain insertion (competence)	X	X				X	X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 16 - Occupational and environmental (including flying and diving) lung disease (Page 52)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• Be competent to carry out specialist assessment and management of patients with occupational and environmental lung disease.</li> <li>• Trainees may care for inpatients and outpatients with occupational and environmental lung disease during their clinical placements but may have to be seconded to a specialised unit to gain experience as this is not available in all placements</li> </ul>								
K	Causes of occupational and environmental lung disease	X	X			X	X	

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Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
	Investigation of occupational and environmental lung disease, including interpretation of lung function tests and the role of challenge testing where appropriate	X	X			X	X	
	Differential diagnosis of occupational and environmental lung disease	X	X			X	X	
	Treatment and management of patients with occupational and environmental lung disease	X	X			X	X	
	Pharmacology of drugs used	X	X			X	X	
	Complications	X	X			X	X	
	Relevant guidelines	X	X			X	X	
	Preventative measures	X	X			X	X	
	Medicolegal aspects	X	X			X	X	
S	Skin testing (experience/competence)	X	X			X	X	
	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests (competence)	X	X			X	X	X
	Bronchoscopy (competence)	X	X	X			X	X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 17 - Genetic and developmental lung disease (Page 53)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• Have, where appropriate, knowledge/experience/competence in the specialist assessment and management of adolescent and adult patients with genetic and developmental lung diseases.</li> <li>• To have knowledge and experience of the problems that may arise in managing lung diseases at the transition from childhood to adult life.</li> <li>• Trainees may care for inpatients and outpatients with genetic and developmental lung disease during their clinical placements but may have to be seconded to a specialised unit to gain experience as this is not available in all placements</li> </ul>								
K	Causes of genetic and developmental lung disease	X	X				X	
	Investigation of genetic and developmental lung disease	X	X				X	

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Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
	Differential diagnosis of genetic and developmental lung disease	X	X				X	
	Treatment and management of patients with genetic and developmental lung disease	X	X				X	
	Pharmacology of drugs used	X	X				X	
	Complications	X	X				X	
	Relevant guidelines	X	X				X	
	Indications for genetic counselling	X	X				X	
S	Perform spirometry	X	X	X			X	
	Interpretation of other appropriate lung function tests (competence)	X	X			X	X	X
	Bronchoscopy (competence)	X	X	X			X	X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 18 - Lung transplantation (Page 54)</b>								
Objectives: -								
<ul style="list-style-type: none"> <li>• Have knowledge and experience of the patients that may benefit from lung transplantation.</li> <li>• Be competent to carry out an <i>initial</i> assessment and to know, and to have experience of, when it is appropriate to refer to a lung transplant centre.</li> <li>• Be competent to administer emergency care to an ill post-transplant patient prior to transfer to the transplant unit.</li> <li>• Trainees may care for inpatients and outpatients pre-and post-transplant during their clinical placements but most trainees will have to be seconded to a specialised unit to gain experience as this is not available in all placements</li> </ul>								
K	Indications for lung transplantation	X	X			X	X	
	Interpretation of lung function tests	X	X			X	X	
	Investigation (work up) for lung transplantation	X	X			X	X	
	Contra-indications to lung transplantation	X	X			X	X	
	Preparation of patients for transplantation	X	X			X	X	
	Outline of surgical procedures	X	X			X	X	
	Pre- and post-operative care	X	X			X	X	
	Pharmacology of drugs used and their complications	X	X			X	X	

