

secondary care. 4 patients following repeat imaging were diagnosed with cancer. 3 of these had nodules initially, 1 had inflammatory shadowing.

**Conclusion** The 'straight to CT' pathway dictates that all patients with a CT scan not suggestive of lung cancer remain under the care of the referring clinician. Only 35% of patients subsequently needed referral for secondary care advice. The 'straight to CT' service not only provides prompt action for patients with cancer but empowers primary care to manage non-malignant diseases. Patients are now managed in the most appropriate setting and inappropriate hospital visits minimised.

### P83 INTRODUCTION OF "STRAIGHT TO CT" IN A LUNG CANCER UNIT – TWO YEARS ON

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10.1136/thoraxjnl-2016-209333.226

**Introduction** In 2014 we introduced in conjunction with our primary care colleagues a "straight to CT" protocol for patients with suspected lung cancer, to not only to speed up the diagnostic pathway but also to reassure at an early stage patients without the disease. However, some clinicians suggested that this approach may increase the burden of CT scans performed without improving cancer care.

**Method** "Straight to CT" is available for patients with a CXR coded as concerning for malignancy, or via a general practitioner with concerns based on symptoms and risk factors. Following radiologist review, if appropriate scans are offered within 72 hours: scan positive cases are reviewed by the lung cancer team for onward next investigation, and where the scan is negative the result is faxed by radiology back to the GP. We compared 2015 data with that for 2014, looking for route of referral, investigations performed, and outcome.

**Results** In 2015 [2014] 464 [468] were eligible for the "straight to CT" pathway. Of these 258 (56%) [246, 53%] coded chest X-rays and 206 (44%) [222, 47%] 'worried clinician' referrals.

Of the coded CXRs, 24 [22] patients (9%)[9%] declined further investigation. Of the 234 [224] who accepted a 72hr hour CT scan, 149 (64%) [119, 53%] had confirmed cancer.

Of the 206 [222] 'worried clinician' referrals, 21 (10%) [16, 7%] patients declined further imaging or assessment, and 32 (16%) [29, 13%] were deemed inappropriate. Of the 153 [177] remaining who went on to have 72 hour CT scans only 29 (19%) [42, 24%] had cancer confirmed.

Overall, 387 [401] CT scans were carried out. 178 [187] patients were accepted by the cancer services, and 209 [214] patients remained under primary care.

Cancer conversion rates for accepted patients was 70% [79%]  
**Conclusions** This study has shown that the burden placed on radiological services has remained constant during the two years of our innovative service, and we had previously shown that introducing this protocol did not increase the overall number of scans. We recommend this pathway to other lung cancers units as a way of improving their diagnostic pathway.

### P84 THE RELATIONSHIP BETWEEN UNADJUSTED REFERRAL TO TREATMENT TIMES, DISEASE STAGE AND SURVIVAL IN LUNG CANCER

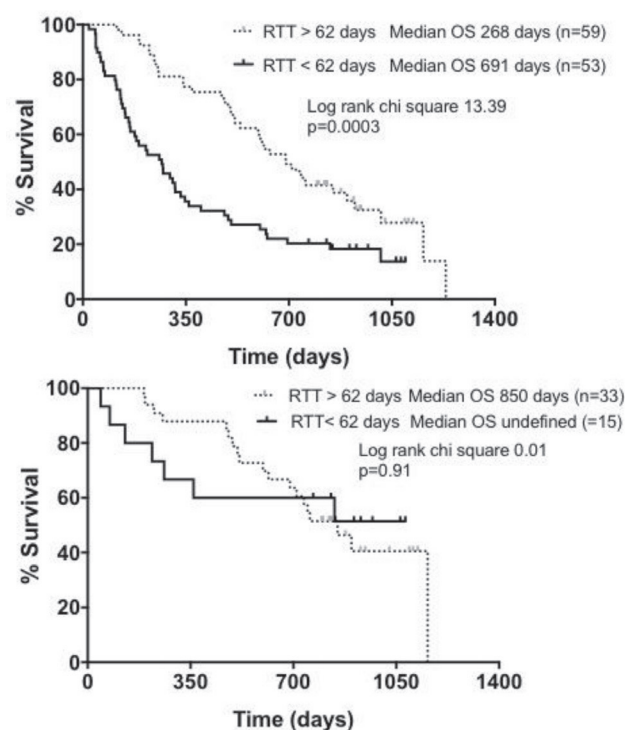
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10.1136/thoraxjnl-2016-209333.227

