

Targeted Lung Health Check Programme Dorset

Dr Jenny Graves: Resp Consultant DCH
and Clinical Director for TLHC Dorset
Lung Cancer Lead DCH and SSG Lung
Cancer Lead for Dorset
March 2024



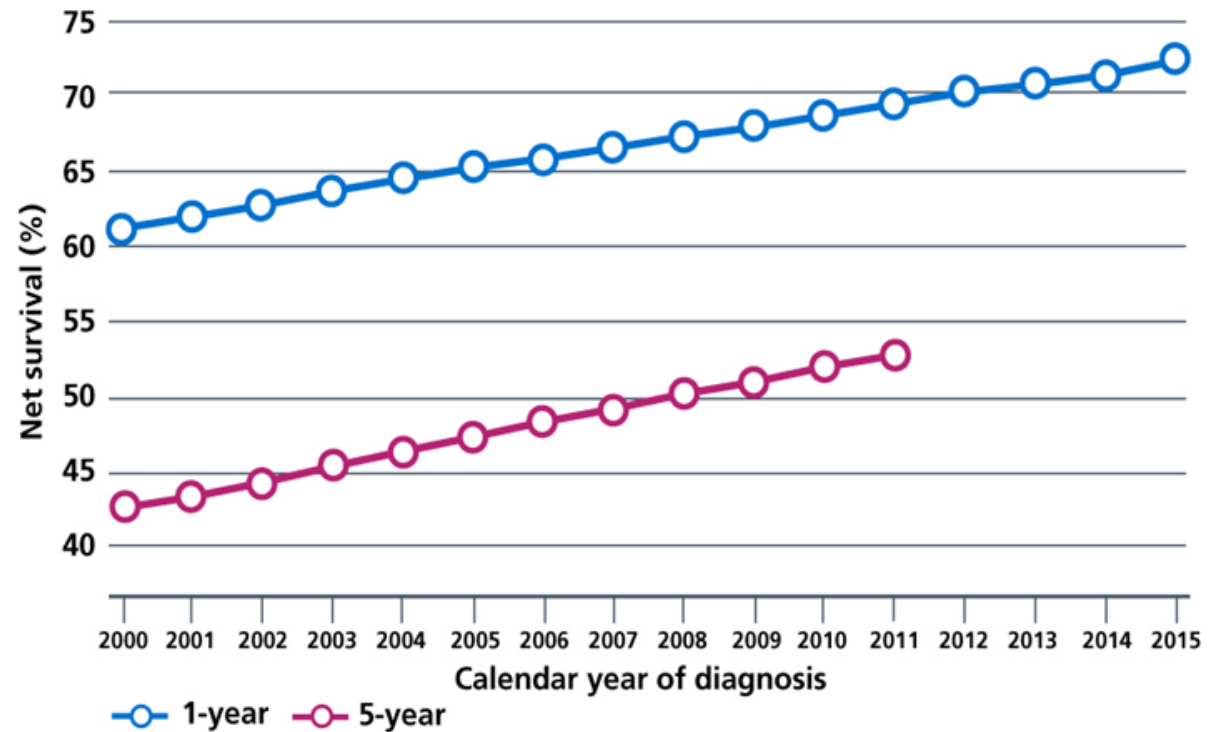
Early Cancer Detection

Cancer survival in England has been increasing over time. Ambitious targets are set out within the NHS Long Term plan:

- 75% of cancers to be diagnosed at stages 1 or 2 by 2028 (Dorset 55%, England 54.3% in 2018)
- 55,000 more people to survive their cancer for at least 5 years after diagnosis (in England)

30.8% of lung cancers were diagnosed at stage 1 or 2 in Dorset in 2018.