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Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
	Complications of lung transplantation	X	X			X	X	
	Relevant guidelines	X	X			X	X	
	Legal and ethical issues	X	X			X	X	X
S	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpretation of other appropriate lung function tests (competence)	X	X			X	X	X
	Ventilation (competence in NIV; experience of mechanical ventilation)	X	X	X			X	X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 19 - Hospital at home/early discharge schemes (Page 55)</b>								
<b>Objective: -</b>								
<ul style="list-style-type: none"> <li>• <b>Be competent in selecting patients who will benefit from homecare/early discharge schemes.</b></li> <li>• <b>Have knowledge and experience of the equipment and staff necessary to operate a high quality home care service.</b></li> <li>• <b>Trainees may experience good home care schemes during their clinical placements but may have to be seconded to a specialised unit to gain experience as this is not available in all placements</b></li> </ul>								
K	What can be achieved by providing home care/appropriate early discharge for respiratory patients	X	X				X	
	Requirements for successful care in the community	X	X				X	
	Appreciation of appropriate early discharge/home care as a cost saving measure for the NHS	X	X				X	
	Appreciation of homecare as a preferred method of treatment for many patients	X	X				X	
	Importance of multi disciplinary team and of high quality team working	X	X				X	
	Relevant guidelines	X	X			X	X	X
S	Use of inhaled and nebulised drug therapy (competence)	X	X				X	
	Assessment for, and management of, oxygen therapy (competence)	X	X				X	
	Non-invasive ventilation (competence)	X	X	X			X	X

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AB	As outlined in generic curriculum		X		X		X	X
	Leadership, organizational and team working skills		X		X		X	X
<b>Subject: Clinical 20 – Respiratory anatomy, physiology, pathology, microbiology and pharmacology (Page 56)</b>								
<b>Objectives: -</b>								
<ul style="list-style-type: none"> <li>• To have sufficient knowledge of basic respiratory anatomy and physiology to properly underpin specialist consultant practice and to be competent in the application of this knowledge.</li> <li>• To be competent in the application of pathology, microbiology and pharmacology expertise to the management of patients with respiratory diseases</li> </ul>								
K	Anatomy as applied to patients with respiratory diseases	X	X				X	
	Physiology as applied to patients with respiratory diseases	X	X				X	
	Pathology as applied to patients with respiratory diseases	X	X				X	
	Microbiology as applied to patients with respiratory diseases	X	X				X	
	Pharmacology as applied to patients with respiratory diseases	X	X				X	
	Value of meetings with radiologists, pathologists and microbiologists	X	X				X	
S	Perform and interpret spirometry (competence)	X	X	X		X	X	
	Interpret the full range of lung function tests (competence)	X	X			X	X	X
	Use of inhaled and nebulised drug therapy (competence)	X	X				X	
	Pleural aspiration (competence) and biopsy (experience/competence)	X	X	X (biopsy only)			X	X
	Chest drain insertion (competence)	X	X	X			X	X
	Bronchoscopy (competence)	X	X	X			X	X
	Medical Thoracoscopy (experience, optional)	X	X				X	X
AB	As outlined in generic curriculum		X		X		X	X

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Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
<b>Subject: Clinical 21 - Imaging techniques (Page 57)</b>								
<b>Objectives: -</b>								
<ul style="list-style-type: none"> <li>• <b>Be competent to request and interpret appropriate imaging investigations for the patient with respiratory disease</b></li> </ul>								
K	Thoracic ultrasound, both radiologist/ radiographer performed and chest physician performed	X	X			X	X	
	Chest X-rays and CT scans (anatomical/CTPA/HRCT) relevant to the respiratory patient; indications, techniques and interpretation	X	X			X	X	X
	Ventilation/perfusion scans; indications, technique and interpretation	X	X			X	X	
	Bone scans; indications, technique, interpretation	X	X				X	
	PET-CT; indications and interpretation	X	X			X	X	
	Indications for magnetic resonance scans	X	X				X	
	Value of regular meetings with radiologists	X	X				X	X
	IRMER guidelines; hazards of radiation; other relevant guidelines		X			X	X	X
S	Interpretation of CXRs and CT scans (anatomical/HRCT/CTPA) (competence)	X	X			X	X	X
	Detailed observation and interpretation of images produced by other imaging techniques eg PET-CT, bone scans (experience/competence)	X	X			X	X	X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Clinical 22 - Smoking cessation (Page 58)</b>								
<b>Objective:</b>								
<ul style="list-style-type: none"> <li>• <b>-Be competent to assist patients to stop smoking.</b></li> <li>• <b>During their training, trainees must attend some smoking cessation clinics</b></li> </ul>								
K	Effects of smoking on general and respiratory health	X	X				X	
	Pharmacological and other treatments available for smoking cessation	X	X				X	
	Relevant aspects of public health	X	X				X	
	Relevant guidelines	X	X				X	X
S	Ability to advise patients on smoking cessation and	X	X				X	X

