

National Lung Cancer Audit

Patient and Executive Summary
Report for the Audit Period 2007

Prepared in association with:



Introduction to this document

The full third Annual Report of the National Lung Cancer Audit covers patients diagnosed with lung cancer or mesothelioma who were first seen in 2007 and is available at www.ic.nhs.uk. The purpose of this summary document is to act as an indexing system for the full report and to provide a brief summary of the key findings.

Key Messages

- The audit has collected data on more than 26,000 patients in the UK for this audit period, representing over 75 per cent of the expected number of lung cancer cases. By the end of June 2008, all cancer networks in England, Wales and Scotland were contributing to the audit and only one hospital trust (in England) had never contributed.
 - The quality of the submitted data has improved compared with previous years allowing more detailed comparison of cancer networks and hospital trusts. Overall the measures of care appear to be improving slowly but still are below those reported from other Western European countries.
 - Despite these improvements, there remains a wide a variation across trusts and networks. And differences in casemix do not appear to explain the whole of this variation.
1. Histological confirmation (i.e. a diagnosis made by taking a sample of tissue or cells) of the cancer diagnosis is made in 68 per cent of patients but varies from less than 20 per cent to more than 85 per cent. Based on the performance of Trusts in previous years, a histological confirmation rate of at least 75 per cent is a reasonable benchmark for acceptable practice, the overall confirmation rate is lower than would be expected. Cancer Networks and Hospital Trusts need to review their diagnostic methods and ensure they have access to the full range of tissue sampling techniques.
 2. The overall unadjusted proportion of lung cancer patients receiving an operation to try to cure their cancer is 10 per cent but varies from less than 5 per cent to more than 25 per cent among the English and Scottish trusts. Organisations need to review their pathways for decisions on, and referral for lung cancer surgery, for example by increasing access to

thoracic surgical expertise at multidisciplinary meetings.

3. Active anti-cancer treatment (i.e. surgery, chemotherapy or radiotherapy) is offered to 51 per cent of patients overall, but this figure varies from less than 10 per cent to more than 70 per cent. Cancer Networks and Hospital Trusts need to examine their processes for decisions on, and referral for cancer treatment, for example by reviewing their local treatment methods in light of national guidance.
- There is an urgent need for Cancer Networks and Hospital Trusts to take responsibility for their data and use it to review their local lung cancer services. This report contains a toolkit to help with this process.

Details of the Chapters in the full NLCA report

- Chapter 4 covers the background to the audit and this annual report. It sets out the reasons why national audit is important and gives some information to enable non-specialists to better understand the information presented later in the report.
- Chapter 5 covers the limitations of the report, by discussing the limitations of the data collected. For meaningful analysis of the data, in particular casemix adjustment and comparison of cancer networks and hospital trusts, the data needs to be as complete as possible. By June 2008, all networks in England, Wales and Scotland were contributing to the audit and only one trust (in England) had never contributed. The overall number of cases submitted to the audit has grown from approximately 10,000 from England alone in 2005 to 22,628 from England and Wales for the year in question, representing 75 per cent of the expected number of cases. A further 3,524 cases from Scotland (88 per cent of expected) enhances the report. This is the first time data from Scotland's lung cancer audit is included. Due to differences in reporting schedules, agreed standards and targets the Scottish data are reported separately and this year focuses on five key measures.

The quality of the data is improving with, for example, stage field completeness rising from 47 per cent in 2005 to 59 per cent in 2007 and

recording of treatment rose from 66 per cent to 79 per cent.

- Chapter 6 looks at the number of lung cancer patients across different groups such as cancer cell type, age, sex, stage, performance status and co-morbidity. Of the 22,628 cases analysed from England and Wales, 9.9 per cent were small cell lung cancer, 4.8 per cent were mesothelioma and the remaining 85.3 per cent were either histologically confirmed NSCLC cell lung cancer (54.1 per cent) or patients in whom the diagnosis was made on clinical ground (45.9 per cent- the vast majority of which can be assumed to have non-small cell lung cancer). 59 per cent of patients were male and 41 per cent were female, with an age-range similar to previous years. Most of these cases are diagnosed between ages 60-85. Patients most often present with Stage IV (metastatic disease) but more patients have good performance status (0-1) than poor performance status (2-4). There are a variety of important co-morbidities in these patients.
- Chapter 7 examines the pathway for lung cancer patients. Almost half (47 per cent) are referred to a specialist from their general practitioner but a significant proportion are referred via other routes including after an emergency presentation. The chapter contains details by cancer network and hospital trust of the times taken between referral to first specialist appointment and between first appointment and initial treatment. Overall the median (middle) wait between referral and first appointment is 6 days (interquartile range 0-11 days). The median wait between first appointment and initial treatment is 29 days (interquartile range 15-49 days), being longer for GP referrals (median 35 days) than non-GP referrals (median 23 days). These intervals are not the same as those recorded under the Department of Health's Cancer Waiting Times initiative.
- The overall aim of the National Lung Cancer Audit is to record information about process and outcomes in lung cancer and through casemix adjustment, start to explain the wide variations in outcome that have been noted in previous studies. Chapter 8 is devoted to those measures of process and outcome that are of key importance in lung cancer.

For England and Wales, the proportion of patients who have a histological/cytological (tissue) diagnosis

is 67.7 per cent. Based on the performance of cancer units in previous years, a histological confirmation rate of at least 75 per cent would seem a reasonable benchmark of acceptable practice and so the overall confirmation rate is lower than would be expected. Furthermore, this average figure hides wide variation across organisations. Scottish data shows an overall higher confirmation rate with less variation. The proportion of patients that are discussed in an MDT meeting in England and Wales is 87.2 per cent. These results fall short of the national target of 100 per cent, although it is acknowledged that a target of 95 per cent is probably more appropriate. Again, there is a wide variation in practice across cancer networks and hospital trusts. Analysis of treatment rates show that in England and Wales, 51.3 per cent are recorded as receiving active anti-cancer treatment (62.3 per cent in Scotland) with 9.9 per cent having surgical resection (9.7 per cent in Scotland). For patients with SCLC, 61.9 per cent are recorded as receiving chemotherapy. Once again, these averages hide wide variation across trusts and networks. Casemix adjustment using age, deprivation, performance status and stage has been applied to these quality measures, as well as to measures of median survival, and they demonstrate that the wide variations between organisations cannot, in general, be explained by casemix factors. Organisations need to examine their own results and use them to assess the need for local service improvement.

Encouragingly, measures of the quality of care do appear to be improving over the life of the National Lung Cancer Audit, with year-on-year increases in the proportions of patients discussed at an MDT, having anti-cancer treatment and surgical resection.

- Chapter 9 lists recommendations based on the results of the audit. These are listed below (further details are given in the chapter):
 - All trusts should ensure that they participate in this national audit
 - Data on all patients diagnosed with either lung cancer or mesothelioma are submitted to the audit
 - All relevant data fields are completed for each patient

- Actual completeness of at least 75 per cent should be achieved for key data fields including stage and performance status
- Over 95 per cent of patients submitted to the audit are discussed at an MDT
- The Histological/Cytological Confirmation Rate is at least 75 per cent
- Over 60 per cent of patients are seen by a lung cancer specialist nurse
- Over 40 per cent of patients have a lung cancer specialist nurse present at the time of diagnosis
- Surgical resection rates below the national mean of 10 per cent must be reviewed
- Active anti-cancer treatment rates below the national mean of 51 per cent should be reviewed
- Chemotherapy rates for small cell lung cancer below the national mean of 62 per cent should be reviewed

A local action planning toolkit is provided to assist organisations in benchmarking against these quality measures. All organisations are encouraged to use the audit data to drive their service development in order to improve the standard of care for lung cancer patients.

