Objective measurement of airflow obstruction, on a background of appropriate history, symptoms and exposure (usually to cigarette smoking) is essential in making a diagnosis of COPD. Spirometry, measuring inter alia FEV1 and FVC, is the accepted standard practice. A multi-agency Guide to Performing Quality Assured Diagnostic Spirometry (the “ARTP Standards”) was published in 2013. These are listed in Figure 1.

Practices in five CCGs were invited to participate. A SNOMED audit identified patients with a READ code for COPD. National Services for Health Improvement (NSHI) nurses conducted a case notes review hand search seeking “diagnostic” (first) spirometry. This was assessed against ARTP technical standards and accepted clinical interpretation for obstructive, restrictive or normal patterns.

Some of the standards proposed may be challenging to achieve in a general practice setting. We assessed the performance of general practices against the criteria.

Method

Practices in five CCGs were invited to participate. A SNOMED audit identified patients with a READ code for COPD. National Services for Health Improvement (NSHI) nurses conducted a case notes review hand search seeking “diagnostic” (first) spirometry. This was assessed against ARTP technical standards and accepted clinical interpretation for obstructive, restrictive or normal patterns.

Results

Twenty seven practices from five English CCGs participated and the notes of 1339 patients with a Read code for COPD were reviewed. Of these, 1230 had a record of spirometry being performed (92%).

COMPLIANCE WITH ARTP CRITERIA:

It wasn’t possible to identify, from routine care individual clinical records, operator competency, maintenance and calibration of equipment or patient preparation.

Full compliance with other ARTP criteria was accepted in 762 cases (62%). Reasons for failure in 468 cases (38%) are shown in Figure 2.

A commendably high number of patients with COPD had a record of diagnostic spirometry. Although the ARTP report states “failing to satisfy all aspects (of quality assured diagnostic spirometry) does not necessarily invalidate results completely...”1 there will be less certainty around the outcome if all criteria are not met. There is a difference in spirometric diagnostic outcomes between the standards compliant and non-compliant groups, which may result in inappropriate treatment or unnecessary, burdensome and costly onward referral for further interventions.

Discussion

This data supports more rigorous training and subsequent assessment and/or certification of quality assured spirometry. This may be more consistently achieved in PCN based diagnostic hublets.

Conclusion

References: