

COPD Units of Learning

Title of overarching NOS: CHS 19 Undertake physiological measurements	Unit of learning to demonstrate competence: Perform dynamic lung function measurements using spirometry
Details of the relationship between the unit to demonstrate competence and relevant national occupational standards (if appropriate)	Users will be able to demonstrate competence in performing and/or reporting dynamic lung volumes required to assess an individuals lung function within COPD and other respiratory diseases services
Outcomes: The individual will know and understand:	Assessment criteria To be competent the individual will be able to:
Indicative Level	Level 1 (Expert/specialist) Level 2 (Experienced practitioner) Level 3 (Novice new to respiratory disease management (including COPD))
Respiratory disease and COPD relevant to level of responsibility, scope of practice and according to NICE COPD guidelines	Describe how the stages of severity of COPD and/or other respiratory diseases are reflected in spirometry results and management decisions
How to recognise the patho-physiology of lung disease and the stages of COPD	Demonstrate through explanation, an understanding of the common symptoms and causes associated with developing COPD and other respiratory diseases
The importance of decontamination and infection control measures	<p>Apply health and safety and infection control measures throughout the procedure</p> <p>Describe the rationale for regular cleaning and equipment maintenance and the appropriate decontamination and infection control protocols for the procedure</p> <p>Outline how individuals with COPD and other respiratory diseases pose a possible infection control risk and the appropriate actions to be taken</p> <p>Demonstrate the need for good hand hygiene and general housekeeping to the individual/carers</p>

How to assess and monitor risk factors within dynamic lung measurements	Assess the risk to the individual which may result from performing spirometry investigations and take appropriate actions
Equipment performance checks and compliance of the individual	<p>Confirm all required quality and performance checks have been completed in accordance with local protocols and guidelines</p> <p>Clearly explain their principles of operation to the individual in terms they will understand</p> <p>Check the individual fully understands their role in participating in the spirometry procedure</p>
The importance of following protocols and procedures to set up and use the equipment	<p>Outline the range of flow and volume measuring spirometry devices available in the organisation</p> <p>Explain any contraindications for performing spirometry and take relevant action(s) to ensure spirometry is performed safely</p> <p>Carry out and record the pre-testing requirements for performing spirometry</p> <p>Take correct and accurate measurement of individual's height</p> <p>Confirm the operational status of the spirometry equipment to explain the main principles of its operation to the individual</p> <p>Position the individual correctly for spirometry</p> <p>Ensure the equipment interfaces with the individual in the correct and safe manner</p> <p>Perform spirometry techniques in accordance with published national guidelines and local protocols</p>
Undertake dynamic lung measurements	<p>Demonstrate effective use of the equipment throughout the procedure</p> <p>Describe the required spirometry technique to the individual</p> <p>Perform testing to published national standards to obtain reliable data</p> <p>Take appropriate action based on the individuals needs and emerging data to optimise results and level of risk</p> <p>Obtain and record technically acceptable spirometry measurements sufficient to assist</p>

	<p>in the diagnosis and clinical management of an individuals lung function</p> <p>Demonstrate knowledge and appropriate use of reference values, including reference ranges</p> <p>Obtain correctly printed out spirometry reports, together with any relevant comments required to assist diagnosis/reporting</p>
How to interpret results within personal level of competence	<p>Calculate and or select the correct values to be reported for of FEV1, FVC, VC, FEV1/FVC, FEV/VC and PEF</p> <p>Correctly and accurately interpret the spirometry results</p>
Assessment of Bronchodilator response	<p>Demonstrate knowledge of bronchodilators and other medications used to treat patients with COPD and other respiratory diseases, including knowledge of modes of action</p> <p>Clearly describe what constitutes a positive bronchodilator response.</p> <p>Administer a bronchodilator correctly using an appropriate delivery device</p> <p>Measure bronchodilator response correctly and display results in the appropriate format</p>
How to handle information and maintain the confidentiality of records	<p>Record information in line with organisational requirements and maintain the rights of individuals and principles of confidentiality</p>
How to communicate effectively	<p>Ensure written information sent to patients prior to attending for spirometry is appropriate and aids compliance</p> <p>Communicate effectively with the individual prior to and during the procedure in a manner and style appropriate to meet the their needs to aid understanding and compliance to achieve high quality results</p> <p>Treat the individual/carer with dignity and respect, equality and diversity</p> <p>Communicate with professional colleagues in a timely manner, style and format to meet the needs of the individual</p>

Refer individuals to appropriate services	Seek advice and support from competent individuals whenever the procedure, data or area of expertise is outside your level of competence
Endorsement of the unit by a sector or other appropriate body (if required)	COPD Strategy Group/DH England; respiratory education providers