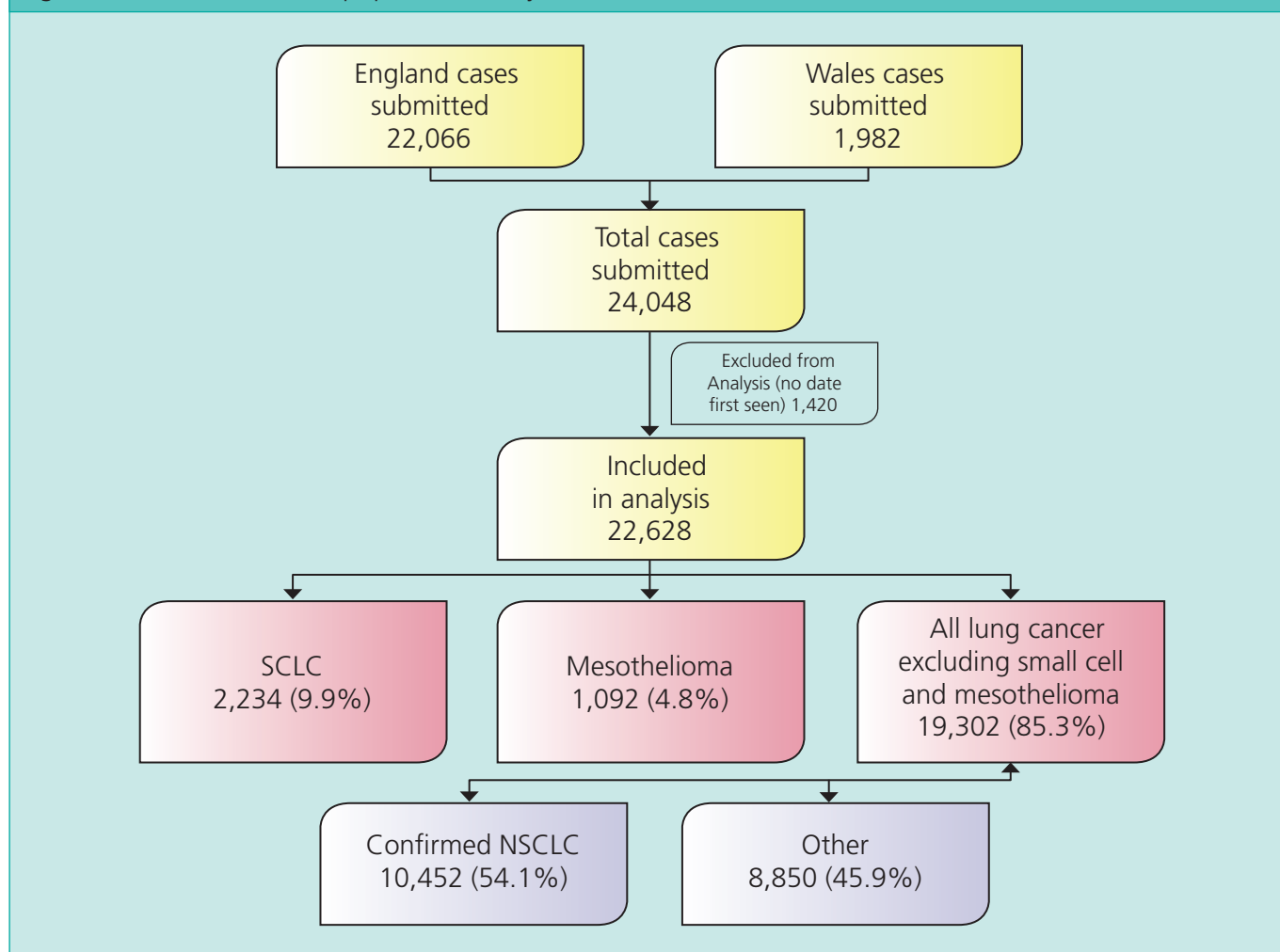
Summary Details of Key Findings

How Many People Were Diagnosed With Lung Cancer?

In 2007 there were 24,048 patient records submitted from England and Wales (see Figure 1). This is approximately 75 per cent of the annual incidence.

1420 of these were not suitable for further analysis (all of which came from English submissions) as there was no "date first seen" recorded, meaning that it was not possible to be certain that these were cases from 2007. There has been a year on year increase in submissions from a baseline of 12,784 (England only) in 2005.

Figure 1 Breakdown of the population analysed



How Good Is The Data In This Report?

Data submitted to the National Lung Cancer Audit must be as complete as possible in terms of organisation, sample size and data fields both to ensure the representative nature of the population and to make case-mix adjustment possible. Data completeness takes three forms:

Organisation completeness

All organisations managing patients with lung cancer should submit data to the NLCA or ensure that another organisation is submitting data on their behalf. A national picture cannot be obtained while organisations fail to submit data. Furthermore it is frustrating for trusts who do submit data to find that their patient records are incomplete because another trust involved in the patient pathway does not.

Only one trust has never contributed data to the NLCA:

Cancer Network	Trust Name
N02 Greater Manchester and Cheshire	The Mid Cheshire Hospitals NHS Trust (RBT)

166 of 172 eligible trusts (96.5 per cent) in England and Wales have participated by uploading data on patients first seen in 2007. The following English trusts did not participate in the NLCA in 2007, although there may still be data on patients first seen at these trusts by virtue of data being submitted by treating trusts. All Welsh and Scottish networks have participated in the audit.

Cancer Network	Trust Name
N07 Humber and Yorkshire Coast Cancer Network	Scarborough and North East Yorkshire Health Care NHS Trust (RV9 &RCC)
N13 Mid Trent Cancer Network	United Lincolnshire Hospitals NHS Trust (RWD)
N31 Central South Coast Cancer Network	Portsmouth Hospitals NHS Trust (RHU)
N35 Greater Midlands Cancer Network	Dudley Hospitals NHS Trust (RNA)
N37 Anglia Cancer Network	Cambridge University Hospitals NHS Foundation Trust (RGT)

Sample (population) completeness

Capturing data on (as near as possible) the total incident population in each organisation is central to the validity of the findings. Disproportionate representation of one particular patient group (e.g. those undergoing surgical resection) makes it very difficult to properly compare the outcomes between organisations. As can be seen from Figure 1 above, nationally the audit has captured approximately 75 per cent of the expected number of cases. The “Data Completeness” section in Table 1 below shows the number of cases and per cent of expected cases (based on historic cancer registry returns) submitted by Network and by Trust (key to codes given in the Appendix 1) across England and Wales.

Data field completeness

Patient records submitted to the Audit need as many data fields completed as possible. It is only by obtaining complete patient records that a true case-mix adjusted model of lung cancer care within

the UK can be built. Key data fields for case-mix adjustment are postcode (for deprivation), age, stage, performance status and co-morbidity. However, co-morbidity is not included in the case-mix adjustment because its interpretation varies significantly between organisations. Postcode is a mandatory field and age is calculated from the mandatory date of birth field. The “Data Completeness” section in Table 1 below indicates the data completeness for the key non-mandatory fields of Stage and Performance Status (PS). It also shows the data completeness for the MDT discussion indicator and for the recording of first treatment. Comparison with previous years shows that data field completeness continues to improve.

What Is The Standard Of Care Given To Patients?

Table 1 below lists headline indicators of “Process and Outcomes” by Network and by Trust (key to codes given in the Appendix 1) for all lung cancer and mesothelioma across England and Wales. These indicators have been chosen as reflecting the overall standard of care provided to patients. In interpreting these figures, the above caveats regarding data completeness must be borne in mind.