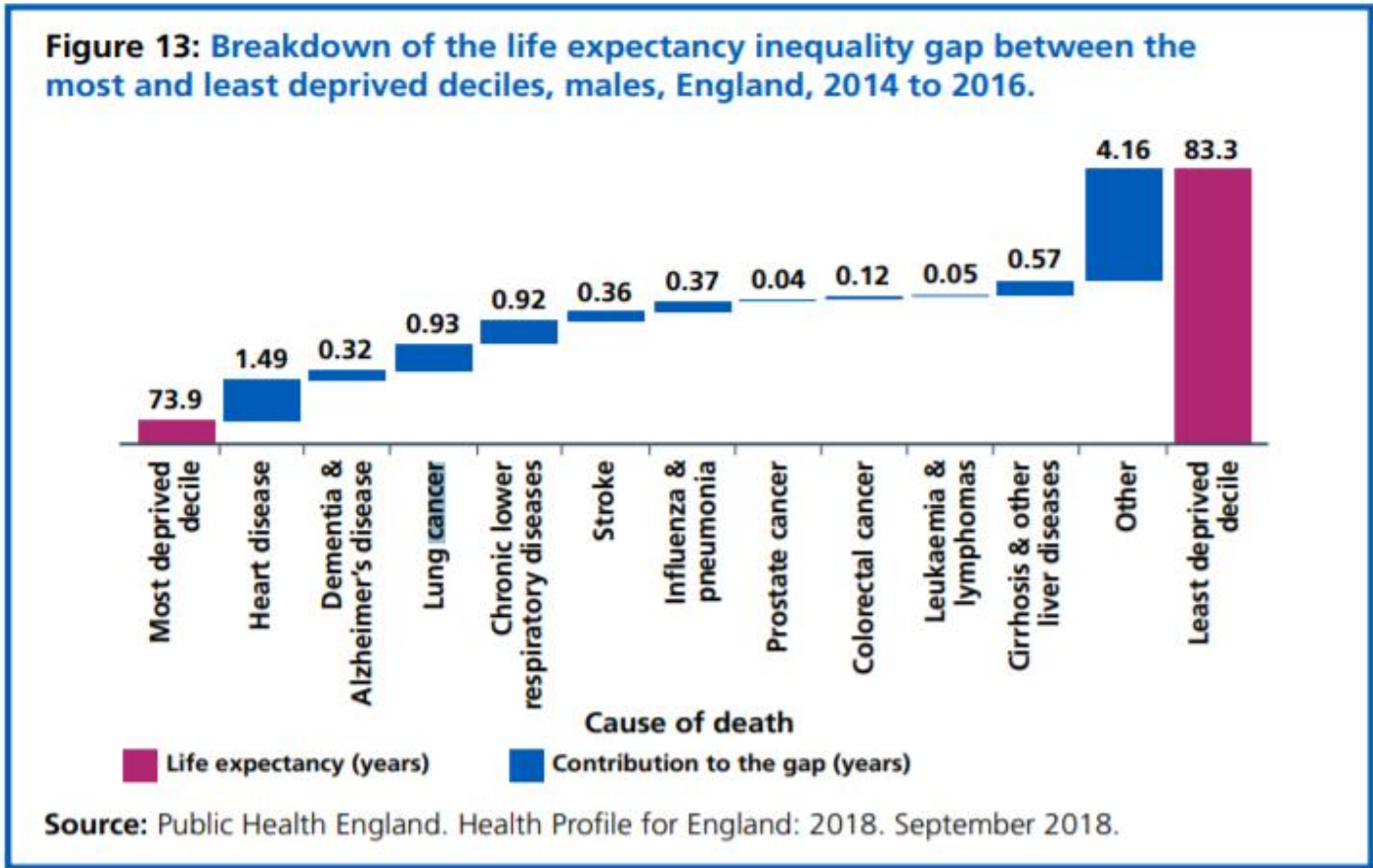
This needs a big collaborative effort by the Dorset Integrated Care System, including primary care, secondary (and tertiary) care, Dorset ICB, Cancer Alliances and Public Health.



