

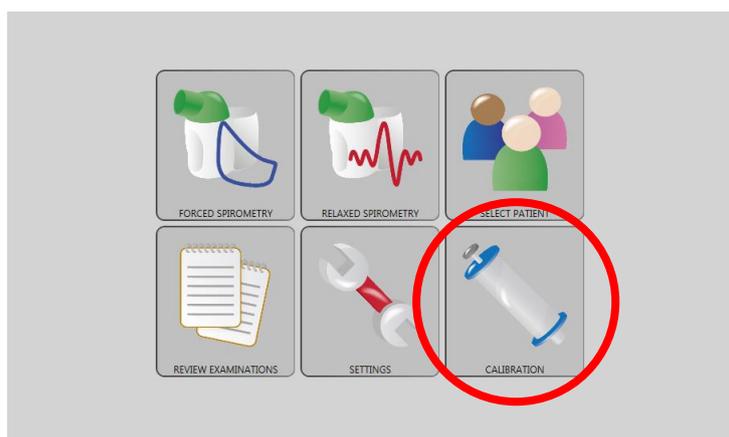
SpiroConnect – Calibration Verification

There are different types of transducer (the part of the spirometer that the patient blows through) available to measure lung volumes and flow rates from different manufacturers. The type of transducer used is responsible for the stability of the spirometry measurement and many transducers require regular re-calibration to compensate for the effects of drift. This drift may derive from physical contamination, changes in ambient temperature, altitude, or humidity.

The **SpiroConnect** spirometer uses a vertically mounted 'digital volume transducer' or 'turbine' that exhibits exceptional stability and remains unaffected by changes in these ambient conditions. As a result the calibration will only change if the turbine has been physically damaged. This can easily be verified by visual inspection.

Volume Accuracy Check

To strictly conform to the ERS (European Respiratory Society) guidelines for Spirometry Measurement, the recommendation is that a Volume Accuracy Check is performed on a daily basis using a 3 litre syringe. The calibration syringe should have an accuracy of +/- 0.5% (15mL for a 3 litre syringe). The **SpiroConnect** spirometry software (**SpiroConnect** Data Manager) has a dedicated calibration verification routine that can be found on the software home screen:



Biological Quality Control Check

A biological quality control check involves performing three technically correct spirometry blows in normal test mode using the same healthy individual for each biological check. This is also recommended as an indicator of spirometer reliability. If any significant change in spirometry values is observed, it is highly recommended that the spirometer be returned for a full service. In normal day-to-day use it is highly unlikely that this situation should arise unless the device has been physically damaged or the turbine cleaning instructions have not been adhered to.

Numed Healthcare can supply a 3 Litre Accuracy Check Syringe at a cost of **£199 + VAT**.

For further information please call **0114 2433896** or visit the website **www.numed.co.uk**