Furthermore, the data presented is preliminary – it has not undergone the full range of checks that would be completed ahead of inclusion in the Annual Report; neither has any case-mix adjustment been applied to the data.

The colour coding used reflects the targets set in the Local Action Plan (see Appendix 2) and gives an overall picture of how a trust or network is performing against these targets. Note that for participation to achieve green status over 50 per cent of the expected number of cases must have been submitted whilst trusts submitting less than 25 per cent of the expected number are coded red. Trusts with a high tertiary workload or where the targets are known to not be applicable for other reasons are shown in blue.

Similar Data for Scotland is shown in table 2. LAP targets do not apply to Scotland hence the data is not colour coded NHS Quality Improvement Scotland published National Lung Cancer Standards in March 2008: the Scottish standard for rate of confirmation of histological / cytological diagnosis is set at a minimum of 75 per cent and MDT discussion at 100 per cent.

Table 1 Headline indicators of “Process and Outcomes by Network and by Trust”

Completeness								Process and Outcome					
Code	Number of cases	Per cent of expected	Performance status (%)	Stage (%)	P.S. and stage (%)	MDT discussion (%)	Treatment recorded (%)	Discussed at MDT (%)	Histological diagnosis (%)	Any active treatment (%)	Surgery (%)	Number of small cell cases	Small Cell Chemo (%)
N01	519	52.5	11.9	23.3	7.9	87.1	81.1	74.6	80.3	57.6	3.1	67	73.1
RTX	141	76.6	2.1	22.0	2.1	95.0	92.9	85.1	91.5	74.5	2.8	22	77.3
RXL	173	71.5	0.6	2.3	0.6	70.5	64.7	64.7	85.5	44.5	3.5	12	58.3
RXN	86	63.2	64.0	53.5	41.9	93.0	77.9	80.2	82.6	51.2	2.3	19	78.9
RXR	119	27.9	2.5	33.6	0.8	97.5	93.3	72.3	58.0	61.3	3.4	14	71.4
N02	1145	53.7	60.5	48.5	32.6	66.1	58.7	61.3	45.9	40.7	3.9	91	62.6
RBV*	1	0.6	100.0	0.0	0.0	100.0	100.0	100.0	0.0	0.0	0.0	0	-
RJN	79	88.8	89.9	55.7	49.4	69.6	88.6	69.6	74.7	64.6	0.0	10	70.0
RM2	52	16.2	50.0	44.2	23.1	75.0	38.5	75.0	59.6	36.5	0.0	3	100.0
RM3	196	145.2	26.0	47.4	17.3	68.4	22.4	67.9	19.9	19.4	0.5	2	0.0
RM4	6	6.7	83.3	50.0	50.0	83.3	16.7	83.3	66.7	16.7	0.0	22	77.3
RMC	179	91.3	88.8	51.4	47.5	73.7	86.0	69.8	69.8	56.4	10.6	15	80.0
RMP	122	93.8	55.7	45.9	29.5	56.6	88.5	45.1	53.3	63.9	13.1	16	56.3
RRF	115	71.4	73.9	78.3	62.6	58.3	37.4	58.3	48.7	36.5	2.6	15	40.0
RW3	110	106.8	60.9	34.5	15.5	82.7	75.5	70.0	54.5	43.6	5.5	6	33.3
RW6	279	53.2	56.3	39.8	25.8	57.0	52.7	50.2	29.0	31.2	0.0	2	50.0
RWJ	6	5.7	50.0	83.3	50.0	83.3	16.7	83.3	83.3	16.7	0.0	0	-
RBT	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	-
N03	823	53.6	68.0	52.1	38.5	94.5	62.6	88.8	62.8	52.4	4.9	86	61.6
RBL	135	113.4	19.3	44.4	11.1	95.6	50.4	89.6	75.6	48.9	0.7	15	73.3
RBN	161	72.9	80.1	32.3	25.5	99.4	80.1	98.8	50.3	49.1	9.3	6	50.0
RBQ*	115	54.2	72.2	67.8	53.9	96.5	87.8	96.5	86.1	82.6	13.0	15	93.3
REM	43	13.3	74.4	62.8	51.2	100.0	65.1	97.7	72.1	46.5	0.0	5	40.0
RJR	128	105.8	100.0	74.2	74.2	100.0	35.2	81.3	64.8	35.2	0.0	21	42.9
RQ6	50	23.1	54.0	64.0	38.0	90.0	88.0	90.0	82.0	78.0	4.0	12	75.0
RVY	20	24.4	60.0	25.0	20.0	95.0	90.0	95.0	15.0	45.0	5.0	0	-
RWW	171	88.6	71.9	46.8	34.5	83.6	48.0	76.0	45.0	45.6	3.5	12	41.7
REN*	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	-
N06	1604	88.6	47.5	46.0	37.1	95.5	84.0	92.5	58.5	50.7	11.5	113	69.9
NT2**	1	-	100.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	0.0	0	-
RAE	229	95.4	91.3	93.0	85.6	99.6	95.2	95.2	65.5	50.7	5.2	26	69.2
RCB	176	101.7	94.9	74.4	72.7	99.4	94.9	94.9	73.9	57.4	18.2	24	62.5
RCD	81	89.0	84.0	81.5	71.6	75.3	84.0	75.3	79.0	50.6	8.6	19	73.7
RCF	95	80.5	82.1	69.5	56.8	98.9	100.0	95.8	68.4	58.9	4.2	17	88.2
RR8	519	91.9	19.8	30.8	14.6	99.8	74.4	95.2	75.5	56.8	15.4	0	-
RWY	109	44.7	53.2	55.0	39.4	89.0	87.2	87.2	71.6	45.0	5.5	17	70.6
RXF	394	103.7	19.8	10.7	10.2	90.9	80.7	90.4	14.7	39.3	11.2	10	50.0