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	support measures (competence)							
AB	As outlined in generic curriculum;		X		X		X	X
	Non-judgmental approach		X		X		X	X
<b>Subject: Clinical 23 - Pulmonary rehabilitation (Page 59)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• Knowledge and experience of the organisation and delivery of specialist pulmonary rehabilitation services.</li> <li>• Trainees may care for inpatients and outpatients undergoing pulmonary rehabilitation during their clinical placements but may have to be seconded to a specialised unit to gain experience as this is not available in all placements</li> </ul>								
K	Patients most likely to benefit from pulmonary rehabilitation	X	X				X	
	Methods of pulmonary rehabilitation	X	X				X	
	Role of the multidisciplinary team including GPs, consultants, nurses, dieticians, physiotherapists, occupational therapists, medical social workers	X	X				X	
	Role of patient education	X	X				X	
	Basic techniques of chest physiotherapy	X	X				X	
	Relevant guidelines	X	X				X	XX
	Cost/benefit issues	X	X				X	
S	Be an active member of a rehabilitation team		X		X		X	
AB	As outlined in generic curriculum		X		X		X	X
	As above with special emphasis on smoking cessation, return to work, driving, sex and exercise	X	X		X		X	X
	Leadership, organisational and team working skills		X		X		X	X
<b>Subject: Clinical 24 - Intensive Care (ICU) and High Dependency Units (HDU) (Page 60)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• Be competent to recognise patients who will benefit from intensive care or high dependency units.</li> <li>• Have knowledge and experience of the care provided in intensive care and high dependency units.</li> <li>• Trainees may care for inpatients in ICU and HDU during their</li> </ul>								

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	<p>clinical placements. Trainees must also spend at least 60 working days in an intensive care unit approved by the Regional Respiratory Medicine STC/PD. Ideally this should occur in one block. If this is not possible, 4 units of 15 consecutive working days is acceptable.</p> <ul style="list-style-type: none"> <li>• Trainees may have to be seconded to a specialised unit to gain experience as this is not available in all placements</li> </ul>							
K	Conditions requiring ICU and HDU, particularly Acute Respiratory Distress Syndrome (ARDS) and septic syndromes	X	X			X	X	
	Knowledge of measures used to support and monitor all vital organ systems in an intensive care unit	X	X			X	X	
	Requirements for an adequately staffed and equipped unit	X	X			X	X	
	Interaction of anaesthetists, physicians, surgeons, nurses, microbiologists, physiotherapists, dieticians	X	X			X	X	
	Role of the multidisciplinary team in ICU and HDU	X	X			X	X	
	Knowledge of the interface between ICU/HDU and the general/specialty wards, including outreach services	X	X			X	X	
	Relevant guidelines	X	X			X	X	X
S	ALS skills (competence)	X	X			X (ALS)	X	X
	Basic airway skills (competence)	X	X			X (ALS)	X	X
	Ability to advise on and manage respiratory patients on ICU or HDU (competence)	X	X			X	X	X
	Ability to advise on the respiratory care of general patients on ICU (competence)	X	X			X	X	X
	Ventilatory support modalities (competence in C-PAP and NIV; experience in mechanical ventilation and mechanical ventilation strategies)	X	X	X (CPAP and NIV only)		X	X	X
	Chest drain insertion (competence)	X	X	X			X	X
	Bronchoscopy (competence)	X	X	X			X	X
AB	As outlined in generic curriculum but with special emphasis on legal and ethical issues, team work, breaking bad news, communicating with relatives	X	X		X	X	X	X
	Organ donation issues	X	X		X	X	X	X