**Introduction and objectives** Cancer waiting times (CWT) targets have helped hospital services evolve to meet the needs of Lung Cancer patients. However, these outcomes are adjusted to allow for perceived clinical complexity or deviation from a 'standard' diagnostic journey. Few patients breach CWT targets in our unit. We performed a retrospective audit to determine the actual time our patients spent on diagnostic pathways and how this related to disease stage and survival.

**Methods** 377 consecutive patients who presented with Lung Cancer during 2013 were identified from our MDT database. 243/377 (64%) presented as an inpatient and were excluded. 22/134 GP referrals were excluded (insufficient records, aborted investigation (clinical deterioration, patient preference), incomplete staging) leaving 112 cases. Demographics, histology, referral-to-treatment (RTT), referral-to-diagnosis (RTD) and diagnosis-to-treatment (DTT) times were recorded. Overall Survival (OS) based on RTT times and Stage was assessed using Kaplan-Meier methodology.

**Results** 82/112 (73.2%) patients had non-small cell lung cancer, 18 (16.1%) had small cell lung cancer and 12 (10.7%) were radiologically-diagnosed. 48/112 patients (42.9%) had stage I to IIIA disease. Mean RTD, RTT and DTT times were 43 (SD 55), 69 (SD 45) and 26 (SD 51) days, respectively.



**Abstract P84 Figure 1** a) Univariate Survival analysis based on Referral to Treatment time < or > 62 days in 112 patients with Lung Cancer (all stages) b) Univariate Survival analysis based on Referral to Treatment time < or > 62 days in 48 patients with potentially radically treatable Stage I-IIIa Lung Cancer

RTD time was <31 days in 57/112 cases (50.8%). 31.6% of these were Stage I-IIIa, compared with 54.5% Stage I-IIIa when RTD was >31 days.

RTT time was <62 days in 59/112 cases (52.7%). 25.4% of these were Stage I-IIIa, compared with 62.3% Stage I-IIIa when RTT was >62 days.

RTT time was <62 days in 15/48 (31.3%) Stage I-IIIa patients and <62 days in 44/64 (68.8%) patients with Stage IIIB-IV.

**Conclusions** Despite few CWT breachers, RTT times were frequently >62 days suggesting pathway adjustments have a major impact. Patients with earlier stage disease, and the most to lose from diagnostic delay had longer diagnostic journeys. The survival disadvantage of short pathways likely reflects stage mix. Pathway redesign to accelerate the complex diagnostics needed for radically-treatable disease should be considered. CWT adjustments may have unintentionally clouded this issue.

### P85 VIRTUAL LUNG CANCER CLINIC: EARLY EXPERIENCE AND FEASIBILITY

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10.1136/thoraxjnl-2016-209333.228

**Background** With increased public awareness, cough campaigns and incidental nodules on computed tomography (CT), referrals on a Lung Cancer Pathway (LC) have risen significantly. Safe and effective methods to transfer patients to Respiratory Pathways (RP) are essential.

**Aims** to evaluate a chose and book, virtual Lung Cancer Clinic (VLCC) to facilitate non-face-to-face “blind” rapid patient assessment, next investigation and appropriate out-patient review.

**Methods** A retrospective review of all referrals during the period March–May 2016 was undertaken to assess whether blind clinical decision-making at point of referral was sufficient to plan on-going management.

**Results** 60 referrals were reviewed in VLCC by a Lung Cancer Consultant Physician (average time from referral 2 days, range 0–4 days) as their first 2 week wait appointment. 17 (28%) patients had a final diagnosis of Lung Cancer (histological 12, radiological 5).

Only 29/60 (48%) were of an acceptable quality for blind decision making. 16 (27%) referrals did not have sufficient information provided to allow any decision to be made and further information from the GP was requested.