Completeness								Process and Outcome					
Code	Number of cases	Per cent of expected	Performance status (%)	Stage (%)	P.S. and stage (%)	MDT discussion (%)	Treatment recorded (%)	Discussed at MDT (%)	Histological diagnosis (%)	Any active treatment (%)	Surgery (%)	Number of small cell cases	Small Cell Chemo (%)
N07	385	51.1	90.6	73.5	70.6	99.2	97.7	97.1	72.5	58.7	16.6	54	64.8
RJL	68	30.1	50.0	50.0	35.3	98.5	95.6	91.2	76.5	60.3	2.9	8	50.0
RWA	317	79.1	99.4	78.5	78.2	99.4	98.1	98.4	71.6	58.4	19.6	46	67.4
RCC	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	-
N08	1094	87.8	83.8	74.9	68.7	97.3	85.8	97.2	63.3	51.7	11.2	89	64.0
RFF	48	36.6	8.3	27.1	6.3	97.9	33.3	97.9	70.8	8.3	6.3	0	-
RFS	172	98.9	98.3	65.1	64.5	98.8	99.4	98.8	62.2	46.5	12.2	15	53.3
RHQ	386	80.4	85.8	82.4	81.6	94.0	87.6	93.5	73.8	58.3	14.0	36	77.8
RP5	360	113.6	81.1	77.8	64.2	99.2	81.9	99.2	68.9	50.3	9.2	38	55.3
RFR	128	88.9	94.5	75.0	71.9	100.0	93.0	100.0	14.1	59.4	9.4	0	-
N11	920	105.3	70.9	74.6	59.5	97.7	88.8	94.6	82.0	56.2	15.2	124	73.4
RBK	154	97.5	95.5	88.3	85.7	98.1	82.5	91.6	79.2	59.7	12.3	21	81.0
RR1	264	124.5	58.3	76.5	48.1	94.3	89.8	90.5	85.6	61.0	22.0	37	83.8
RRJ	1	-	0.0	0.0	0.0	100.0	0.0	100.0	100.0	0.0	0.0	35	77.1
RRK	230	93.9	97.0	96.1	93.5	99.6	90.9	96.1	88.7	63.0	13.5	31	51.6
RXK	271	104.6	47.2	46.9	26.9	99.3	90.0	98.9	74.2	43.9	11.8	0	-
N12	402	98.3	60.4	60.9	38.8	96.8	72.6	93.0	77.1	55.2	10.0	41	61.0
RJC	9	180.0	22.2	55.6	11.1	100.0	77.8	100.0	77.8	66.7	0.0	3	66.7
RKB	258	103.6	55.4	59.7	34.5	100.0	66.7	94.2	74.4	51.2	7.4	21	47.6
RLT	121	126.0	81.0	62.8	54.5	100.0	81.8	100.0	80.2	57.9	5.8	17	76.5
RWP	14	23.7	0.0	71.4	0.0	7.1	100.0	7.1	100.0	100.0	100.0	0	-
N13	640	75.2	97.5	88.1	86.1	99.8	99.4	98.9	65.8	68.1	19.7	67	70.1
RK5	200	117.6	96.0	88.5	85.0	99.5	98.0	99.0	82.0	60.5	10.5	26	73.1
RX1	440	132.5	98.2	88.0	86.6	100.0	100.0	98.9	58.4	71.6	23.9	41	68.3
RWD	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	-
N14	404	126.6	86.9	75.5	68.6	99.5	80.0	90.6	79.5	58.4	17.6	34	85.3
RJF	136	219.4	86.8	87.5	78.7	99.3	89.0	91.9	69.1	62.5	18.4	16	87.5
RTG	268	104.3	86.9	69.4	63.4	99.6	75.4	89.9	84.7	56.3	17.2	18	83.3
N15	772	102.5	74.5	73.2	59.2	94.4	86.0	90.3	71.4	68.1	16.8	85	72.9
RNQ	174	119.2	57.5	56.9	46.0	85.1	72.4	70.7	46.0	58.6	17.2	5	20.0
RNS	143	100.7	63.6	69.9	46.9	93.7	95.8	93.0	75.5	72.0	14.7	18	72.2
RWE	455	97.8	84.4	80.4	68.1	98.2	88.1	96.9	79.8	70.5	17.4	62	77.4
N20	513	96.4	40.4	31.0	26.7	99.6	86.4	95.1	43.9	19.5	12.1	11	18.2
RC9	146	133.9	65.8	39.7	32.2	98.6	71.9	95.9	77.4	21.9	15.8	2	0.0
RWH	175	85.0	53.7	49.1	44.6	100.0	92.6	95.4	46.9	16.0	6.9	6	33.3
RWG	192	88.5	8.9	7.8	6.3	100.0	91.7	94.3	15.6	20.8	14.1	3	0.0

Completeness								Process and Outcome					
Code	Number of cases	Per cent of expected	Performance status (%)	Stage (%)	P.S. and stage (%)	MDT discussion (%)	Treatment recorded (%)	Discussed at MDT (%)	Histological diagnosis (%)	Any active treatment (%)	Surgery (%)	Number of small cell cases	Small Cell Chemo (%)
N21	558	69.2	63.8	60.6	38.7	95.7	61.5	91.4	52.2	28.9	9.1	32	25.0
RAS	105	100.0	2.9	74.3	1.9	97.1	98.1	95.2	57.1	7.6	7.6	13	0.0
RFW	83	150.9	100.0	95.2	95.2	100.0	95.2	100.0	69.9	53.0	3.6	11	63.6
RYJ	262	90.7	87.8	49.6	41.2	98.1	40.1	98.1	37.8	30.5	12.2	0	-
RT3	5	3.4	100.0	60.0	60.0	100.0	100.0	80.0	100.0	100.0	100.0	1	0.0
RV8	59	38.3	11.9	35.6	10.2	100.0	28.8	64.4	67.8	10.2	3.4	4	0.0
RC3	43	78.2	62.8	60.5	39.5	62.8	76.7	62.8	65.1	41.9	2.3	3	33.3
RFU	1	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0	-
N22	425	58.1	94.4	92.5	89.2	91.3	91.1	78.8	90.1	69.4	30.1	45	82.2
RAL	95	110.5	91.6	91.6	86.3	92.6	93.7	91.6	83.2	51.6	16.8	9	77.8
RAP	62	73.8	91.9	79.0	75.8	79.0	75.8	66.1	87.1	67.7	19.4	9	66.7
RKE	75	76.5	89.3	90.7	82.7	98.7	90.7	92.0	82.7	64.0	10.7	14	100.0
RQW	12	10.6	100.0	100.0	100.0	91.7	100.0	16.7	100.0	100.0	100.0	0	-
RRV	142	102.2	100.0	99.3	99.3	95.1	99.3	81.7	99.3	83.1	42.3	12	75.0
RVL	39	18.4	92.3	92.3	89.7	79.5	76.9	51.3	89.7	66.7	51.3	1	100.0
N23	740	76.0	51.2	58.5	40.0	86.9	77.3	85.1	65.7	51.2	15.1	69	79.7
RF4	276	93.9	22.1	50.4	10.9	97.1	90.6	95.3	76.4	69.9	20.7	36	75.0
RGC	121	92.4	84.3	89.3	77.7	100.0	90.1	97.5	83.5	54.5	13.2	15	73.3
RNH	118	122.9	78.8	65.3	59.3	93.2	69.5	89.8	55.9	39.0	13.6	7	85.7
RNJ	168	66.7	54.2	47.6	46.4	54.8	54.2	54.2	50.6	33.9	11.9	7	100.0
RQX	57	28.4	56.1	50.9	42.1	91.2	70.2	91.2	40.4	29.8	5.3	4	100.0
N24	611	70.0	67.4	60.2	51.4	88.9	62.2	86.3	72.8	39.3	3.9	70	42.9
RG2	165	117.9	76.4	70.9	58.2	93.3	80.0	93.3	73.9	41.2	3.0	23	56.5
RG3	155	123.0	98.1	89.7	89.7	97.4	86.5	94.2	78.1	60.0	3.2	21	57.1
RGZ	73	70.2	11.0	2.7	1.4	64.4	5.5	63.0	41.1	1.4	0.0	3	0.0
RJ1	55	20.1	3.6	30.9	3.6	50.9	90.9	49.1	92.7	80.0	9.1	6	16.7
RJ2	58	50.0	74.1	8.6	8.6	100.0	70.7	86.2	70.7	39.7	0.0	5	60.0
RJZ	105	92.1	77.1	83.8	67.6	100.0	18.1	99.0	76.2	10.5	8.6	12	8.3
N25	377	48.0	1.6	35.8	0.3	34.0	56.8	30.8	68.7	40.6	8.2	41	53.7
5LG	3	42.9	0.0	66.7	0.0	66.7	66.7	66.7	100.0	66.7	0.0	1	100.0
RPY	1	0.6	0.0	0.0	0.0	100.0	100.0	0.0	0.0	100.0	100.0	4	75.0
RJ6	58	54.2	0.0	56.9	0.0	3.4	69.0	1.7	27.6	53.4	0.0	11	54.5
RJ7	76	39.4	7.9	28.9	1.3	13.2	57.9	13.2	90.8	57.9	27.6	0	-
RVR	142	75.5	0.0	23.2	0.0	24.6	41.5	19.7	66.2	30.3	3.5	14	42.9
RAX	97	80.8	0.0	46.4	0.0	80.4	70.1	77.3	79.4	33.0	4.1	11	54.5