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Subject: Clinical 25 – Palliative care (Page 61)								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• Be competent to recognise when palliative care is appropriate.</li> <li>• Have knowledge and experience of the services required for effective palliative care.</li> <li>• Trainees must care for inpatients and outpatients receiving palliative care during their clinical placements (minimum 2 years)</li> </ul>								
K	Indications for palliative care, including both malignant and non-malignant pulmonary diseases	X	X				X	
	Practice of palliative care	X	X				X	
	Importance of team work in palliative care	X	X				X	X
	The use of a palliative care team	X	X				X	
S	Empathy with patients and their relatives	X	X		X		X	X
AB	As outlined in generic curriculum with special emphasis on legal and ethical issues, team work, breaking bad news, communicating with relatives and honesty	X	X		X		X	X
Subject: Clinical 26 – Dysfunctional Breathing and Psychological aspects of respiratory symptoms (Page 62)								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• Be competent to recognise and diagnose dysfunctional breathing .</li> <li>• Be competent to carry out specialist assessment and management of patients with of dysfunctional breathing .</li> <li>• Have knowledge and experience of psychological factors which may cause or exacerbate breathlessness.</li> <li>• Have knowledge and experience of managing psychological causes of breathlessness in co-operation with other appropriate health care professionals</li> </ul>								
K	Causes and manifestations of dysfunctional breathing	X	X				X	
	Understanding of the impact of psychological factors on the respiratory system	X	X				X	X
	Diagnostic strategies for dysfunctional breathing	X	X				X	

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	Management strategies for dealing with psychological factors in breathlessness and other respiratory symptoms	X	X				X	
	Importance of team work	X	X				X	X
S	Be able to recognise when psychological factors are important	X	X		X		X	X
	Empathy with patients		X		X		X	X
	Recognise when to refer to other health care professionals	X	X		X		X	X
AB	As outlined in generic curriculum with special emphasis on communication skills		X		X		X	X
	Non judgmental approach		X		X		X	X
<b>Learning Objectives for Practical Procedural Areas</b>								
<b>Subject: Procedures 1 – Advanced Life Support (Page 63)</b>								
<b>Objectives: -</b>								
<b>Be competent to carry out and supervise effective resuscitation</b>								
K	Causes of cardio-pulmonary arrest					X		
	Principles of cardio-pulmonary resuscitation					X		
	Organ donation issues					X		
	Relevant guidelines							
S	Be proficient and competent in basic and advanced life support					X		
	Be proficient and competent in the use of defibrillators					X		
	Be competent in judging when ALS is not appropriate					X		
N.B Trainees must pass the ALS (UK)						X		X
The training portfolio/DOTS must show that they have performed successful resuscitation						X		X
AB	As outlined in the generic curriculum with emphasis on ethics, legal issues, breaking bad news and support of relatives		X		X	X		X

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### Assessment Blueprint for Respiratory Medicine

Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
	Familiarity with “do not resuscitate” orders		X		X	X		X
<b>Subject: Procedures 2 - Lung function testing and respiratory physiology (Page 64)</b>								
<b>Objectives: -</b>								
<ul style="list-style-type: none"> <li>• Have knowledge and experience of all lung function tests.</li> <li>• Be competent in performing simple lung function tests (particularly spirometry); have experience of the performance of more complex tests.</li> <li>• Be competent in interpreting all lung function tests.</li> <li>• Trainees must care for inpatients and outpatients having lung function tests during their clinical placements (minimum 2 years)</li> </ul>								
K	Theory of simple spirometry and flow volume loops	X	X			X	X	
	Theory of measurement of static lung volumes and gas transfer	X	X			X	X	
	Theory of body plethysmography	X	X			X	X	
	Assessment of airway hyper-responsiveness	X	X			X	X	
	Hypoxic challenge/fitness to fly tests	X	X			X	X	
	Exercise testing (exercise-induced bronchoconstriction, six minute walk, shuttle walk tests, cardiopulmonary exercise tests)	X	X			X	X	
	Respiratory muscle assessment	X	X			X	X	
	Relevant guidelines	X	X			X	X	X
	How to set up/supervise the running of a lung function laboratory	X	X			X	X	
	Infection control, quality control and safety at work issues	X	X			X	X	
S	Be able to perform and interpret simple lung function tests, including spirometry and arterial/capillary blood gases (competence)	X	X	X		X	X	
	Have knowledge and experience (but not competence) in all the other lung function tests listed under knowledge section	X	X			X	X	X
	Interpretation of all lung function tests (competence)	X	X			X	X	X
AB	As outlined in generic curriculum		X		X		X	X

