

## P211 TIME TO DIAGNOSIS AND TREATMENT FOR PATIENTS WITH AN UNDIAGNOSED PLEURAL EFFUSION- RAPID PLEURAL CLINIC- WYTHENSHAW HOSPITAL

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**Introduction and Objectives** The pleural service runs in parallel to the RAPID lung cancer diagnostic service at Wythenshawe Hospital. This is a tertiary referral service within Manchester Foundation Trust.

Our current practice is to offer an urgent outpatient appointment with diagnostic aspiration at time of assessment and proceed to a tissue diagnosis if required.

Our aims were to assess time to diagnosis and treatment for patients presenting with an undiagnosed pleural effusion, to determine the percentage of patients who were diagnosed on cytology and molecular studies, and to assess for those who had a biopsy which form of biopsy achieved a diagnosis and the associated complication rate.

**Method** This retrospective study reviewed all patients referred to the service from January 2018 to June 2019, with a pleural effusion of unknown aetiology to look at time to diagnosis and treatment, based on the initial investigation. Outcomes of procedures, need for further investigation and fluid management and complication rates were also analysed.

**Results** 85 patients were seen during this study period. 77 (91%) had a diagnostic aspiration and 8 (9%) went directly to Medical Thoracoscopy (MT). 34 (44%) patients undergoing diagnostic aspiration required further investigation. 19 (25%) in the form of MT, 5 (6%) image guided pleural biopsy and 10 (13%) video assisted thoracoscopy (VATs). In 56% cases, pleural aspiration was sufficient for diagnosis without need for further investigation. Further fluid management was required in 19% (n=15) of those who had a diagnostic aspiration alone, 10% (n=3) of those who underwent MT and 20% (n=1) of those undergoing image guided pleural biopsy. The mean time to treatment across all patients was 18.9 days and 33 days in those who require systemic anticancer therapy. 2 (2%) of patients breached the 62-day time- to-treatment pathway due to patient choice to delay chemotherapy.

**Discussion** Our service is operating within the 62-day target (98%) with two breaches due to delay in chemotherapy which was patient choice. We will continue to offer diagnostic pleural aspirations as part of our workup. Direct to MT will continue to be considered in cases where mesothelioma is suspected.

## The lung cancer diagnostic journey

## P212 PREHAB4CANCER: AN INNOVATIVE REGIONAL LUNG CANCER PREHABILITATION SERVICE

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**Introduction and Objectives** Surgical resection for lung cancer is physically and emotionally demanding for patients, with risks of complications and morbidity. Prehabilitation aims to maximise patients' fitness, nutrition and wellbeing before treatment to improve outcomes. The existing literature on lung cancer prehabilitation points to improved functional capacity, post-operative length of stay & frequency of complications. As such, it is recommended in current guidelines.<sup>1</sup>

**Methods** Prehab4Cancer, a Greater Manchester (GM) Cancer funded project, is the first regional system in the UK to introduce large-scale prehab as a standard of care for cancer patients.<sup>2</sup> Surgical lung cancer patients are rapidly assessed at one of 17 clinics. Tailored prehab interventions span exercise (re-HIIT: high intensity interval training and muscle strengthening), nutrition, and psychological support. It is delivered by 'GM Active', a collective of 12 community organisations utilising cancer rehabilitation-qualified exercise specialists. A 12-week post-op rehabilitation programme follows. Measures of fitness are recorded at baseline, pre-operatively, post-operatively, and after rehabilitation.

**Results** Since April 2019, 380 lung cancer patients have been referred from 11 hospitals, with 75% participating. Average age was 70y; 53% were female. Median duration of prehab was 39 days, with mean 2.2 sessions/week. Physiological assessments such as incremental shuttle walk test (ISWT) improved from median 350 m at baseline to 380 m. Health-related quality of life measures also demonstrated improvement (see table 1).

**Conclusions** Prehab4cancer has successfully implemented a regional cancer prehab programme that demonstrates feasibility and excellent uptake and improved patient experience. Collaboration has been key, between GM-wide healthcare professionals working together with the GM Cancer alliance, people

**Abstract P212 Table 1** Physiological and functional assessments made during prehabilitation (baseline to pre-operative). Values presented as median (IQR) unless stated otherwise.

	Baseline	Pre-operative
<b>Physiological assessments</b>		
Weight (kg)	72.1 (60.0-83.9)	70.8 (60.6-82.0)
BMI (kg/m <sup>2</sup> )	26.2 (22.8-29.3)	25.5 (22.8-28.7)
Sit to Stand (reps/min)	19 (12-22)	22 (17-27)
Hand grip (kg)	22.7 (18.7-31.1)	23.2 (18.8-31.0)
6MWT (m)	310 (232-360)	365 (319-430)
ISWT (m)	350 (260-440)	380 (290-490)
<b>Survey assessments</b>		
WHODAS	5 (2-10)	3 (1-7)
Self-efficacy scale	66 (49-77)	74 (63-81)
EQ-5D (mean)		
Mobility	1.71	1.43
Self-care	1.15	1.11
Usual Activities	1.59	1.33
Pain/Discomfort	1.85	1.62
Anxiety/depression	1.78	1.71

### Summary of survey assessments

WHODAS: lower scores indicate patient is better able to perform in their daily living tasks  
Self-efficacy scale: higher scores indicate patient has more confidence in their ability to exercise

EQ-5D: lower scores indicate better health-related quality of life

**Abbreviations:** BMI: body mass index; 6MWT: 6-minute walk test; ISWT: incremental shuttle walk test; WHODAS: WHO disability assessment schedule

affected by cancer and GM Active. Validated measures of fitness and quality of life show promising trends toward improvement among surgical lung cancer patients.