Completeness								Process and Outcome					
Code	Number of cases	Per cent of expected	Performance status (%)	Stage (%)	P.S. and stage (%)	MDT discussion (%)	Treatment recorded (%)	Discussed at MDT (%)	Histological diagnosis (%)	Any active treatment (%)	Surgery (%)	Number of small cell cases	Small Cell Chemo (%)
N26	997	108.4	41.5	33.2	26.1	94.6	89.9	89.7	68.4	60.5	9.7	91	76.9
RA9	173	110.9	96.0	89.0	86.1	98.8	93.6	96.5	77.5	63.0	8.7	19	89.5
RBZ	51	60.0	64.7	56.9	37.3	98.0	84.3	92.2	74.5	56.9	17.6	6	50.0
REF	319	143.0	34.2	14.7	6.0	99.4	94.7	92.2	62.1	64.3	11.3	28	60.7
RH8	171	85.5	57.3	53.8	41.5	76.0	87.7	76.0	74.3	69.0	17.5	16	93.8
RK9	283	110.5	2.8	3.2	0.7	97.2	84.5	90.5	65.4	50.2	2.5	22	81.8
N27	493	122.6	84.2	68.8	61.3	99.4	90.7	98.6	66.5	52.5	10.5	45	77.8
RBD	121	147.6	54.5	57.9	36.4	99.2	95.0	99.2	68.6	57.9	14.9	19	63.2
RD3	160	106.7	88.8	73.8	67.5	99.4	87.5	96.9	72.5	47.5	9.4	13	100.0
RDZ	212	124.7	97.6	71.2	70.8	99.5	90.6	99.5	60.8	53.3	9.0	13	76.9
N28	518	61.4	47.5	42.9	27.4	93.4	81.1	90.2	72.0	54.4	4.8	49	65.3
RA3	99	137.5	70.7	65.7	54.5	89.9	93.9	86.9	88.9	59.6	5.1	14	64.3
RA4	67	95.7	56.7	47.8	29.9	100.0	79.1	97.0	83.6	61.2	6.0	4	75.0
RA7	95	27.9	33.7	18.9	9.5	91.6	74.7	89.5	76.8	56.8	10.5	8	87.5
RBA	151	111.9	62.9	45.7	37.7	98.7	84.1	96.0	71.5	58.3	1.3	19	63.2
RD1	55	103.8	1.8	38.2	0.0	78.2	67.3	76.4	52.7	29.1	5.5	3	33.3
RVJ	51	29.5	19.6	33.3	3.9	96.1	76.5	86.3	37.3	47.1	2.0	1	0.0
N29	315	65.9	86.0	69.2	62.2	99.4	82.5	96.5	83.81	68.6	14.3	45	66.7
RLQ	112	151.4	97.3	84.8	82.1	100.0	82.1	96.4	76.8	56.3	8.9	18	61.1
RTE	203	83.2	79.8	60.6	51.2	99.0	82.8	96.6	87.7	75.4	17.2	27	70.4
RWP	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	-
N30	882	85.5	63.5	62.8	47.1	93.1	75.2	89.6	76.3	49.7	13.0	92	48.9
RD7	74	66.1	70.3	20.3	18.9	100.0	85.1	83.8	95.9	60.8	35.1	1	0.0
RD8	83	86.5	32.5	49.4	27.7	79.5	59.0	74.7	83.1	54.2	18.1	10	50.0
RHW	195	94.7	80.0	93.8	75.4	100.0	89.2	96.4	78.5	58.5	11.3	32	40.6
RN3	155	137.2	56.1	46.5	34.8	99.4	91.0	94.2	61.3	34.8	7.7	16	18.8
RP1	1	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0	-
RTH	244	80.5	64.3	58.2	43.0	84.8	49.2	84.8	66.8	34.8	4.1	19	68.4
RXQ	130	64.7	61.5	76.9	54.6	95.4	88.5	95.4	93.1	72.3	22.3	14	78.6
N31	415	38.0	58.1	56.9	46.7	97.6	76.4	91.1	75.7	48.2	6.0	47	72.3
RHM	8	1.8	0.0	12.5	0.0	12.5	0.0	12.5	12.5	0.0	0.0	0	-
RN1	113	120.2	3.5	1.8	0.9	100.0	61.9	92.9	75.2	51.3	2.7	11	90.9
RN5	55	141.0	70.9	70.9	49.1	96.4	98.2	90.9	58.2	47.3	10.9	3	100.0
RNZ	86	121.1	97.7	79.1	79.1	100.0	86.0	100.0	73.3	33.7	0.0	13	84.6
RPR	121	112.0	69.4	84.3	62.0	99.2	83.5	86.0	86.8	62.8	11.6	19	47.4
RR2	32	60.4	93.8	75.0	71.9	100.0	56.3	100.0	87.5	34.4	6.3	1	100.0
RHU	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	-

Completeness								Process and Outcome					
Code	Number of cases	Per cent of expected	Performance status (%)	Stage (%)	P.S. and stage (%)	MDT discussion (%)	Treatment recorded (%)	Discussed at MDT (%)	Histological diagnosis (%)	Any active treatment (%)	Surgery (%)	Number of small cell cases	Small Cell Chemo (%)
N32	242	44.8	36.4	44.2	24.0	82.6	90.9	76.9	82.6	59.9	18.2	5	40.0
RA2	54	49.5	55.6	68.5	46.3	81.5	92.6	64.8	94.4	57.4	13.0	3	66.7
RTK	43	27.0	44.2	30.2	25.6	48.8	90.7	44.2	95.3	65.1	20.9	2	0.0
RDU	18	15.5	66.7	33.3	33.3	66.7	100.0	50.0	100.0	94.4	61.1	0	-
RTP	127	81.4	21.3	40.2	12.6	96.9	89.0	96.9	70.9	54.3	13.4	0	-
N33	461	74.4	67.7	42.1	38.6	80.0	74.6	74.2	58.4	43.8	4.6	38	52.6
RPL	108	77.1	72.2	50.9	44.4	88.0	81.5	83.3	66.7	23.1	5.6	3	33.3
RXC	221	96.5	98.6	57.0	56.6	98.6	79.2	89.1	77.4	50.2	6.8	31	54.8
RXH	132	52.6	12.1	9.8	3.8	42.4	61.4	41.7	19.7	50.0	0.0	4	50.0
N34	509	56.4	20.8	28.5	14.7	71.1	97.8	65.4	44.4	66.6	2.4	18	66.7
RN7	87	71.9	78.2	70.1	62.1	98.9	88.5	97.7	89.7	79.3	12.6	7	85.7
RPA	20	9.8	60.0	50.0	40.0	95.0	100.0	95.0	80.0	75.0	0.0	4	75.0
RWF	171	84.2	4.7	7.6	4.7	19.3	99.4	19.3	11.1	62.0	0.0	1	0.0
RVV	231	61.8	7.8	26.4	2.2	97.0	100.0	84.8	48.9	64.5	0.4	6	50.0
N35	234	21.9	70.9	77.4	54.7	99.6	67.9	99.6	88.9	49.6	14.1	50	64.0
RJD	148	121.3	75.0	75.0	56.1	100.0	53.4	100.0	90.5	33.8	7.4	22	63.6
RJE	23	6.7	0.0	100.0	0.0	100.0	82.6	100.0	87.0	82.6	0.0	20	75.0
RL4	62	32.8	88.7	75.8	72.6	100.0	98.4	100.0	87.1	75.8	35.5	8	37.5
RXW	1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	-
RNA	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	-
N36	2291	120.1	71.9	55.1	46.7	95.4	76.9	91.7	68.5	49.2	7.3	253	62.1
RE9	148	548.1	50.7	25.7	14.9	99.3	87.8	98.6	68.9	57.4	5.4	17	64.7
RLN	269	560.4	99.3	84.8	84.0	99.6	92.9	99.6	79.9	51.3	8.2	35	80.0
RNL	215	180.7	56.7	40.9	26.0	93.0	41.4	89.3	69.3	35.3	5.1	13	23.1
RR7	106	460.9	80.2	50.0	40.6	85.8	98.1	83.0	47.2	56.6	4.7	12	83.3
RTD	219	28.4	84.9	72.6	65.3	89.5	95.4	89.0	82.2	60.7	5.9	24	70.8
RTF	320	888.9	42.2	40.9	28.4	85.9	68.8	84.7	51.3	45.9	8.8	24	54.2
RTR	302	73.7	61.9	11.6	8.3	98.0	60.3	94.0	79.8	39.7	7.3	37	59.5
RVV	320	113.5	71.9	81.9	62.8	100.0	100.0	84.1	62.2	53.8	7.8	35	54.3
RXP	392	206.3	91.8	68.6	67.1	100.0	65.6	99.0	68.9	50.0	8.4	56	60.7