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### Assessment Blueprint for Respiratory Medicine

Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
<b>Subject: Procedures 3 – Bronchoscopy (Page 65)</b>								
<b>Objectives: -</b>								
<ul style="list-style-type: none"> <li>• <b>Be safe, efficient and competent at fiberoptic bronchoscopy</b></li> </ul>								
K	Indications for fiberoptic bronchoscopy	X	X	X			X	X
	Safe sedation for fiberoptic bronchoscopy	X	X	X			X	X
	Techniques of fiberoptic bronchoscopy	X	X	X			X	X
	Bronchoalveolar lavage	X	X	X			X	X
	Transbronchial biopsies	X	X	X			X	X
	Be aware of more advanced diagnostic and therapeutic bronchoscopic techniques	X	X	X			X	X
	Patient consent and adequate explanation of risks and benefits	X	X	X			X	X
	Relevant guidelines	X	X	X			X	X
	Infection control/safety at work issues	X	X	X			X	X
S	Be competent in safely performing fiberoptic bronchoscopy. A minimum of 200 should be recorded in the training portfolio/DOTS. Initially the trainee will be an observer and subsequently perform bronchoscopy under supervision, with appropriate increasing independence as training progresses			X				X
	Trainees should not bronchoscope unsupervised until at least 150 supervised bronchoscopies have been undertaken and their Educational Supervisor has assessed them as competent			X				X
AB	As outlined in generic curriculum		X		X		X	X
	A log book should be kept							X
	The percentage positive histology rate for visible tumour should be audited							X
<b>Subject: Procedures 4 – Closed Pleural biopsy (Page 66)</b>								
<b>Objectives: -</b>								
<ul style="list-style-type: none"> <li>• <b>Be safe, efficient and competent at closed pleural biopsy</b></li> <li>• <b>Have knowledge of the technique of physician-practiced thoracic ultrasound</b></li> </ul>								
K	Indications for closed pleural biopsy	X	X				X	

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### Assessment Blueprint for Respiratory Medicine

Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
	Various techniques of closed pleural biopsy, both “blind” and image guided	X	X				X	
	The role of physician-practiced thoracic ultrasound	X	X			X	X	X
	Patient consent and explanation of risks and benefits	X	X				X	X
	Relevant guidelines	X	X				X	X
S (Optional)	Be competent in safely performing closed “blind” pleural biopsy. A minimum of 10 should be recorded in the training portfolio/DOTS			X				X
	Initially trainee should perform procedure under the supervision of a senior colleague skilled in this technique and then perform independently when competent			X				X
	Training in thoracic ultrasound (optional)	X	X			X	X	X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Procedures 5 – Intercostal tube placement and “medical” pleurodesis (Page 67)</b>								
<b>Objectives: -</b>								
<ul style="list-style-type: none"> <li>• <b>Be safe, efficient and competent at intercostal tube placement and medical pleurodesis</b></li> </ul>								
K	Indications for intercostal tube placement	X	X				X	
	Safe techniques for intercostal tube placement, both “surgical” and “Seldinger”	X	X				X	
	Methods for preventing tube displacement	X	X				X	
	Indications for suction	X	X				X	
	Portable drainage systems	X	X				X	
	Drugs and techniques used for medical pleurodesis							
	Patient consent and explanation of risks and benefits	X	X				X	
	Relevant guidelines							
S	Be competent in safely performing “Seldinger” intercostal tube placement. A minimum of 20 should be performed and recorded in the training portfolio/DOTS	X		X				X

