



Primary Care Respiratory Society Get Winter Wrapped

Spirometry and lung function testing in primary care: Your Questions Answered

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The Covid-19 pandemic saw a virtual halt on respiratory function testing in primary care, including spirometry, given the concerns around the potential for transmission of infections, including Covid-19. As services are resumed, even against a background of increasing community viral transmission of Covid-19 and the usual winter viruses, Carol Stonham answers your questions on the appropriate delivery of respiratory diagnostics and suggests ways in which you can mitigate any potential risk to yourselves or your patients. This document will be updated as the situation evolves and new guidance emerges.

What is the current guidance on the use of spirometry in primary care?

In primary care most respiratory function testing involved spirometry and FeNO, mainly in adults. Spirometry can be important in ensuring patients receive the correct diagnosis without unnecessary delay so that they can start appropriate treatment. In August 2020, the Association for Respiratory Technology & Physiology (ARTP) issued revised guidance on recommencing physiological services, including spirometry and other respiratory tests. While these guidelines encompass secondary care services they do include important guidance for those performing respiratory function tests in the primary care setting. ARTP recommends that respiratory function tests should only be carried out when they will definitively inform or change a patient's management. While spirometry should be considered a moderate risk respiratory function test, other tests requiring only low exhalatory flow such as FeNO should be considered as lower risk. Both spirometry and FeNO can be conducted in the primary care setting where available and while adhering to local infection control guidance and when due consideration has been given to the risk concerning the individual patient, the tests being performed and the environment (plant).

What steps should I take to protect myself and my patients when assessing spirometry?

ARTP recommends that all patients

should be pre-screened before attending for respiratory function tests. This could take the form of a phone call or a questionnaire to check for recent exposure to anyone with a positive Covid-19 diagnosis or if the patient has any Covid-19 symptoms. Temperature checking before patients enter the healthcare building should continue to be mandatory and routine. If and when possible pre-test Covid swab should be offered. Local infection protection and control standard operating procedures should be stringently followed. Tests must be performed using antibacterial, anti-viral filters instead of one way valved mouth pieces.

A room should be designated for respiratory function testing and attention should be paid to air circulation. While the ARTP guidance recommends that rooms used for respiratory function testing should have 6 air changes per hour in the secondary care setting, this is unlikely to be possible or measurable in primary care facilities. As a minimum, the door should remain closed to the rest of the building at all times, the room should be fully cleaned between patients and it should be left empty for a period of time between patients although there is no evidence to suggest for how long. Fans should not be used in rooms where respiratory function tests are conducted. Appropriate personal protective equipment for performing respiratory function tests in primary care include appropriate clothing (eg scrubs) along with apron, gloves and face coverings (at least a water-resistant mask but ideally also a visor) in line with local

policies. Consider separation of the operator from the patient with an appropriately placed Perspex screen for added protection.

What other respiratory test can I deliver at the moment?

ARTP guidance on low effort procedures including FeNO is that they can be considered as low risk for viral transmission and so can be carried out in the primary care setting with adherence to local infection protection and control procedures. They can be performed in a room with normal ventilation, with surgical face mask, gloves, apron and visor. There is no need to leave the room fallow but equipment and surfaces should be wiped between patients.

What about peak flow monitoring?

Given the potential to induce cough, where possible peak flow measurement should be conducted remotely by the patient in their own home. Charting and reporting their score is acceptable if the patient is sufficiently competent. Video consultation is helpful if additional support is needed to ensure an accurate test. Peak flow measurement can also be carried out as part of a face to face consultation but should be conducted in an outdoor setting and not in the clinical room. The patient should use their own peak flow meter.