Fleischner, 2) BTS guidelines using Brock (full), 3) BTS guidelines using Brock (parsimonious).

When using the Brock model we assumed worse case scenario if clinical information was not available (i.e. family history of lung cancer present). We assumed all nodules stayed stable in size and that volumetric analysis was performed.

Results 23% fewer patients (75 vs. 99) required surveillance when using the BTS guidelines with Brock models rather than Fleischner.

38% fewer CT scans (132 vs. 214) would be performed in total when using Brock (full) compared with Fleischner.

31/99 patients had nodules ≥ 8 mm. Using the Brock (full) model 9/31 would have PET-CT compared with 6/31 with the Brock (parsimonious) model.

Abstract P168 Table 1 Lung nodule follow-up when using the 3 different surveillance methods

	No. (%) of patients requiring CT follow-up	Total no. CT scans performed in all patients requiring follow-up
Fleischner	97 (97%)	214
BTS with Brock- Full with Spiculation	75 (75%)	132
BTS with Brock- Parsimonious with Spiculation	75 (75%)	129

Conclusion The new BTS guidelines will significantly reduce both the number of patients requiring radiological follow up for indeterminate nodules and also the total number of scans required overall.

Even assuming worst case scenario in terms of clinical risk factors there is very little difference between Brock (full) and Brock (parsimonious). This needs assessing in a larger population with clinical outcomes evaluated.

P169 FDG PET-CT SCANS – WHO BEST USES THIS EXPENSIVE RESOURCE?

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Introduction and objectives FDG PET-CT scans are a valuable tool in the diagnosis and staging of lung cancer, but their growing use in other diseases can cause resource issues, and in some cases they may be ordered by non-specialists further congesting the patient pathway. To study this further, we looked at referral patterns for PET-CT scans in the diagnosis of lung cancer at our hospital, paying particular attention to the reason for the scan and the referring clinician.

Methods A retrospective audit was undertaken of all PET-CT scans performed for the investigation of suspected lung cancer in 2014 by the Liverpool Lung Cancer Unit (LLCN). The LLCN consists of Liverpool Heart and Chest Hospital, a specialist cardiothoracic centre in the North West of England and the Royal Liverpool University Hospital, a teaching hospital.

Results All 253 PET-CT scans (186 for outpatients) carried out during 2014 for the investigation of suspected lung cancer were reviewed. One hundred and seventy five (69%) found

malignancy. Scans ordered by lung cancer specialists were more likely to demonstrate a cancer diagnosis (145 cancer versus 52 benign) compared to those requested by non-specialists (30 cancer versus 26 benign), (Chi2 = 8.21, P < 0.01) (Figure 1).

Abstract P169 Figure 1 Difference in PET-CT cancer diagnosis between lung cancer specialists and non-lung cancer specialists

The commonest causes for a negative scan result were mass 27 (34%), nodule follow up 17 (22%) and new nodule assessment 14 (18%) respectively. Of 31 patients (39%) who had a PET-CT scan for nodule assessment, 8 (26%) were <10 mm in diameter. Overall, 22% of all negative scans were for nodule surveillance.

Conclusions We have shown that scans arranged by lung cancer specialists are more likely to give a positive yield, and also that the guidance for their use in nodule investigation is not being strictly followed. The results indicate that there is a need for better guidelines and patient pathways to ensure the most appropriate use of expensive resources.

P170 OUTCOMES FOLLOWING PURSUIT OF A TISSUE DIAGNOSIS IN ELDERLY PATIENTS WITH SUSPECTED LUNG CANCER

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Background 40% of cases of lung cancer are diagnosed in patients aged 75 years and over. Comorbidities, frailty and poorer tolerance of therapy are challenges for diagnosis and management. We explored clinical outcomes and survival in a cohort of elderly patients in which a tissue diagnosis was pursued.

Methods 43 patients aged 75 and older who attended between 01/11/2013 and 30/04/2014, where a West Glasgow MDT decision was made to pursue tissue diagnosis were identified from audit data. Survival was reviewed at April 2015.

Results Mean age was 80 $\pm$ 4 yrs; 21 male/22 female; WHO Performance Status (PS) of 0 (2 pts), 1 (27 pts), 2 (5 pts), 3 (5 pts), Not Documented (4 pts). 17 patients had Bronchoscopy +/- EBUS-TBNA, 19 CT-guided lung biopsy, 5 other core biopsy, 2 positive pleural aspiration. Histology was non-small cell lung cancer in thirty-two (74%) patients, small cell lung cancer in three (7%) patients, mesothelioma in three (7%) patients, other malignancy in 3 (7%) patients and non diagnostic in 2 patients (diagnosis registered as clinical lung cancer). Seventeen (40%) patients were treated with curative intent (surgery, radical