Cancer survival in England, 2000-2015

Lung Cancer and Deprivation

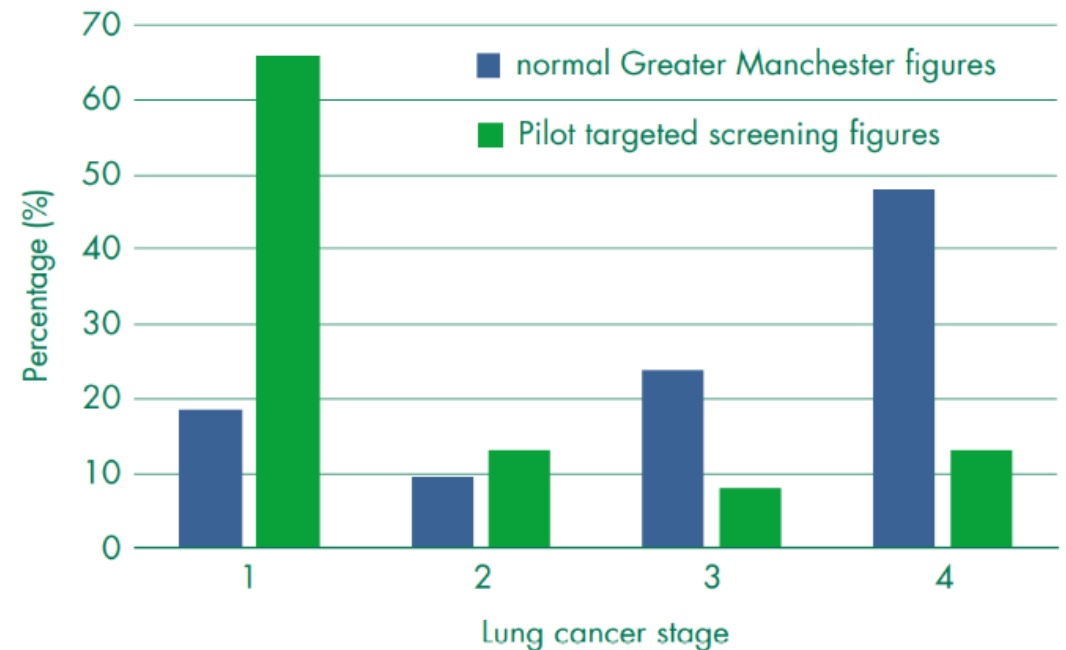
Lung cancer contributes almost a whole year to the gap in life expectancy between most and least deprived deciles (for males, England, 2014-2016).



Targeted Lung Health Checks – National

- ❖ National programme in 10 locations across England, more came on stream in 2021 inc Portsmouth
- ❖ The UK Lung Screening Trial provided the evidence base for targeted lung health checks with lung cancer diagnosed at an early stage and curative surgery offered to more than 80%.
- ❖ Manchester early adopter found 78% lung cancers at stage 1 & 2.
- ❖ NHS England published standard protocol and quality assurance standards.

Lung cancer: stage shift



Targeted Lung Health Checks – Model

- ❖ Invite eligible population for a Lung Health Check (age 55-74, ever smokers) – Initial screening call will take place prior to Lung Health Check
- ❖ Lung Health Check carried out by respiratory nurse, includes spirometry and risk assessment
- ❖ Patients at high risk of lung cancer referred for low dose CT scan (Poole or Dorchester)
- ❖ All patients offered smoking cessation advice
- ❖ Patients with positive CT scan result referred to lung 2ww cancer service
- ❖ TLHC MDT for incidental findings
- ❖ Patients with indeterminate CT scan result referred for follow up low dose CT scan in 3 or 12 months
- ❖ Patients with negative CT scan result eligible for low dose CT scan in 24 months
- ❖ Incidental findings management protocol followed and target of <8%

Finding	Reporting Recommendation	Action required	Notes
Emphysema	Classify as: <ul style="list-style-type: none"> • Mild (<25%); • Moderate (25-50%); or • Severe (>50%). 	Smoking cessation. Consider referral to local community respiratory team for moderate and severe. Enter onto COPD register if diagnosis confirmed.	It should not be used to diagnose COPD.
Bronchiectasis	Classify as: <ul style="list-style-type: none"> • Mild (airways are 1.5-2 times the size of artery); • Moderate (2-3 times the size); or • Severe (greater than three times the size of corresponding artery [7]). <p>For bronchiectasis to be categorised as severe, it must also be present in more than one segment of the lung.</p>	Mild/borderline bronchiectasis: no action or communication required. Moderate or severe bronchiectasis either: <ul style="list-style-type: none"> • refer to chest clinic if chronic cough or recurrent LRTI has been documented at the health check; or • notify participant and GP regarding standard bronchiectasis/ infection prophylaxis management and give the option of referral. <p>Consider referral to local community respiratory team.</p>	Information on symptoms should be available from the lung health check. Do not recommend for non-specific clinical correlation. Option, for review at screening review meeting. CT results with moderate and severe disease communicate result to the participant and GP.
Bronchial wall thickening	Do not report.	None.	
RBILD	Report.	Smoking cessation.	
Interstitial Lung Abnormalities (ILAs)	Report all ILD and recommend: <ul style="list-style-type: none"> • If >10% reticulation based on visual estimation, for respiratory referral; or • If 5-10%, recommend correlation with 	<ul style="list-style-type: none"> • <5% ILA does not require action or communication. • Consider referral if >10% or >5% with restrictive spirometry for further 	Option should be available for review at the screening review meeting. Only communicate significant CT results to the participant and the GP.

