



#### **Issue: Spirometers**

*Raised by:* Various sources

*Background:* Requests have been made that Remote Health supply spirometers to remote health centres to assist with assessment of asthma and other lung disease. For reasons of consistency and ease of training for clinical staff, it is proposed that Best Practice Group recommend a specific spirometer.

*Discussion:* Spirometry is important in the early diagnosis and management of acute and chronic airway conditions and responses to therapy for these conditions. It contributes to rapid and objective assessment of obstructive or restrictive lung diseases, providing a quantitative report of the severity of disease. Spirometry is considered a key element in asthma management strategy, and is the respiratory function test of choice. Furthermore, current local NT protocols require annual spirometry to be performed for clients with chronic lung disease (CARPA STM 5<sup>th</sup> Ed pg 292).

Accuracy of spirometry results is crucial for diagnosis and clinical management. While performing a test is relatively simple, it is important for clinicians to be knowledgeable and competent in the procedure; for this reason Specialist groups recommend training for every clinician prior to performing client testing. Training equips the clinician for: *adequate client preparation / instructing client for the correct breathing manoeuvre; troubleshooting equipment or client problems in the test; obtaining results that are consistent and reproducible; interpretation of results.*

Although spirometers are not standard clinical equipment for all DoH remote health centres, a small number of spirometers of varying makes/models are already in use in some remote health centres. Nevertheless, there is value in Remote Health making a stance on a select spirometer for all future purchases. ASH and RDH Respiratory Teams have both assessed particular brands of spirometer (*specifications, ease of use, reliability, etc*) and are satisfied with the *EasyOne* as product of choice.

**Note:** *the EasyOne-line package in particular allows the flexibility of either Real-Time spirometry connected to a PC via USB cable, or stand-alone testing with results able to be fully uploaded at a later date. This package most suits the Remote Health context.*

*Consultation:* Respiratory Educator (ASH); Respiratory Clinical Nurse Consultant (RDH); Education Manager (Asthma Foundation NT); Senior RMP's (RHB - TE / CA)

*References:* [EasyOne specifications](#); [Performing Spirometry in Primary Care](#); [Spirometry & reliability \(Asthma Management Handbook 2006\)](#); [Spirometry Training Courses](#) (A Position Paper of The Aust/NZ Society of Respiratory Science & The Thoracic Society of Aust/NZ, 02/2004)

*Outcome:* The '**EasyOne-line**' (spirometer with USB Cable & Software) package is endorsed by Remote Health Branch as the product of choice for all future spirometer purchases.

A small supply of '*EasyOne-line*' spirometers will be purchased and held by the Medical Teams in CA & TE Remote Health, for use by RMPs routinely visiting health centres.

RMPs and other clinicians are required to participate in training prior to use of spirometers in a clinical setting.

**Note:**

- A wider rollout of spirometers as Standard Clinical Equipment is tied to availability of further funding
- The PCIS Spirometry URG which describes the process for importing results is under development