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Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
	Initially the trainee should undertake at least 10 procedures fully supervised. Solo practice should not occur until the educational supervisor has confirmed competence							X
	Trainees should have experience of "surgical" intercostal tube placement; some trainees may gain full competence in this	X	X				X	X
	Be competent at "medical" pleurodesis	X	X	X			X	X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Procedures 6 - Sleep studies (Page 68)</b>								
<b>Objectives: -</b> <ul style="list-style-type: none"> <li>• Have experience of screening studies, multi-channel studies and polysomnography.</li> <li>• Be competent in the interpretation of screening studies.</li> <li>• Have experience of the interpretation of multi-channel studies and polysomnography.</li> <li>• Be competent in the initiation of CPAP and NIV</li> </ul>								
K	Causes of sleep breathing disorders	X	X			X	X	
	Methods of screening for sleep breathing disorders	X	X			X	X	
	Multi-channel studies	X	X			X	X	
	Polysomnography	X	X			X	X	
	CPAP, including auto-titration, and NIV	X	X			X	X	
	Relevant guidelines	X	X			X	X	X
S	Perform and interpret screening sleep studies (competence)	X	X			X	X	X
	Interpret multi- channel sleep studies (experience)	X	X			X	X	X
	Interpret polysomnography (knowledge)	X	X			X	X	X
	Initiate CPAP and NIV (competence)	X	X	X			X	X
	Initially trainee will be under the supervision of a senior colleague skilled in the performance and interpretation of these techniques and then will perform/interpret independently							
AB	As outlined in generic curriculum		X		X		X	X

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Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
<b>Subject: Procedures 7 - Non-invasive ventilation (Page 69)</b>								
<b>Objectives: -</b>								
<ul style="list-style-type: none"> <li>• <b>Be competent in initiating CPAP and NIV</b></li> </ul>								
K	Indications for CPAP and NIV	X	X			X	X	
	How to set up and train a patient to use the equipment	X	X			X	X	
	Importance of input from physiotherapists/other health care professionals input	X	X			X	X	X
	Methods available	X	X			X	X	
	Relevant guidelines	X	X			X	X	X
S	Set up patients on CPAP and NIV The trainee should be supervised until signed off as competent by the Educational Supervisor			X				X
	Document sufficient patients in training portfolio/DOTS							X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Procedures 8 - Tuberculin skin tests (Page 69)</b>								
<b>Objectives: -</b>								
<ul style="list-style-type: none"> <li>• <b>Be able to competently perform and interpret tuberculin skin tests;</b></li> </ul>								
K	Types of tuberculin tests	X	X				X	
	Indications for tuberculin tests	X	X				X	
	How to read tuberculin tests	X	X				X	
	Relevant guidelines	X	X				X	X
	Understand the relative roles of tuberculin skin tests and gamma-interferon tests	X	X				X	
S	Perform and read tuberculin tests (experience/competence)	X	X				X	X
	Document sufficient patients in training portfolio/DOTS						X	X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Procedures 9 - Skin tests to demonstrate "Allergy" (Page 70)</b>								

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Curriculum area	Competence	Exam	Mini-CEX	DOPS	MSF	Assessed Course	CBD	Sup Report
<b>Objectives: -</b>								
<ul style="list-style-type: none"> <li>Be able to competently perform and interpret skin tests for allergy</li> </ul>								
K	Indications for skin tests	X	X				X	
	How to perform skin tests	X	X				X	
	Relevant guidelines	X	X				X	X
S	Perform and read skin tests for common allergies (experience/competence)	X	X				X	X
	Document sufficient patients who have been skin tested in training portfolio/DOTS							X
AB	As outlined in generic curriculum		X		X		X	X
<b>Subject: Procedures 10 – Medical Thoracoscopy (Page 70)</b>								
<b>Objectives: -</b>								
<ul style="list-style-type: none"> <li>Have knowledge of the technique of medical thoracoscopy</li> </ul>								
K	Indications for medical thoracoscopy; place in guidelines for management of pleural effusion	X	X				X	
	Safe sedation for medical thoracoscopy	X	X				X	
	Patient consent and adequate explanation of risks and benefits	X	X				X	
	Essentials of the technique	X	X				X	
S	Have witnessed medical thoracoscopy (knowledge)(optional)							X
	Hands on experience in medical thoracoscopy (Optional; it is not necessary to have had “hands on” experience of the technique)							X
AB	As outlined in generic curriculum		X		X		X	X

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