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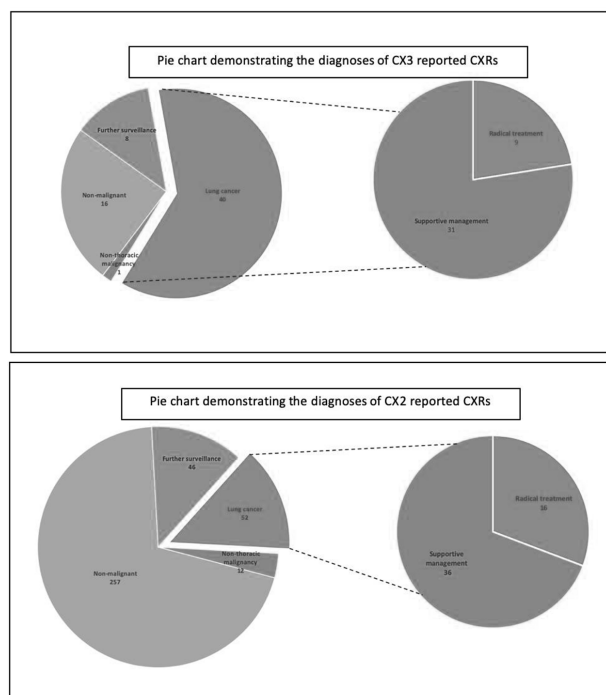
## THE EFFICACY OF THE SOUTHWEST CHEST X-RAY REPORTING TOOL (SW CXR RT) IN IDENTIFYING PATIENTS WITH A NEW DIAGNOSIS OF LUNG CANCER, SUBSEQUENTLY MANAGED VIA THE NATIONAL OPTIMAL LUNG CANCER PATHWAY (NOLCP)

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**Introduction and Objectives** The Southwest Lung Cancer Alliance introduced the Southwest CXR Reporting Tool (SW CXR RT) to help identify patients requiring reflex CT scans to streamline the first part of the NOLCP. The SW CXR RT identifies 3 categories: CX1 (normal), CX2 (abnormal pathology of uncertain significance), CX3 (highly suggestive of lung cancer). CX3 reported XR have a reflex CT; for CX2 the CT decision is at the discretion of the general practitioner (GP). We audited the efficacy of using the SW CXR RT in identifying patients with a new diagnosis of lung cancer, subsequently managed via the NOLCP.

**Methods** Results were collated over a 10-month period (1st March – 31st December 2019). The CTs of patients with CX2 and CX3 reported chest x-rays were reviewed.



Abstract P213 Figure 1

**Results** The 65 reflex CTs for CX3 identified the following diagnoses: 41 (63%) malignant condition, 16 (25%) non-malignant, and 8 (12%) undergoing further surveillance. Of malignant diagnoses, 40 (98%) were lung cancer and 1 (2%) was non-thoracic malignancy. 9 (23%) lung cancer diagnoses received radical treatment and 31 (78%) supportive management. The average time from CX3 CXR to CT was 5.8 days. The average time from CT to report was 2.3 days. The average time from CX3 CXR to CT report was 8.1 days.

The 367 separately-requested CTs for CX2 identified the following diagnoses: 64 (17%) malignant condition, 257 (70%) non-malignant, and 46 (13%) undergoing further surveillance. Of malignant diagnoses, 52 (81%) were lung cancer and 12 (19%) were non-thoracic malignancy. 16 (31%) lung cancer diagnoses received radical treatment and 36 (69%) supportive management. The average time from CX2 CXR to CT was 9.8 days. The average time from CT to report was 2.6 days. The average time from CX2 CXR to CT report was 12.4 days.

In total, 92/432 (21%) CTs were lung cancer diagnoses; 25/92 (27%) were treated radically.

**Conclusion** The discretion for CT imaging in CX2 is with GPs. Further work is needed to streamline CT imaging to ensure prompt time to diagnosis and treatment in CX2 patients with lung cancer given a greater proportion were radically treatable versus CX3.

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## A NORMAL CT CHEST NEGATES THE NEED FOR BRONCHOSCOPY FOR THE DETECTION OF COVERT MALIGNANCY IN PATIENTS PRESENTING WITH HAEMOPTYSIS THROUGH THE TWO-WEEK-WAIT PATHWAY; A RETROSPECTIVE STUDY FROM A DISTRICT GENERAL HOSPITAL

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**Introduction** Unexplained persistent haemoptysis is a red flag symptom and a common indication to refer via the two-week wait (2WW) lung cancer pathway. For patients having a normal chest radiograph who are not anticoagulated our current standard of practice is to investigate with computed tomography (CT), fibre-optic bronchoscopy (FOB) and blood panel.

Given the perceived poor yield in bronchoscopic evaluation for malignancy,<sup>1</sup> we tested the hypothesis that in haemoptysis patients a normal CT chest is enough to exclude lung cancer.

**Methods** We performed a retrospective study reviewing the medical records of all patients referred via the 2WW service with haemoptysis in one year (2018). 743 patients were screened and 128 cases were included, reviewing demographics, investigations and final diagnosis.

**Results** Of the 128 patients 53% (n=68) were male, 47% (n=60) female. The mean age was 66.8 years. 65% were current or ex-smokers. 98.4% of patients underwent CT chest imaging (n=126), of which 32.5% (n=41) were reported as normal and 67.4% (n=85) as showing pathology, malignant or otherwise. 50.7% (n=65) of patients underwent FOB.