Completeness								Process and Outcome					
Code	Number of cases	Per cent of expected	Performance status (%)	Stage (%)	P.S. and stage (%)	MDT discussion (%)	Treatment recorded (%)	Discussed at MDT (%)	Histological diagnosis (%)	Any active treatment (%)	Surgery (%)	Number of small cell cases	Small Cell Chemo (%)
N37	704	51.5	51.8	43.9	38.1	82.4	70.7	80.3	68.0	52.0	6.3	56	60.7
RC1	81	142.1	88.9	85.2	75.3	100.0	96.3	97.5	67.9	74.1	7.4	6	50.0
RCX	67	59.8	68.7	53.7	50.7	95.5	95.5	83.6	98.5	53.7	7.5	8	87.5
RGM*	5	1.9	60.0	100.0	60.0	80.0	60.0	80.0	60.0	60.0	40.0	0	-
RGN	30	27.8	46.7	40.0	26.7	100.0	60.0	100.0	46.7	40.0	3.3	4	50.0
RGP	64	48.9	84.4	78.1	68.8	92.2	71.9	90.6	90.6	68.8	7.8	6	66.7
RGQ	10	5.8	0.0	0.0	0.0	10.0	20.0	0.0	100.0	10.0	10.0	0	-
RGR	123	236.5	64.2	43.1	34.1	100.0	74.8	100.0	61.8	53.7	3.3	12	58.3
RGT*	68	66.0	86.8	79.4	70.6	97.1	8.8	97.1	11.8	8.8	8.8	1	0.0
RM1	206	60.9	0.5	0.0	0.0	54.4	81.1	52.9	82.5	58.3	2.4	17	64.7
RQQ	50	142.9	74.0	60.0	56.0	80.0	44.0	80.0	38.0	36.0	18.0	2	0.0
N38	653	96.3	69.7	71.8	55.0	87.6	91.0	84.1	81.2	55.1	10.0	84	54.8
RAJ	205	106.8	72.7	62.4	48.8	94.6	99.0	89.3	86.3	46.8	6.8	20	50.0
RDD	149	84.7	73.8	57.0	48.3	87.9	94.0	87.9	57.7	47.0	12.1	13	61.5
RDE	201	114.2	97.5	95.0	93.0	98.0	97.5	92.0	85.6	76.6	14.4	32	59.4
RQ8	98	73.1	0.0	66.3	0.0	51.0	56.1	51.0	96.9	40.8	4.1	19	47.4
SEW	943	123.4	80.0	85.4	71.4	93.6	73.7	91.6	63.5	46.3	3.3	115	41.7
RWM	303	109.8	85.1	92.1	78.5	99.3	83.5	97.0	66.7	49.8	7.6	36	72.2
RRS	119	108.2	82.4	80.7	70.6	100.0	59.7	97.5	59.7	45.4	0.0	7	85.7
RVE	139	136.3	76.3	66.9	55.4	97.1	75.5	95.0	75.5	46.0	5.8	32	25.0
RVF	382	138.4	76.4	88.2	71.7	85.9	69.6	84.3	57.9	44.0	0.0	40	20.0
SWW	614	91.8	79.6	88.3	72.0	97.7	63.4	94.5	75.7	42.7	7.8	84	38.1
RVA	132	99.2	84.1	87.1	74.2	100.0	65.2	97.0	72.0	21.2	7.6	22	18.2
RKU	21	61.8	66.7	47.6	38.1	100.0	81.0	95.2	95.2	61.9	28.6	2	100.0
RR6	99	113.8	66.7	88.9	57.6	100.0	47.5	94.9	69.7	32.3	6.1	7	0.0
RVC	193	79.4	98.4	91.2	90.2	100.0	73.6	95.3	72.5	53.4	10.4	28	57.1
RVD	169	98.3	63.9	90.5	62.1	91.7	57.4	91.1	83.4	50.9	3.6	25	40.0
NWW	425	98.2	40.2	52.2	31.5	87.3	68.5	87.3	79.1	44.9	5.4	43	37.2
RT7	126	113.5	38.9	52.4	27.8	96.0	61.9	96.0	88.1	49.2	9.5	19	31.6
RT8	139	77.2	16.5	7.9	3.6	69.8	73.4	69.8	78.4	38.8	0.7	7	57.1
RT9	160	112.7	61.9	90.6	58.8	95.6	69.4	95.6	72.5	46.9	6.3	17	35.3
Total	22628	75.2***	63.0	58.7	46.7	91.0	78.6	87.2	67.7	51.3	9.9	2234	61.9

* Trusts with a high tertiary workload therefore targets cannot be applied.

All except RGT participated in this audit cohort data. Data for RGT was entered by other trusts.

** Private hospital

*** This figure is based on trust ascertainment and trust expected numbers only. When all cases of lung cancer are considered, case ascertainment for England and Wales is 72.9 per cent RQX self report a case ascertainment of 67%

RQX self report a case ascertainment of 67%

Network to trust mapping can be seen in Appendix 1

Table 2 Headline indicators of “Process and Outcomes for Scotland”

Completeness					Process and Outcome			
Code	Number of cases	Per cent of expected	MDT discussion (%)	Treatment recorded (%)	Discussed at MDT	Histological diagnosis (%)	Any active treatment (%)	Surgery (%)
SCAN	1089	96.4	99	100	86.9	70.2	60.8	8.8
Borders	80	93.0	100	99	100	86.3	72.5	5
D&G	95	77.2	99	100	96.8	82.1	75.8	17.9
Fife	314	120.8	98	100	83.8	71	51	8.3
Lothian	600	90.8	100	100	85.2	65.8	62	8.2
WoSCAN*	1594	82.2	94	100	90.3	78.6	59.3	11.2
Ayrshire & Arran	277	89.4	100	100	99.3	78.3	51.6	14.1
Clyde	284	84.0	87	99	79.9	75.4	50	3.5
Forth Valley	176	76.4	96	100	83	86.9	51.1	11.4
Greater Glasgow	857	80.8	95	99	92.4	78.1	66.6	12.7
* excludes data from hospitals in Lanarkshire Health Board area.								
NoSCAN	841	90.2	100	99	92.1	78.1	70	8.1
Grampian	343	88.7	100	100	83.7	74.9	78.1	9
Highland	171	108.0	100	100	98.2	85.4	66.6	9.9
Tayside	309	85.1	100	97	100	78.7	65.1	6.5
Western Isles	15	93.8	100	100	66.7	66.7	33.3	0
Orkney	0	0.0	-	-	-	-	-	-
Shetland	3	100.0	0	0	0	0	0	0
Scotland Total	3524	88.1	97	99	89.7	75.9	62.3	9.7

Figures for histological / cytological diagnosis in Table 2 exclude patients who only received cytological confirmation of diagnosis after surgery

Is The Standard Of Care Improving?

