STANDARDISING COPD MANAGEMENT IN PRIMARY CARE WITH A REMOTE CLINICAL PATHWAY USING COMPUTER GUIDED CONSULTATION SOFTWARE AS AN EFFECTIVE STRATEGY TO AID ELECTIVE RECOVERY: A NORFOLK AND WAVENEY CCG CASE STUDY

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Background

We have previously reported on the clinical validation and initial "real world" experience of using a computer guided consultation (CGC) to undertake COPD patient reviews in a face to face manner within primary care. This study aims to evaluate the role of the CGC within a clinical pathway where COPD reviews are conducted in a remote capacity.

Methodology/Clinical pathway

The CGC (LungHealth Ltd) is an intelligent decision support system ensuring holistic guideline-based review for COPD patients encompassing symptom interpretation including medical alerts, accurate diagnosis and staging, automated interpretation of spirometry and good practice points e.g. inhaler technique review, selection for pulmonary rehabilitation and optimisation of pharmacological/non-pharmacological interventions.

Patients on COPD registers in Norfolk and Waveney CCG underwent review with video consultation using the CGC linked directly to the GP clinical system following an initial remote review of clinical records and any prior spirometry.

Results

6,952 (2.3% prevalence) on the COPD register of which **6,892** patients across 26 practices initially underwent a remote review of their clinical record and spirometry traces.

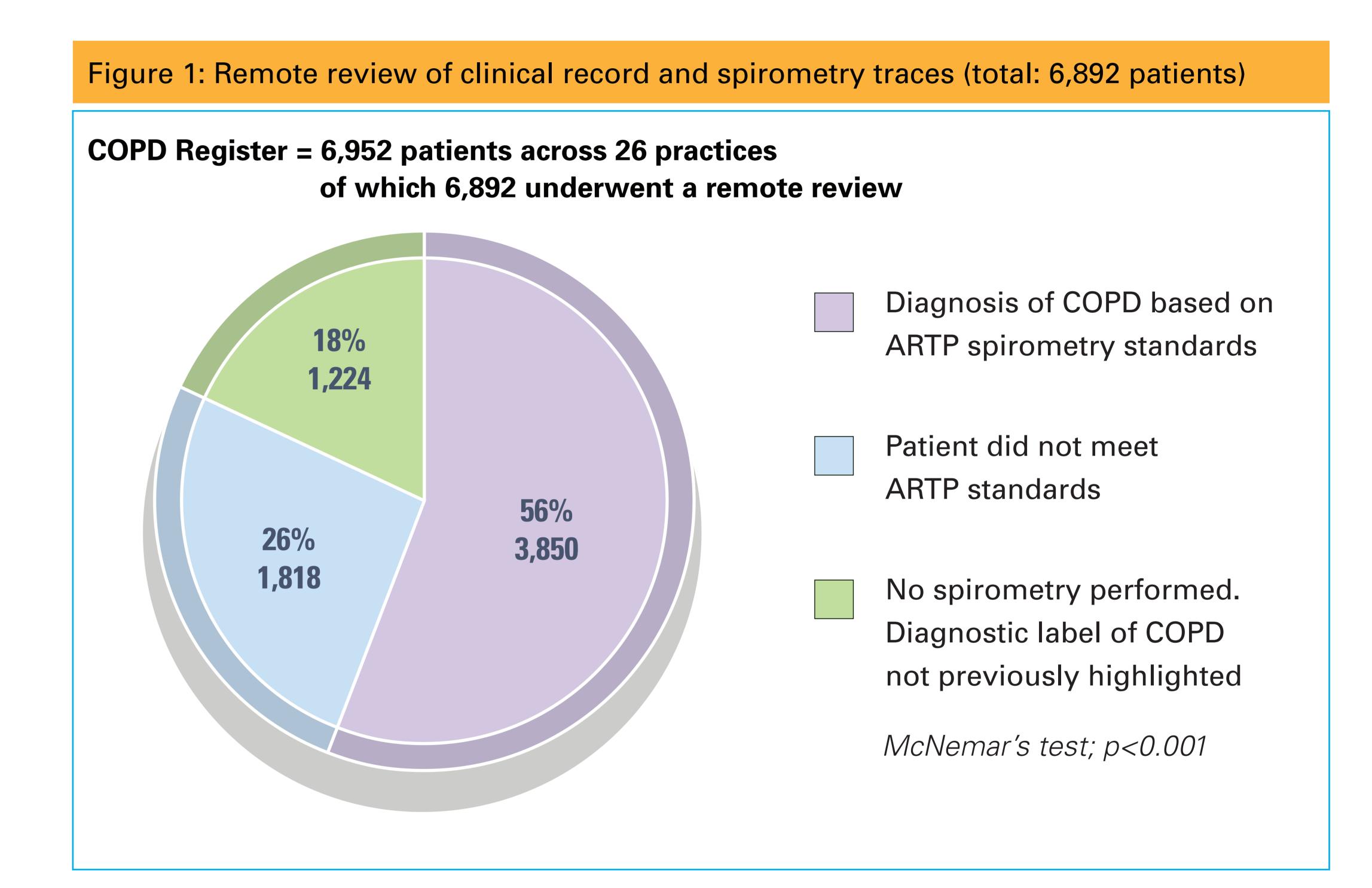
Of these, **3,850** (56%) met the diagnosis of COPD based on ARTP spirometry standards. **1,818** (26%) patients did not meet ARTP standards and a further **1,224** (18%) patients had no spirometry performed at all, yet had a diagnostic label of COPD that had not been highlighted previously (*McNemar's test; p<0.001*).

1,877 patients all labelled as COPD GOLD Group D on the register, were subsequently invited for CGC review, of which **1,661** underwent CGC review (73% remotely).

Of these, **243** (15%) either did not have a diagnosis of COPD (CGC supported interpretation) or were alerted by the software as warranting urgent medical attention following CGC review. None had been identified prior to CGC review (*McNemar's test; p<0.001*).

Of these **1,661** patients, the CGC review resulted in **1447** guideline based medicinal interventions specifically for COPD.

Group D patients invited for review	
1,877	Invited for CGC review
1,661	Underwent CGC review (73% of reviews were held remotely)
1,447	COPD specific medical intervention as a result of review
243	Did not have a diagnosis of COPD (CGC supported interpretation) or were alerted by the software as warranting urgent medical interventions specifically for COPD



Conclusion

The introduction of this remote pathway for COPD reviews in primary care embedding the use of computer guided consultation software resulted in assisting in the improved accuracy of diagnoses including COPD and other causes of respiratory symptoms and an increase in the implementation of key guideline-based interventions thus facilitating elective recovery following the pandemic.