<https://youtu.be/wXgkKCNJsIU>

Live in Dorset since Dec 2022

- Soft roll out (we wanted to get it right!)
- Went live in West Dorset: Royal Manor, Portland Dec 2022. The Bridges, Weymouth Dec 2023
- Went Live in East Dorset: Kinson Road Surgery, Bournemouth Sep 2023 (next Banks and Bearwood),
- TLHC Research: Roche Cancer Screening Study (Lighthouse).
- Prospective blood sample collection study in healthy subjects. Followed for 4 years.
- This is done with a view to developing new testing methods for early detection of cancer in the future.

Number of participants with a Lung Cancer diagnosed at stage 1	0	0	2	0	1	1	1	0	0	5
Number of participants with a Lung Cancer diagnosed at stage 2	0	0	0	0	1	0	1	0	0	2
Number of participants with a Lung Cancer diagnosed at stage 3	0	0	0	0	0	0	0	0	0	0
Number of participants with a Lung Cancer diagnosed at stage 4	0	0	0	0	0	0	0	0	0	0
Number of participants with a Lung Cancer diagnosed with an unknown stage, that cannot be staged	0	0	0	0	0	0	0	0	0	0
Number of participants with incidental findings	7	28	37	33	28	42	82	80	63	400
Number of participants with incidental findings - Coronary calcification - I258	6	25	31	33	23	37	62	55	0	272
Number of participants with incidental findings - Aortic valve calcification - I35.0, I06.0, Q23.0	0	0	0	0	0	0	0	0	0	0
Number of participants with incidental findings - Emphysema - J43	3	11	16	14	12	17	38	39	63	213
Number of participants with incidental findings - Other Cancers - C00-D48 excluding C35	0	1	0	0	1	0	0	1	3	6
Sum of all other incidental findings (not including Coronary calcification, Aortic valve calcification, Emphysema or other cancers). Consolidation Tuberculosis Mediastinal mass Thoracic Aortic aneurysm Pleural effusions/thickening Suspicious breast lesion Thyroid lesion Liver or spinal lesions Renal lesion Adrenal lesion Abdominal Aortic Aneurysm Bone abnormalities Osteoporosis Fractures with no trauma history Respiratory Bronchiolitis Interstitial lung abnormalities	7	28	37	34	28	43	82	81	63	403
Number of participants who were offered or referred to a smoking cessation course	70	79	82	79	68	117	85	165	197	942

Trajectory: 2023-2024 Dorset

	Jan-Jun 2023	July-Sep 2023	Oct 2023- March 2024	2023-2024
Lung Health Checks	324	229	3526	4079
Initial CT scans	130	118	1817	2065
Repeat CT scans (3 months)	2	17	258	277
Repeat CT scans (12 months)			258	258

Trajectory modelling

Use yellow cells to input your eligible population and ever smoking rates, or enter your eligible ever smoker population. The orange cells are also pulled through into other spreadsheet tabs, altering them here will change data in other tabs.

Stage	No.	%	Comment
Total 55-74 population	224, 575	100.0%	Aged 55-74 & 364 days
Eligible ever-smoker population	101,143	54.0%	Of Total eligible population
Appointments booked	48,549	48.0%	Of Ever Smoked (uptake reduced from 50%)
Non attendees	3,884	8.0%	Of Appointments Booked
LHC's performed	44,665	92.0%	Of Appointments Booked
Positive LHC's	19,206	43.0%	Of LHC's analysed
Excluded from CT scan	576	3.0%	Of Positive LHC's
Non attendees (initial CT scans)	0	0.0%	Of Positive LHC's
Initial CT scans performed	18,630	97.0%	Of Positive LHC's
Indeterminate - require second scan	2,459	13.2%	Of Initial CT Scans performed
Negative CT Scan - 24 months follow-up	15,966	85.7%	Of Initial CT Scans performed
Negative CT Scan - 48 months follow-up	13,938	87.3%	Of 24 month scans
Findings	No.	%	Comment
Patients needing clinical investigation (following first scan, three months follow-up and 12 months follow-up)	1,099	5.9%	Of Initial CT Scans performed (including patients requiring investigation after second scan)
Lung Cancers found	558	50.8%	Of Needing clinic investigation
24 months follow-up	15,966	85.7%	Of Initial CT Scans performed
Patient needing clinical investigation following 24 month scan	383	2.4%	Of 24 month scans
Lung Cancers found at 24 months follow	251	65.5%	Of Needing clinic investigation
Total cancers found	809	N/A	Including those found at initial, 3, 12 and 24 months scans
Treatments	No.	%	Comment
Surgery	413	51.0%	Of Cancers found

Incidentalomas



Incidentalomas

- National TLHC Guidance to follow-quite generic
- We have worked hard to adapt these locally
- Engaged secondary care teams
- GP is part of our team
- Discussed with cardiology
- Try to put useful information on the results Eforms
- CT report NOT available to patient or GP
- Coronary artery calcification and emphysema most common findings
- Awaiting further guidance form the National team

Meet the initial Team!



Press release

New lung cancer screening roll out to detect cancer sooner

National targeted lung cancer screening programme designed to catch cancer sooner announced.

From: [Department of Health and Social Care](#), [The Rt Hon Rishi Sunak MP](#), and [The Rt Hon Steve Barclay MP](#)

Published 26 June 2023

- NHS England will be rolling out the programme nationally from 2024 onwards, with plans to reach 100% coverage by March 2030. Once fully rolled out, it is expected to detect cancer in as many as 9,000 people and deliver almost one million scans every year as well as ensuring treatment can be provided treatment earlier.

Case Example 1

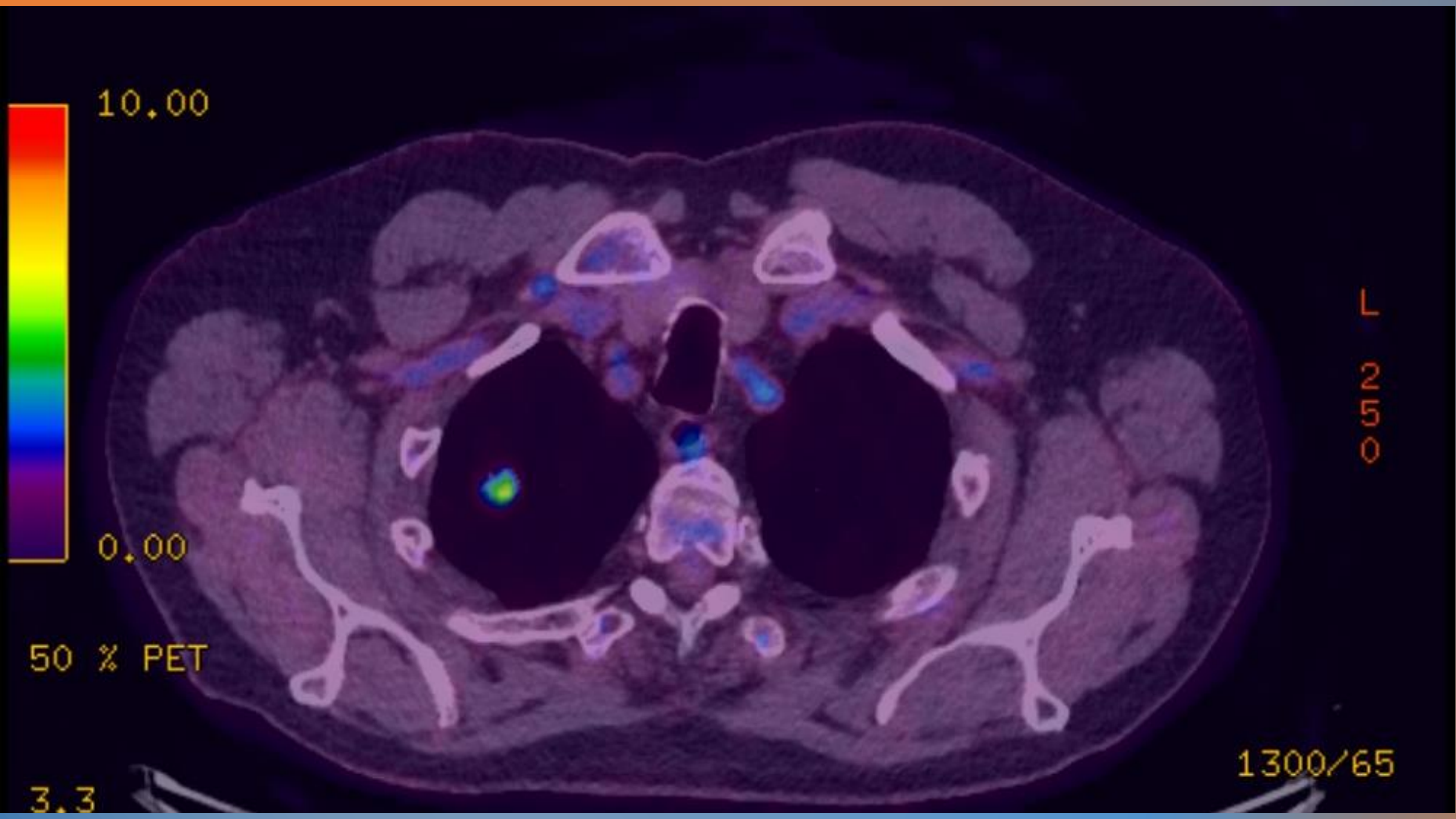
- Mr KA. 63 yr old.
- TLHC 12/01/2023
- High risk-for LD CT scan
- CT suspicious area-referred Lung Cancer Team
- Moderate coronary artery calcification

- Staging CT with contrast: 15mm spiculate RUL lesion
- For clinic to discuss PET and PFTs.



- Clinic 30/3/2023-asymptomatic.
- PET/PFTS/ECHO and refer surgery.
- ECHO normal
- PFTs
- PET: Lung lesion, bowel polyp-for colonoscopy (benign polyp removed), large left renal stone-referred urology (for lithotripsy)





10.00



0.00

50 % PET

L
250

1300/65

3.3

- June 2023: Right lung segmentectomy: Adenocarcinoma pT1bN0 = 20mm. No further treatment needed.
- Baseline CT Sep 2023 = No recurrence.

Case Example 2

- MR GE. 73-year-old.
- TLHC 9/5/2023
- High risk-for LD CT scan
- CT-small left sided pleural effusion-referred Lung Cancer Team

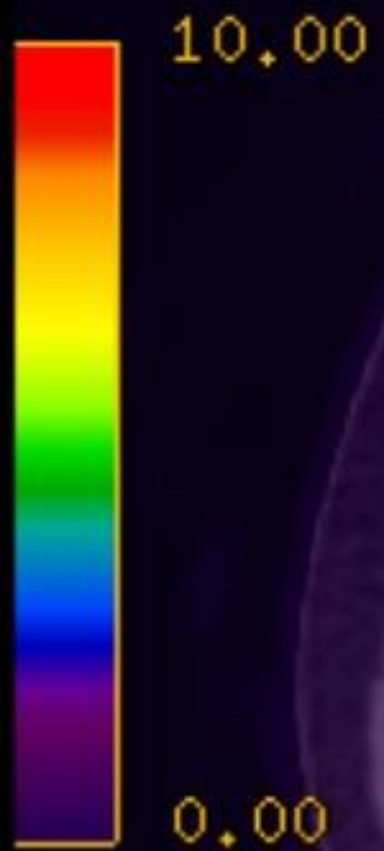
- Staging CT with contrast-confirmed stable effusion
- Pleural Clinic review



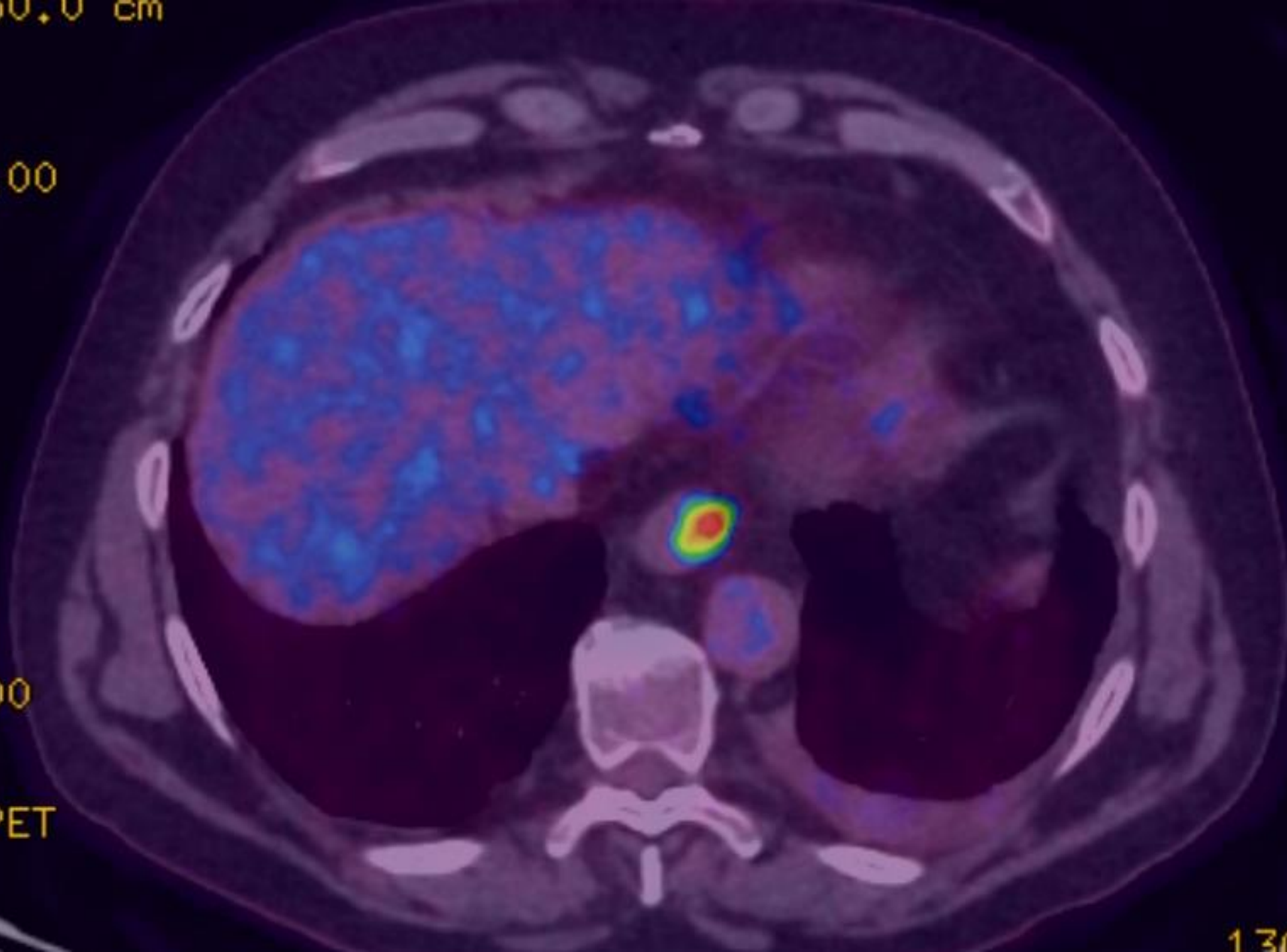
- Pleural clinic 9/8/2023.
- Ex smoker, but no asbestos exposure.
- Asymptomatic bar occasional fluid appearing at the back of his throat.
- USS-trace of fluids-too small to tap.
- For PET scan

- PET-pleural fluid bland
- Markedly avid distal oesophageal tumour with no distant metastatic disease

DFOV 50.0 cm



50 % PET



L 2520

1301/108

- Referred upper GI MDT
- Endoscopy: 18/9/2023-tumour seen
- MDT: Adenocarcinoma of oesophagus-for radical treatment



Targeted Lung
Health Check
Programme

NHS

**A 30 minute
appointment
could save your
life.**

