



Competence Areas – TIER 3

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1. Pulse Oximetry

Competence statement:

This competence refers to the knowledge, skills and attitudes required to measure and evaluate pulse oximetry in acute exacerbations and long term management of asthma, COPD and other respiratory conditions

Rating Scale: 1 Needs a lot of development

2 Needs some development

3 Is well developed

T3 Knowledge		1	2	3
1	Relate patterns of results to pathological processes and patient's clinical status			
2	Critically evaluate need for palliative/supportive care approach in patients with end-stage or terminal respiratory disease			
3	Describe qualities and aspects of clinical and professional leadership			
4	Awareness of when overnight oximetry is indicated and its interpretation			
5	Critically analyse and evaluate factors effecting oxygen saturation curve and how they relate to presentation of symptoms and disease			
T3 Skills		1	2	3
1	a) Interpret measurement patterns to evaluate oxygen status in all clinical situations to arrange and/or carry out suitable investigations where necessary			
1	b) Interpret measurement patterns to evaluate oxygen status in all clinical situations to implement appropriate treatment			
1	c) Interpret measurement patterns to evaluate oxygen status in all clinical situations to adjust and review individualised management plan where necessary			
2	Carry out training needs analysis of nurses and other health professionals to arrange and/or deliver education on pulse oximetry			
3	Lead and develop organisational policies and procedures relating to use of pulse oximetry			
4	Support and assist nurses and other health professionals in their use and understanding of pulse oximetry			
5	Lead audit of pulse oximetry use through continuous quality improvement approach			
T3 Attitudes		1	2	3
1	Show willingness to provide clinical leadership to promote the appropriate use and interpretation of pulse oximetry			

2. Blood Gases

Competence statement:

This competence refers to the knowledge, skills and attitudes required to measure and analyse blood gases in acute exacerbations and long term management of asthma, COPD and other respiratory conditions

Rating Scale: 1 Needs a lot of development

2 Needs some development

3 Is well developed

T3 Knowledge		1	2	3
1	Explain the anatomy and physiology of lower arm and wrist			
2	Differentiate between, and identify causes of, respiratory and metabolic acidosis and alkalosis			
3	a) Describe quality assurance, risk management and infection control mechanisms relative to the procurement of blood gas analysers where relevant to own practice			
3	b) Describe quality assurance, risk management and infection control mechanisms relative to obtaining samples			
4	Critically evaluate benefits and reliability of arterial and arterialised blood gas sampling methods and their contribution to ongoing assessment and management			
5	Describe legal and professional requirements for extending scope of own role including obtaining and analysing blood gases			
T3 Skills		1	2	3
1	Choose most appropriate method of sampling, taking into consideration patient's clinical status and preference			
2	Use blood gas sampling appropriately as an aid to assessing, diagnosing and monitoring patients			
3	Discuss meaning of results for ongoing management with patient/carer			
4	Critically analyse results in light of patient's clinical status and pathophysiological processes to inform diagnosis, severity (and/or progression) of disease and adjust individualised management plan accordingly			
5	Develop organisational policies and procedures relating to blood gas sampling			
6	Lead and assist nurses to progress and consolidate their blood gas analysis skills whilst maintaining own skills			
7	Provide leadership through collaboration with nurses and multiprofessionals to promote the appropriate use of blood gas analysis in the assessment and monitoring of patients			
T3 Attitudes		1	2	3
1	Show willingness to provide clinical leadership to promote the appropriate use and interpretation of blood gases			

3. Peak Expiratory Flow Rate (PEFR)

Competence statement:

This competence refers to the knowledge, skills and attitudes required to measure and evaluate peak expiratory flow rate (PEFR) in acute and long term management of asthma.

- Rating Scale:** 1 Needs a lot of development
 2 Needs some development
 3 Is well developed

T3 Knowledge		1	2	3
1	Critically evaluate the cost-effectiveness of PEFR equipment for organisational use			
2	Critically evaluate the evidence base and contribution of PEFR to the care of individuals and groups			
3	Describe how to obtain normal PEFR ranges for ethnic minority groups			
T3 Skills		1	2	3
1	Incorporate PEFR in the overall assessment, diagnosis, evaluation and adjustment of patient's individualised management plan			
2	Develop, in partnership with relevant stakeholders, organisational policies and procedures relating to PEFR use			
3	Carry out training needs analysis of nurses and multiprofessionals to provide appropriate education			
4	Lead and assist nurses to progress and consolidate their PEFR knowledge and skills			
5	Ensure ethnic minority groups' normal ranges are considered in interpretation of results			
T3 Attitudes		1	2	3
1	Show motivation to promote the use of PEFR in the care of asthma patients			

4. Pulmonary Function Testing (PFT)

Competence statement:

This competence refers to the knowledge, skills and attitudes required to measure and evaluate pulmonary function tests (PFTs) in acute and long term management of asthma, COPD and other respiratory conditions.

