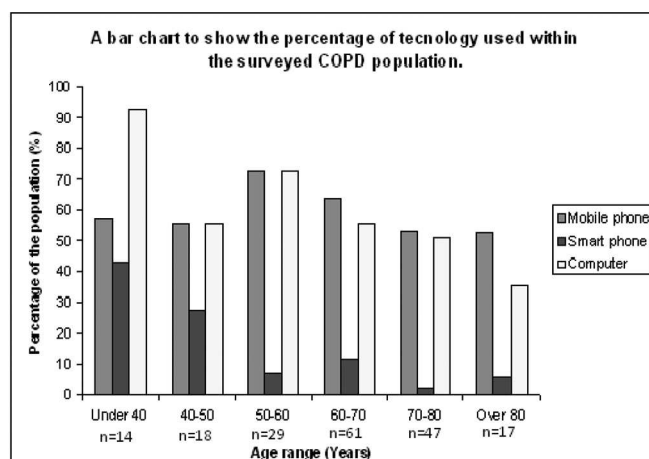


of population was; <40 yrs 14 (8%); 40–50 yrs 18 (9.6%); 50–60 yrs 29 (15.5%); 60–70 yrs 61 (32.6%); 70–80 yrs 47 (25.1%); > 80yrs 17 (9.1%). Within the total population it was found that 112 (60.5%) owned a computer and 138 (74.2%) own a mobile telephone however, of 138 only 22 (11.8%) were owners of a smart phone. Within each age range there were a small number of smart phone users but the predominant usage of smart phones occurred within the younger age ranges. Furthermore, within each age range a higher percentage of the population owned a mobile phone than those that did not. Similarly within each age range a higher percentage of the population owned a computer than did not, excluding the >80 yrs, where 9 (52.9%) did not own a computer.

Conclusion Overall the use of technology is limited in this COPD population. A significant proportion of those taking part used a mobile phone but a very small percentage used a smart phone, upon which a number of interventions might be delivered. Over half the population had a computer. There is a potential target market for providing alternative forms of pulmonary rehabilitation utilising technology, however, more evaluation is needed to ascertain whether a technological intervention would be acceptable to these patients.



Abstract P48 Figure 1.

Lung cancer: investigation and treatment

P49 INCIDENTAL PULMONARY NODULES; ARE WE DOING TOO MANY FOLLOW UP SCANS? SERVICE REVIEW AND VALUE OF PET-CT IMAGING

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Incidental lung nodules are problematic. Their detection generates 2 years of CT scan follow-up, causing patient anxiety, immense cost and a high radiation burden. Few of these nodules are malignant. The 2005 Fleischner society guidelines are complex with no reference to the value of PET- CT imaging.

The Sheffield Teaching Hospital Trust follows a modified Fleischner protocol where the majority of patients have 3 follow-up scans over 2 years. This study aimed to:

- Determine the final diagnosis of each nodule and the number of follow-up CT scans performed.
- Assess the value of PET-CT nodule imaging.
- Determine whether an experienced chest radiologist could predict which nodules were malignant/ benign by CT characteristics alone.

Pulmonary nodules under review were extracted from the Trust lung cancer database. The final diagnoses were determined after 2 + years of follow up. An experienced chest radiologist reviewed all the nodules, recording their impression of whether the nodules were benign/ malignant.

162 nodules in 140 patients were analysed. Six patients were excluded as no follow up data. 148/156 nodules were benign (95%), 7 malignant and one presumed malignant (had inadequate follow-up). The 140 patients had 427 scans follow-up CT scans (mean 2.7, mode 3). 47 patients had fewer scans than required by protocol due to eg nodule resolution (9), recommendation to stop follow-up on CT report (13) and diagnosis of other disease (11). 20/22 patients had 4 + follow-up scans due to shortened time interval between scans.

35 patients had PET CT scan. 28/29 nodules with low FDG uptake were morphologically benign and stable at 2 years. 1 “cold” nodule with malignant morphology was resected (adenocarcinoma).

The analysis of lung nodules by experienced chest radiologist found NPV 97.6%, PPV 15%, specificity 81% and sensitivity 62.5%.

Comment The vast majority of lung nodules followed-up were benign. Better use of CT nodule morphology and review by an experienced chest radiologist is advised. We recommend that patients with a “cold”, morphologically benign, nodule on PET-CT scan should have a single 12 month CT scan to confirm stability.

REFERENCES

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A LOCAL ASSESSMENT OF THE ESCALATING IMPACT OF PULMONARY NODULE SURVEILLANCE AND ITS RELATIONSHIP TO PATIENT OUTCOMES IN A DGH

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Introduction Recent national emphasis on increased awareness to improve detection of early lung cancer has led to dramatic increases in CT chest scans being performed. Consequently, increased detection of incidental lung nodules requires monitoring. In response, we set up a dedicated Nodule Surveillance Service (2 physicians, 1 radiologist, 1 surgeon, 1 tracker). To determine likely future service requirements, we assessed current resource allocation to nodule surveillance and related this to patient outcomes.

Methods Patients discussed through our local Nodule Surveillance Service over 6 months were identified, and their electronic records reviewed.

Results 107 patients (64 male) undergoing surveillance were discussed November 2012-May 2013: 71 had single nodules, 36 multiple. This constituted an average 25 extra patient-discussions/month. Mean age 67years (range 39–93years); smoking status 27 current, 53 ex-smokers, 22 non-smokers. Referral