26 referrals (43%) were removed from CP onto RP at VLCC review: 14 did not require a CT; 12 scans were undertaken (7 high resolution CT, 1 CT pulmonary angiogram, 4 staging CT), 8 prior to clinic attendance.

34 referrals (57%) remained on CP: 30 (88%) proceeded to staging CT with average wait 12 days (range 3–17 days) from referral, all performed prior to clinic attendance. 1/34 died prior to clinic attendance. 3/34 were scanned before VLCC. A further 8 referrals were removed from CP after imaging.

Thus, only 36/60 (60%) referrals were seen in the Lung Cancer Clinic. There was appropriate pathway change in 30% of referrals to General Respiratory (25%) and Pleural Clinic (5%).

**Conclusion** The VLCC can effectively assess and plan next investigation with appropriate clinic follow-up for suspected Lung Cancer patients. However, blind decision-making relies upon good clinical information from the referrer and administrative time can be wasted chasing this. Our data confirms that the VLCC facilitates efficient use of Out-patient and Radiology Services.

### P86 OPTIMISING PATIENT FLOW AND USE OF RESOURCES IN THE TWO WEEK WAIT PATHWAY

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10.1136/thoraxjnl-2016-209333.229

**Introduction** Lung cancer is the most common cause of cancer death in the UK. Survival is improving but is worse than in some European countries and North America.<sup>1</sup> NICE guidelines recommend that patients with suspected malignancy are seen within two weeks of referral.

An earlier local audit found that 22% of patients referred on the pathway had lung cancer and identified a need to streamline the service. Referrals are triaged as high, intermediate and low risk by a respiratory Consultant based on chest X-ray and clinical details. High-risk patients are prioritised for CT imaging and lung clinical nurse specialist (CNS) time. All patients remain on the two week pathway regardless of triage status.

This study reviewed whether this triage system is accurate in identifying patients with malignancy, thereby improving resource utilisation.

**Method** Data was collected retrospectively on two week wait referrals during June and July 2015, using referral forms and electronic medical records. Data included key dates in the pathway, triage status and diagnosis.

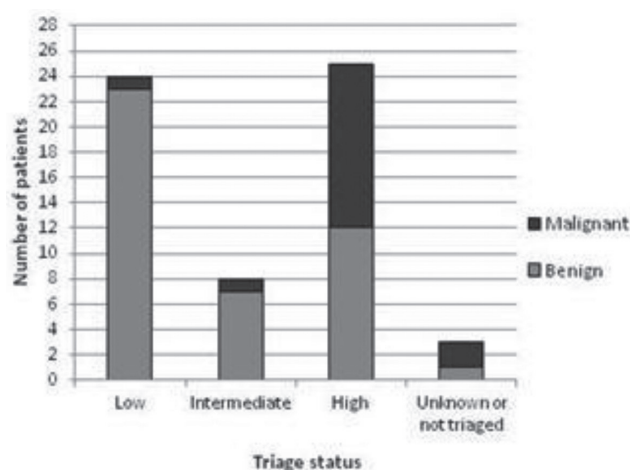
**Results** 25 of 60 patients were triaged as high risk. Thirteen of these patients had cancer. Two patients with lung cancer were not triaged as high risk.

Triaging a patient as high risk had a sensitivity for lung malignancy of 86.7% and specificity of 71.4%. Positive predictive value was 0.52.

Nineteen patients triaged as high risk had a CT prior to clinician review and the remaining three had a CT within 3 days. This was three times higher than in the low/intermediate group.

The CNS attended the majority of initial clinic appointments in prioritised patients, unless CT showed benign disease.

**Conclusion** The triage method correctly identified patients with malignancy in the majority of cases. This led to efficient use of resources. Patients with lung cancer had earlier imaging and access to the CNS. Lung cancer symptoms can overlap with other respiratory conditions and following the initial clinical review, the respiratory clinician may decide to investigate some patients less urgently. In future, this method could help stratify urgency of referral.



**Abstract P86 Figure 1** Number of patients triages high/intermediate/low with benign or malignant disease