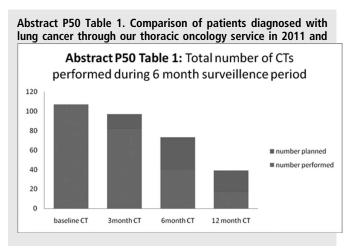
pathways: 2WW 37, inpatients 15, angiograms 6, PE service 5, respiratory OPD 17, other MDT 4, OPD 11, GP 3. Only 4/107 patients (3.7%) had high suspicion for lung cancer at outset, - 2 confirmed at surgery, 1 received radiotherapy (age 91yrs), 1 declined treatment. No further pathology was detected from surveillance. So far, a total of 246 CTs have been performed with 72 awaited (table 1). Fifteen patients had PET-CT (all low SUV). Fourteen underwent bronchoscopy (normal). Two had CT biopsy (benign), 2 declined biopsy, 2 were smaller at biopsy. One benign lesion was resected (patient choice). Only 28 patients have been discharged from surveillance; 10/28 resolved on 3month CT, 3/28 resolved on 6month CT, 15/28 stable on 12month CT. Fleischner guidance was accurately followed in 67%, most deviance due to delayed timing of 6month CT. Twenty-nine (27%) were discussed without documented nodule size.

**Conclusion** Nodule surveillance has put a significant burden on local Thoracic-Oncology services. No unexpected pathology was encountered during this surveillance period. Until clear clinical and/or radiological identifying factors for high risk patients are understood and rationalised, nodule surveillance will have to continue. There are cost implications not only for Radiology and Respiratory services, but also to patients' emotional and physical well-being. This highlights the continued need for clear surveillance protocols supported by service development.



## P51 FOLLOW-UP OF THE INCIDENTAL PULMONARY NODULE– OUTCOMES AND COSTS

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A retrospective study to analyse the outcomes and costs of follow-up of incidental nodules (solitary and multiple) referred to our Department from 2010–2011.

Method Consecutive nodule cases were identified by reviewing CT reports of 619 patients discussed at our Lung Cancer MDT from 2010–2011. Only clinically incidental nodules were included. Information was gathered using PACS and hospital records. In our department incidental nodules are seen once in clinic and then largely managed 'remotely' via correspondence. All nodules are managed to Fleischner guidelines.

Costs for investigations/procedures/appointments were calculated using local 2012-13 reference costs. Manpower costs for

MDTs and correspondence were calculated using a 'bottom-up' costing approach.

**Results** 62 patients were referred with a new incidental nodule (s). Mean age was 66(34-92) with a 1:1 male:female ratio. 56% (35/62) had PS 0–1 and 56%(35/62) were current/ex-smokers. 66%(41/62) had a SPN. Mean size of largest nodule was 9mm.

11%(7/62) were diagnosed with malignancy, 6%(4/62) of pulmonary origin. The 3 non-pulmonary malignancies were renal, breast and metastatic squamous cell. New clinically important diagnoses were made in a further 11%(7/62) including TB/amyloid/ILD, whilst 78%(48/62) were benign.

In the malignancy group, 71% (5/7) were current/ex-smokers, 86% (6/7) had a SPN with mean size 7.7mm and there was a higher likelihood of nodules enlarging on follow-up CTs (40% versus 2% at 2nd CT). 75%(3/4) of patients with lung malignancy underwent curative treatment. In the benign group (48), the mean number of follow-up CTs/patient (excluding baseline CT) was 1.8. 21 ultimately unnecessary investigations were performed, including 9 invasive procedures. (Table) The cost of screening to the NHS to identify a single malignancy was  $\pounds$ 5805. The cost to our service per patient screened was  $\pounds$ 655 resulting in a shortfall of  $\pounds$ 455/patient compared with the  $\pounds$ 200 charge to the PCT for an initial appointment.

**Conclusions** In our study, incidental nodule follow-up led to a clinically relevant diagnosis in 22% of patients, including identification of malignancy in 11%. Whilst the study had a high yield, those who received a benign diagnosis underwent a number of ultimately unnecessary investigations, some invasive, with no gain. Our 'remote management' model of care is efficient but requires an appropriate tariff.

Abstract P51 Table 1. Additional	Investigations	Performed:	Benign
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Group.		
Investigation	Number	
PET CT	9	
Bronchoscopy	4	
CT abdomen & pelvis	1	
MRI adrenals	2	
Colonoscopy	1	
Breast lump biopsy	1	
Lung biopsy (CT/VATS)	3	
TOTAL	21	

P52 INCIDENTAL NON-CALCIFIED PULMONARY NODULES: RATIONALE FOR CT SCANNING AND COST ANALYSIS

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Introduction The advent of CT scanning as a routine test in the work-up of pulmonary disease has brought with it the unexpected detection of large numbers of pulmonary nodules, most of which are of a benign aetiology, even in high risk groups. Previous lung cancer screening studies have shown that likelihood of malignancy in nodules < 7 mm in size is < 1% in patients. Current guidance for the follow-up of these patients bases repeat CT scanning on nodule size and the risk of malignancy (Fleischner Society 2005; figure 1). However, such surveillance comes with increased healthcare costs, patient anxiety and radiation exposure. To look at this further, we reviewed the burden of repeat scanning on the healthcare economy.