The answer to this appears to depend on which indicator of care is examined, but in general there do appear to be small improvements. For example in England and Wales, the proportion of patients having specific anti-cancer therapy (surgery, chemotherapy, radiotherapy) has risen from 48 per cent in 2006 to 51 per cent in 2007; the proportion of patients discussed at an MDT has risen from 86 per cent to 87 per cent; the overall resection rate has risen from 9 per cent to 10 per cent. However, the proportion of patients with a histological/cytological diagnosis has fallen from 67 per cent to 65 per cent. Again, the data must be interpreted with caution based on the caveats mentioned above.

Converting Data In To Service Improvement

In the summer of 2007, we released a Local Action Planning (LAP) Toolkit in order to stimulate further evaluation of results at a local level and more in depth local audit. This has been well received by trusts, with several reporting useful outcomes. The toolkit is reproduced here in Appendix 2.

Annual Report

The report was published in April 2009 and distributed electronically to network and trust leads. We would be interested to hear your comments. Please contact lucada@ic.nhs.uk

Appendix 1

National Lung Cancer Audit Network Trust Lookup Table	
Code	Network/Trust
N01	Lancashire and South Cumbria Cancer Network
RTX	University Hospitals of Morecombe Bay NHS Trust
RXL	Blackpool, Fylde and Wyre Hospitals NHS Trust
RXN	Lancashire Teaching Hospitals NHS Foundation Trust
RXR	East Lancashire Hospitals NHS Trust
RXR	East Lancashire Hospitals NHS Trust
N02	Greater Manchester and Cheshire Cancer Network
RBV	Christie Hospital NHS Trust
RJN	East Cheshire NHS Trust
RM2	South Manchester University Hospitals NHS Trust
RM3	Salford Royal Hospitals NHS Trust
RM4	Trafford Healthcare NHS Trust
RMC	Bolton Hospitals NHS Trust
RMP	Tameside and Glossop Acute Services NHS Trust
RRF	Wrightington, Wigan and Leigh NHS Trust
RW3	Central Manchester and Manchester Children's University Hospital NHS Trust
RW6	Pennine Acute Hospitals NHS Trust
RWJ	Stockport NHS Foundation Trust
RBT	The Mid Cheshire Hospitals NHS Trust

National Lung Cancer Audit Network Trust Lookup Table

Code	Network/Trust
N03	Merseyside and Cheshire Cancer Network
RBL	Wirral University Teaching Hospital NHS Trust
RBN	St Helens and Knowsley Hospitals NHS Trust
RBQ	The Cardiothoracic Centre- Liverpool NHS Trust
REM	Aintree Hospitals NHS Trust
RJR	Countess of Chester Hospital NHS Foundation Trust
RQ6	Royal Liverpool and Broadgreen University Hospitals NHS Trust
RVY	Southport and Ormskirk Hospital NHS Trust
RWW	North Cheshire Hospitals NHS Trust
REN	Clatterbridge Centre for Oncology NHS Trust
N06	Yorkshire Cancer Network
NT2	Nuffield Health (Leeds) NHS Trust
RAE	Bradford Teaching Hospitals NHS Foundation Trust
RCB	York Hospitals NHS Foundation Trust
RCD	Harrogate and District NHS Foundation Trust
RCF	Airedale NHS Trust
RR8	Leeds Teaching Hospitals NHS Trust
RWY	Calderdale and Huddersfield NHS Foundation Trust
RXF	Mid Yorkshire Hospitals NHS Trust
N07	Humber and Yorkshire Coast Cancer Network
RJL	Northern Lincolnshire and Goole Hospital NHS Trust
RWA	Hull and East Yorkshire Hospitals NHS Trust
RCC	Scarborough and North East Yorkshire Healthcare NHS Trust
N08	North Trent Cancer Network
RFF	Barnsley Hospital NHS Foundation Trust
RFS	Chesterfield Royal Hospital NHS Foundation Trust
RHQ	Sheffield Teaching Hospitals NHS Foundation Trust
RP5	Doncaster and Bassetlaw Hospitals NHS Foundation Trust
RFR	The Rotherham NHS Foundation Trust
N11	Pan Birmingham Cancer Network
RBK	Walsall Hospitals NHS Trust
RR1	Heart of England NHS Foundation Trust
RRJ	Royal Orthopaedic Hospital NHS Foundation Trust
RRK	University Hospital Birmingham NHS Foundation Trust
RXK	Sandwell and West Birmingham Hospitals NHS Foundation Trust
N12	Arden Cancer Network
RJC	South Warwickshire General Hospitals NHS Trust
RKB	University Hospitals Coventry and Warwickshire NHS Trust
RLT	George Elliot Hospital NHS Trust
RWP	Worcestershire Acute Hospitals NHS Trust

National Lung Cancer Audit Network Trust Lookup Table

Code	Network/Trust
N13	Mid Trent Cancer Network
RK5	Sherwood Forest Hospitals NHS Trust
RX1	Nottingham University Hospitals NHS Trust
RWD	United Lincolnshire Hospitals NHS Trust
N14	Derby/Burton Cancer Network
RJF	Burton Hospitals NHS Trust
RTG	Derby Hospitals NHS Foundation Trust
N15	Leicestershire Northampton and Rutland Cancer Network
RNQ	Kettering General Hospital NHS Trust
RNS	Northampton General Hospital NHS Trust
RWE	University Hospitals of Leicester NHS Trust
N20	Mount Vernon Cancer Network
RC9	Luton and Dunstable Hospital NHS Trust
RWH	East and North Hertfordshire NHS Trust
RWG	West Hertfordshire Hospitals NHS Trust
N21	West London Cancer Network
RAS	The Hillingdon Hospital NHS Trust
RFW	West Middlesex Hospital NHS Trust
RYJ	Imperial College Healthcare NHS Trust
RT3	Royal Brompton and Harefield NHS Trust
RV8	North West London Hospitals NHS Trust
RC3	Ealing Hospital NHS Trust
RFU	Bedfordshire and Hertfordshire Ambulance and Paramedic Service NHS Trust
N22	North London Cancer Network
RAL	Royal Free Hampstead NHS Trust
RAP	North Middlesex University Hospitals NHS Trust
RKE	The Whittington Hospital NHS Trust
RQW	Princess Alexandra Hospital NHS Trust
RRV	University College London Hospitals NHS Foundation Trust
RVL	Barnet and Chase Farm Hospitals NHS Trust
N23	North East London Cancer Network
RF4	Barking, Havering and Redbridge Hospitals NHS Trust
RGC	Whipps Cross University Hospital NHS Trust
RNH	Newham University Hospital NHS Trust
RNJ	Barts and the London NHS Trust
RQX	Homerton University Hospital NHS Foundation Trust
N24	South East London Cancer Network
RG2	Queen Elizabeth Hospital NHS Trust
RG3	Bromley Hospitals NHS Trust
RGZ	Queen Mary's Sidcup NHS Trust
RJ1	Guy's and St Thomas' NHS Foundation Trust
RJ2	The Lewisham Hospital NHS Trust
RJZ	King's College Hospital NHS Trust

