

## SPIROMETRY BY VISITING NURSES IN GENERAL PRACTICE INCREASES TESTING IN PATIENTS AT RISK OF COPD

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It is widely accepted that there is delayed and under-diagnosis of COPD in primary care. Our previous work found that lack of training and access to reliable spirometers were barriers to early diagnosis. This study compared two models of spirometry testing in practices, trained nurse (TN) versus usual care (UC) for case finding of patients at risk of COPD.

**Methods:** A 6 month study in 8 practices recruited from the Tasmanian Division of General Practice to assess lung function in a target group at risk of COPD (smokers and ex-smokers aged over 35 years) using the EasyOne™ spirometer. Practices were randomized to: 1) visiting nurse sessions 6 hours/week, 2) provision of spirometer for practice use. All GPs and nurses were trained in spirometry and its interpretation.

**Results:** 700 patients had spirometry; 531 in TN, 86 in UC practices in target group. Demographics of groups were similar (48% male, mean age 57.5 years, 38% current smokers). Fewer patients in UC group were without a current respiratory diagnosis (24% v 58%,  $p < 0.001$ ). In TN practices 254 (32%) refused spirometry. Refusers had an excess of males and ex-smokers (58% male, 71% ex-smokers;  $p = 0.03$ ). Most frequent reasons for refusing were, "I think my lungs are OK" and "I'm not interested in knowing". Good quality spirometry was higher in TN group (90% v 63%,  $p < 0.001$ ). Median test time in TN group (without reversibility) was 5 minutes (range 3-15) and median number of attempts needed for a complete test was 4 (range 3-10).

**Conclusions:** Trained nurse sessions in general practice are a feasible and very effective method of increasing the frequency and quality of spirometry for the target group of patients at risk of COPD as specified in COPDX guidelines.

Conflict of interest: No