## A2 Acute respiratory presentations

Assessment of these competencies via Mini-CEX, CbD (formative or summative) or ACAT-EM and a reflective log.

In addition, key DOPs could be carried out as part of this module, including PP2 Obtaining and interpreting an ABG, PP5 Basic airway assessment and management and PP8 Initial decompression of a large / tension pneumothorax.

Potential presentations in which these competencies could be assessed include the following:

- Sudden onset chest pain and SOB (suspicion of pulmonary embolism)
- Acute exacerbation in patient with known COPD or bronchiectasis
- Patient with new onset fever, productive cough +/- haemoptysis (suspicion of pneumonia)
- Any acute SOB with new oxygen requirement
- Acute wheeze with respiratory compromise (e.g. severe asthma)
- Acute stridor with respiratory compromise (e.g. severe croup)
- Other causes of acute respiratory compromise such as sickle cell crisis

Core competencies to achieve (for all patients) are EPA level 3 (Indirect activepartial supervision by senior clinician, no prompting or help provided, direct line of vision or supervisor immediately available).

Knowledge/	Detail of competency
Skill/ Behaviour	
Knowledge	Defines common causes of Breathlessness (including non-
	cardiorespiratory) and their patho-physiology [to ensure causes of
	acidosis are not overlooked; e.g. DKA]
	Is able to describe the physiology of oxygen delivery, oxygen
	cascade and effects on work of breathing; definitions/causes of
	respiratory failure (type 1/type 2)
	Is able to define common causes and pathophysiology of <b>cough</b> ,
	cyanosis [consider endemic pathogens/ environmental/
	occupational causes]; haemoptysis, wheeze, pleuritic chest pain,
	orthopnoea, dyspnoea, pleural effusion
	Is able to differentiate upper and lower respiratory features of
	obstructive or restrictive conditions, inspiratory or expiratory phase
	e.g. stridor vs. wheeze, croup (laryngotracheobronchitis) vs.
	epiglottitis or foreign body obstruction
	Outlines relevant indications for, and limitations of, investigations
	including CXR; transthoracic ultrasound, Computed Tomography
	Pulmonary Angiography; spirometry; ECG; cardiac biomarkers; d-

Knowledge/	Detail of competency
Skill/ Behaviour	
	dimer; microscopy; Ventilation/Perfusion (V/Q) Scan; ABG [note: PP2
	for interpretation of ABG]
	Recalls/understands principles of ventilatory support strategies
	including prescribing and administration of oxygen therapy, types of
	delivery and appropriate monitoring of effectiveness of ventilatory
	support
	Outlines the indications/contraindications for, and limits of, non-
	invasive and invasive ventilatory support
Skills- History	Takes a history that captures symptoms, timeline and relevant past
	medical, pharmaceutical, environmental or behavioural issues and
	risk factors that may support development of a differential diagnosis
	Elicits issues within the history that would identify high risk patients
	e.g. those likely to deteriorate, require admission, require ventilatory
	support or escalation to higher level care
	Is able to elucidate normal degree of activity/ functioning prior to
	current presentation and establish any predetermined limits of
	escalation, such as an 'advance directive' (or similar)
Skills –	Uses a systematic (ABCDE) approach with an appropriately detailed
Examination	cardiovascular and respiratory examination identifying important
	features to support a differential diagnosis
	Is able to differentiate between stridor and wheeze
	Recognises where respiratory effort is disproportionate due to
	hyperventilation from anxiety rather than a metabolic or
	cardiorespiratory disorder
Skills-	Orders, interprets, prioritises relevant initial investigations including:
investigation	routine blood tests, D-dimer and cardiac enzymes, ABG [note: PP2],
and treatment	CXR, ECG, peak flow, spirometry, CTPA, laboratory analysis pleural
	drain/tap sample
	Interprets ABG results in context of clinical condition [note: PP2]
	Initiates initial treatment specific to suspected cause (e.g. safe
	oxygen prescribing, early antibiotics, bronchodilator therapy)
	Interprets CXR to recognise/differentiate features including pleural
	effusion, pneumothorax, pneumonia, cardiac size, pulmonary
	mass/hilar enlargement; recognise the need for further investigations
	or intervention as necessary (e.g. pleural effusion drain/'tap').
	Makes a rapid and appropriate assessment and provides simple
	airway manoeuvres, airway adjuncts, selection of oxygen delivery
Skills- Clinical	Makes an appropriate assessment of ongoing oxygen delivery and
decision	support, monitoring and decision when to escalate with initial
making,	ventilation [BVM] or ventilatory support if required for more severe or
judgement	

Knowledge/	Detail of competency
Skill/ Behaviour	
	deteriorating respiratory compromise and/or to a higher level/arena
[in addition to	of care
CC1]	
Behaviour-	Recognises the distress caused by breathlessness during discussions
Communication	with patient and carers
&	Ensures appropriate documentation and sharing of information
professionalism	regarding an infectious disease/communicable disease (such as
[in addition to	notifiable disease reporting process) according to local/national
CC7/CC8]	policy
Paediatric	Is able to identify and treat common respiratory conditions of
	childhood e.g. pertussis, croup, induced bronchospasm (viral URTI-
	related); recognising features of respiratory compromise e.g.
	intercostal/sub-costal recession, accessory muscle use, work and
	effectiveness of breathing
	Appreciates parental concerns and previous history or preceding
	pattern of illness in context of the acute presentation; offering
	appropriate counselling and advice e.g. inhaler medication
	administration using a spacer device
	Is aware of the importance of establishing a vaccination history as
	part of consultation
	Is aware of the risks that some childhood illnesses may present to the
	immunocompromised or other family members e.g. pregnant
	females.

## Additional optional competencies- EPA 1 to 2

Knowledge/	Detail of competency
Skill/ Behaviour	
	Participation/observation of initiation of non-invasive or invasive
	ventilation strategies, including emergency RSI/endotracheal
	intubation.
	Participation/observation of pleural effusion 'tap' and/or chest drain
	insertion; pleural aspiration/insertion of chest drain for spontaneous
	pneumothorax
	Discuss the impact of long-term respiratory illness and potential limits
	of escalation according to patients specified wishes or best interests'
	documentation of appropriate limits of escalation and end of
	life/palliative care.
	Exhibit non-judgemental attitudes and take opportunity to provide
	health education including inhaler technique, smoking cessation,
	lifestyle changes, environmental aspects (solid fuel fires) and

information about continuity of care for chronic respiratory
conditions.