Rating Scale: 1 Needs a lot of development

2 Needs some development

3 Is well developed

T3 Knowledge		1	2	3
1	Explain physiological and pathological effects on airflow and diffusion in the lungs			
2	Explain the indications for the range of PFTs			
3	Identify relevant clinical and operational guidelines for spirometry and other PFT testing and how they can be integrated into clinical practice			
4	Describe quality assurance and risk management mechanisms relative to procuring and ongoing use of spirometers			
5	Describe infection prevention and control mechanisms for spirometry and FeNO testing			
6	Outline the process for preparing patients to carry out forced vital capacity (FVC) manoeuvre			
7	Identify how to minimise factors affecting the reliability of FVC test results			
8	Describe how to obtain normal spirometry ranges for ethnic minority groups			
9	Critically evaluate benefits of flow loop and volume time graphs			
10	Explain the relationship of spirometry, lung volumes, diffusing capacity and flight assessments to physiological and pathological processes and patient's clinical status			
11	a) Critically discuss the contribution of spirometry and FeNO to the assessment, diagnosis and management of patients'			
11	b) Critically discuss the contribution of lung volumes to the assessment, diagnosis and management of patients			
11	c) Critically discuss the contribution of diffusing capacity to the assessment, diagnosis and management of patients			
11	d) Critically discuss the contribution of flight assessments to the assessment, diagnosis and management of patients			
12	Critically evaluate cost-effectiveness of spirometry and FeNO equipment and disposable interfaces			
13	Describe legal and professional requirements for extending scope of own role			
T3 Skills		1	2	3
1	Ensure patient is fully informed about spirometry, and consents to procedure			
2	Carry out spirometry testing in suitable patients according to			

4. Pulmonary Function Testing (PFT)

T3 Skills (contd.)

	1	2	3
3 Assist and motivate patient to perform reliable FVC manoeuvre and minimise and manage potential side-effects			
4 Refer patient to pulmonary function laboratory for PFTs when indicated			
5 Develop, in partnership with respiratory physiologists, pathways for appropriate referral to local respiratory investigation centres for PFTs			
6 Interpret PFTs in light of patient's clinical status (and ethnic minority group) to inform diagnosis, severity (and/or progression) of disease and adjust individualised management plan accordingly			
7 Develop, in collaboration with relevant stakeholders, organisational protocols and procedures for spirometry			
8 Carry out training needs analysis of nurses and multiprofessionals to provide appropriate education			
9 Lead audit of spirometry practice through continuous quality improvement approach			

T3 Attitudes

	1	2	3
1 Provide clinical leadership to promote the appropriate use and interpretation of spirometry and FeNO			

5. Allergy Testing

Competence statement:

This competence refers to the knowledge, skills and attitudes required to assess and monitor the contribution of allergy in the acute and long term management of asthma.

Rating Scale: 1 Needs a lot of development

2 Needs some development

3 Is well developed

T3 Knowledge		1	2	3
1	Describe the pathophysiology of atopic (immunoglobulin E mediated IgE inflammatory) processes in airways of the nose and lungs			
2	Describe models for full assessment of patient allergy status			
3	Describe methods for specific allergen testing			
4	Evaluate the benefits to patients of specific allergen testing			
5	Evaluate the evidence base for organisation of allergy services			
6	Evaluate the evidence base for avoidance of specific allergens			
7	Describe legal and professional requirements for extending the scope of practice/role			
8	Evaluate methods to audit and improve quality of respiratory services and care			
9	Describe qualities and aspects of clinical leadership			
T3 Skills		1	2	3
1	Carry out full allergy assessment of patient			
2	Obtain informed consent from patient/carer to carry out specific allergen testing (IgE or skin prick testing) on suitable patients, using most appropriate testing method			
3	Interpret results from assessment to formulate allergy management plan with patient/carer and provide written information in the form of an individual management plan			
4	Explore with patient/carer ways of incorporating allergen avoidance, relative to confirmed allergy, into patient's lifestyle			
5	Collaborate with relevant stakeholders to develop strategic policies and procedures for the management of confirmed clinical allergy			
6	Carry out training needs analysis of nurses and multiprofessionals to provide appropriate training			
7	Lead audit of service effectiveness through continuous quality improvement approach			
T3 Attitudes		1	2	3
1	Show willingness to empower patient/carer through appropriate allergy education and advocacy of their wishes			