



Australian Government

HLTHPS004 Measure spirometry

Release: 1

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Modification History

Release	Comments
Release 1	This version was released in <i>HLT Health Training Package release 2.0</i> and meets the requirements of the 2012 Standards for Training Packages. Significant changes to the elements and performance criteria. New evidence requirements for assessment, including volume and frequency requirements. Significant change to knowledge evidence.

Application

This unit describes the skills and knowledge required to prepare a client for spirometry, complete the spirometry test and to provide a report as an aid to the diagnosis and management of ventilatory impairment.

This unit applies to any health worker who takes spirometry measurements. Spirometry measurement is commonly conducted in hospitals, respiratory physicians rooms, general practitioner (GP) rooms, pharmacies and pathology collection centres.

The skills in this unit must be applied in accordance with Commonwealth and State/Territory legislation, Australian/New Zealand standards and industry codes of practice.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

Elements define the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

1. Prepare spirometer and materials for use

1.1 Check cleanliness and functionality of spirometer and other materials

1.2 Validate or calibrate spirometer in accordance with manufacturer specifications

2. Prepare client for procedure

2.1 Greet client courteously and identify self

2.2 Identify client following organisation and regulatory

ELEMENT**PERFORMANCE CRITERIA**

Elements define the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

procedures

2.3 Obtain, read, and accurately record client information, in accordance with organisation policies and procedures

2.4 Identify and responds to contraindications for performing spirometry within scope of own job role

2.5 Obtain clarifications from requesting health professional when necessary

2.6 Take accurate client measurements, consider other inputs and calculate reference values from established value sets

2.7 Seat client correctly for procedure

3. Perform spirometry

3.1 Initialise equipment to commence recording and record additional information

3.2 Coach client through procedure with the provision of continuous instruction, encouragement and reassurance

3.3 Observe client throughout the procedure for ability to continue

3.4 Identify recording as technically correct

3.5 Provide client with feedback on performance

3.6 Repeat spirometry as necessary to comply with current standards for repeatability

3.7 Make technically acceptable measurements according to current standards

3.8 Select indices for report in accordance with current standards

3.9 Identify the need for administration of a bronchodilator in accordance with current standards and medical officer request

3.10 Allow sufficient time for peak effect from bronchodilator and repeat spirometry

3.11 Identify and respond to clinical emergencies in accordance with organisation emergency procedures

ELEMENT**PERFORMANCE CRITERIA**

Elements define the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

4. Complete spirometry measurement

4.1 Assist client as required on completion of procedure

4.2 Review follow up arrangements with client

4.3 Respond appropriately to client's questions

4.4 Dispose of or clean materials in accordance with organisation policies and procedures, and infection control guidelines

4.5 Clean, restock and store equipment according to manufacturer's guidelines

4.6 Complete report to technically acceptable standards, provide a provisional interpretation of results and forward to physician for final interpretation

4.7 Forward report and interpretation to requesting medical officer

4.8 Enter details of client and test completed on to database and/or hospital information system

Foundation Skills

The Foundation Skills describe those required skills (language, literacy, numeracy and employment skills) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>

Assessment Requirements for HLTHPS004 Measure spirometry

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Performance Evidence

The candidate must show evidence of the ability to complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the job role. There must be evidence that the candidate has:

- followed established technical, infection control and safety procedures to produce spirometry measurements for at least 3 different clients that accurately reflect the maximal expiratory ventilatory capacity:
 - recognised and responded appropriately to errors due to both client performance and technical faults
 - provided provisional interpretation against established reference values

Knowledge Evidence

The candidate must be able to demonstrate essential knowledge required to effectively complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the work role. This includes knowledge of:

- purpose, principles and protocols of spirometry
- legal and ethical considerations for spirometry, including:
 - duty of care
 - informed consent
 - records management
 - privacy, confidentiality and disclosure
 - industry standards
 - work role boundaries – responsibilities and limitations
- basic pharmacology related to respiratory function relevant for spirometry measurement

- anatomy and physiology relevant for understanding and conducting spirometry
- set up, operation and routine maintenance of spirometry equipment
- patterns of normal/abnormal results related to both respiratory disease and technical factors relevant for spirometry measurement
- features of technically correct recordings, including:
 - no hesitation at start
 - evidence of maximal effort
 - no cough within first second
 - end of test criteria met
 - reproducibility
- mathematical and statistical information relevant for spirometry measurement
- reference values required for spirometry measurement and the factors that contribute to calculation of client reference values and how to incorporate these, including:
 - weight
 - height
 - age
 - gender
 - race
- how to convert volumes from atmospheric temperature and pressure (ATP) to body temperature and pressure saturated (BTPS)
- common causes of client non compliance in spirometry and the appropriate remedies
- complications and contraindications for clients undergoing spirometry measurement, and how to respond
- emergency procedures specific to spirometry instrument quality control procedures, including:
 - calibration
 - biological control measures
- relevance of environmental factors in spirometry, including temperature and humidity
- features and functions of respiratory therapy products

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - spirometer
 - client information
 - procedures for candidate to follow
- modelling of industry operating conditions, including integration of situations requiring problem solving

Assessors must satisfy the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory competency requirements for assessors.

Links

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