

SPIROMETRY TRAINING DOES NOT GUARANTEE VALID RESULTS.

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The Australian and New Zealand Society of Respiratory Science and The Thoracic Society of Australia and New Zealand's position paper on Spirometry Training Courses recommends follow up training within twelve months of a course. We undertook a quality assurance project to determine whether follow up training was necessary and if so, how follow up improves test validity. Health care professionals from rural health facilities undertook a two day, fourteen hour spirometry course. The core content of the course reflected the position paper on Spirometry Training Courses and was facilitated by experienced respiratory scientists. Course participants consented to an onsite review at 5 (V1), 7 (V2) and 9 (V3) months post course. Part one of the review consisted of the participant and an experienced scientist (S) performing spirometry on a naïve subject in random order. In part two, a retrospective review of up to 20 spirometry results was conducted at each site. Participants were assessed for adherence to American Thoracic Society acceptability and reproducibility criteria (ATS criteria) in both parts. Feedback and further education were provided at and between visits where indicated. **Results:** Fifteen participants from ten sites were available for all 3 visits. Part one revealed an improvement in adherence to ATS criteria over visits with 40% of participants testing to ATS criteria at V1 (87% S), 67% at V2 (93% S) and 80% at V3 (100% S). Part two reflected part one's findings with 27/67 (41%) of tests meeting ATS criteria and having selected best test meeting ATS acceptability criteria at V1 and 35/60 (58%) at V2, though no further improvement was seen at V3, 35/60 (58%). **Conclusion:** A single spirometry training course does not provide sufficient skill to perform spirometry to ATS criteria. Our study suggests that short term follow up is an essential component for improving test validity.

Key words: Spirometry training.

Nomination for Award: Nil