OSCE for Spirometry- AIR Service

The OSCE is a performance-based test in skills of communication and testing procedures. You are required to perform a technically acceptable spirometry test on your subject.

Spirometry is objective, non-invasive, sensitive to early change and reproducible. It is useful for detecting early change and disease progression. With the availability of a portable spirometer it can be performed almost anywhere and, with the right training, it can be performed by anybody.

Assessment outcomes:

To demonstrate how to prepare for, perform on a Subject and evaluate the quality of the result, including its acceptability and reproducibility of spirometry. Pass mark to determine competence 80%.

Preparation of environment and equipment

Demonstrated:	**Not evident**	**Evident**	**Competent**
Establish rapport and maintain effective communication with Subject			
Safe environment including infection, prevention and control factors: Knowledge of aerosol generating procedures Fit testing Chlor-clean room Leave room ventilated for 1 hour after procedure			
Spirometer (must meet ISO standard 26783)			
One-way disposable mouthpiece & nose clip			
Bacterial and viral filters (selected patients with any risk of infection)			
Accurate height measures or equivalent measure			
Short acting bronchodilators for reversibility testing and suitable means for delivery (Volumatic/ nebuliser)			

Notes:

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Calibration and verification of spirometry equipment

Discussed:	Not evident	Evident	Competent
Device confirmed to within calibration limits +/-3% of true			
Knowledge of the frequency of calibration (prior to each clinic session or after every 10th patient)			

Notes:

Assess the readiness of the Subject

Assessed for contraindication (A-Absolute; R-Relative)	Not evident	Evident	Competent
A-Active infection			
A-Condition that may cause serious consequences if spirometry performed eg. Dissecting/unstable aortic aneurysm, pneumothorax, recent surgery (abdo, thoracic, neurosurgery, eye surgery)			
R- Suspected respiratory infection in past 4-6 weeks requiring Abx or steroids			
R-Undiagnosed chest symptoms eg. Haemoptysis			
R-Any condition that might be aggravated by forced expiration eg. Prior pneumothorax, history NI, CVA or embolism in past 3 months; previous thoracic, abdo or eye surgery			
R-Perforated ear drum			
R-Acute disorders eg. Nausea or vomiting			
R-Confusion, communication problems			

Notes:

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Demonstrating spirometry procedure with Subject

Demonstrated testing of:	Not observed	Observed	Competent
Relaxed or slow vital capacity (VC)			
Forced vital capacity (FVC)			
Forced Expiratory Volume in 1 sec (FEV1)			
FEV1/FVC ratio The FEV1 expressed as a percentage of the FVC (or VC if that is greater)			
Forced Expiratory Volume in 6 secs (FEV6)			
Peak Expiratory Flow			

Notes:

Common errors in spirometry testing:

Identified common errors	Not observed	Observed	Competent
Poor seal around mouthpiece			
Hesitation or false start			
Poor forced expiratory effort			
Cough during procedure			
Incorrect data entered into the spirometer prior to testing			
Spirometer not calibrated and verified			

Notes:

Mark agreed: (80% achieved to demonstrate competence)……

Marker name:……

Signed:……

Date:……..

Moderator name:……

Signed:……

Date:……..