National Lung Cancer Audit Network Trust Lookup Table

Code	Network/Trust
N25	South West London Cancer Network
5LG	Queen Mary's Hospital PCT NHS Trust
RPY	The Royal Marsden NHS Foundation Trust
RJ6	Mayday Healthcare NHS Trust
RJ7	St George's Healthcare NHS Trust
RVR	Epsom and St Helier University Hospitals NHS Trust
RAX	Kingston Hospital NHS Trust
N26	Peninsula Cancer Network
RA9	South Devon Health Care NHS Trust
RBZ	Northern Devon Health Care NHS Trust
REF	Royal Cornwall Hospitals NHS Trust
RH8	Royal Devon and Exeter NHS Foundation Trust
RK9	Plymouth Hospitals NHS Trust
N27	Dorset Cancer Network
RBD	Dorset County Hospital NHS Foundation Trust
RD3	Poole Hospital NHS Trust
RDZ	Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust
N28	Avon Somerset and Wiltshire Cancer Network
RA3	Weston Area Health NHS Trust
RA4	Yeovil District Hospital NHS Foundation Trust
RA7	United Bristol Healthcare NHS Trust
RBA	Taunton and Somerset NHS Trust
RD1	Royal United Hospital Bath NHS Trust
RVJ	North Bristol NHS Trust
N29	3 Counties Cancer Network
RLQ	Hereford Hospitals NHS Trust
RTE	Gloucestershire Hospitals NHS Foundation Trust
RWP	Worcestershire Acute Hospitals NHS Trust
N30	Thames Valley Cancer Network
RD7	Heatherwood and Wexham Park Hospitals NHS Trust
RD8	Milton Keynes General Hospital NHS Trust
RHW	Royal Berkshire and Battle Hospitals NHS Trust
RN3	Swindon and Marlborough NHS Trust
RP1	Northamptonshire Healthcare NHS Trust
RTH	Oxford Radcliffe Hospitals NHS Trust
RXQ	Buckinghamshire Hospitals NHS Trust
N31	Central South Coast Cancer Network
RHM	Southampton University Hospitals NHS Trust
RN1	Winchester and Eastleigh Healthcare NHS Trust
RN5	North Hampshire Hospitals NHS Trust
RNZ	Salisbury Foundation NHS Trust
RPR	Royal West Sussex NHS Trust
RR2	Isle of Wight Healthcare NHS Trust
RHU	Portsmouth Hospitals NHS Trust

National Lung Cancer Audit Network Trust Lookup Table

Code	Network/Trust
N32	Surrey, West Sussex and Hampshire Cancer Network
RA2	Royal Surrey County Hospital NHS Trust
RTK	Ashford and St Peter's Hospitals NHS Trust
RDU	Frimley Park Hospital NHS Foundation Trust
RTP	Surrey and Sussex Healthcare NHS Trust
N33	Sussex Cancer Network
RPL	Worthing and Southlands Hospital NHS Trust
RXC	East Sussex Hospitals NHS Trust
RXH	Brighton and Sussex University Hospitals NHS Trust
N34	Kent and Medway Cancer Network
RN7	Dartford and Gravesham NHS Trust
RPA	Medway NHS Foundation Trust
RWF	Maidstone and Tunbridge Wells NHS Trust
RVV	East Kent Hospitals NHS Trust
N35	Greater Midlands Cancer Network
RJD	Mid Staffordshire General Hospitals NHS Trust
RJE	University Hospital of North Staffordshire NHS Trust
RL4	The Royal Wolverhampton Hospitals NHS Trust
RXW	Shrewsbury and Telford Hospital NHS Trust
RNA	Dudley Group of Hospitals NHS Trust
N36	North of England Cancer Network
RE9	South Tyneside NHS Foundation Trust
RLN	City Hospitals Sunderland NHS Foundation Trust
RNL	North Cumbria Acute Hospitals NHS Trust
RR7	Gateshead Health NHS Foundation Trust
RTD	The Newcastle Upon Tyne Hospitals NHS Trust
RTF	Northumbria Health Care NHS Trust
RTR	South Tees Hospitals NHS Trust
RVW	North Tees and Hartlepool NHS Trust
RXP	County Durham and Darlington Acute Hospitals NHS Trust
N37	Anglia Cancer Network
RC1	Bedford Hospital NHS Trust
RCX	The Queen Elizabeth Hospital King's Lynn NHS Trust
RGM	Papworth Hospital NHS Foundation Trust
RGN	Peterborough and Stamford NHS Foundation Trust
RGP	James Paget Healthcare NHS Foundation Trust
RGQ	Ipswich Hospital NHS Trust
RGR	West Suffolk Hospitals NHS Trust
RGT	Cambridge University Hospitals NHS Foundation Trust
RM1	Norfolk and Norwich University Hospital NHS Trust
RQQ	Hinchingbrooke Health Care NHS Trust

National Lung Cancer Audit Network Trust Lookup Table

Code	Network/Trust
N38	Essex Cancer Network
RAJ	Southend University Hospital NHS Foundation Trust
RDD	Basildon and Thurrock University Hospitals NHS Foundation Trust
RDE	Essex Rivers Healthcare NHS Trust
RQ8	Mid Essex Hospital Services NHS Trust
SEW	South East Wales Regional Cancer Network
RWM	Cardiff and Vale NHS Trust
RRS	North Glamorgan NHS Trust
RVE	Pontypridd and Rhondda NHS Trust
RVF	Gwent Healthcare NHS Trust
SWW	South West Wales Regional Cancer Network
RVA	Carmarthenshire NHS Trust
RKU	Ceredigion and Mid Wales NHS Trust
RR6	Pembrokeshire and Derwyn NHS Trust
RVC	Swansea NHS Trust
RVD	Bro Morgannwg NHS Trust
NWW	North Wales Regional Cancer Network
RT7	North West Wales NHS Trust
RT8	Conway and Denbighshire NHS Trust
RT9	North East Wales NHS Trust

Appendix 2 Local Action Plan

Local Action Plan	
Cancer Network	
Trust	
Audit Title	National Lung Cancer Audit

Recommendation	Achieved Y/N/P/NK	Planned Action	Suggested Actions	Suggested Responsibility	Date plan actioned	Date issue resolves
Data Completeness and Quality						
The trust participates in this national audit			Contact local Cancer Network for audit advice Contact NCASP Lung Cancer Audit Project Manager (roz.stanley@ic.nhs.uk) Visit www.ic.nhs.uk/cancer-audits for information. Obtain, read and disseminate the Lung Cancer Audit Annual Report	Cancer Manager / Governance Lead		
Data on all patients diagnosed with either lung cancer or mesothelioma are submitted to the audit			Use MDT meetings to capture all cases discussed. Try to record cases in real time or near real time. Liaise with pathology departments to correlate cases. Work with IT department to set up CSV file upload facility if information is collected on a third party system or identify resources to input data directly	MDT Chair		
All relevant data fields are completed for each patient			Use proforma for data collection at MDT. Identify key person to QA data prior to submission. Data inputters understand clinical implications of data. Map and allocate responsibility along patient pathway. Agree protocols and submission routes for patients that are treated across different organisations	Data Co-ordinator / Cancer Manager / Network Manager		
Actual completeness of at least 75 per cent should be achieved for key data fields including stage and performance status			Refer to the document 14 key data items on the National Lung Cancer Audit Website and ensure that these fields are completed for all relevant cases. Assist MDT co-ordinator by chair ensuring that stage, performance status and other key fields are discussed and recorded for each patient	MDT Chair, Data Co-ordinator / Cancer Manager/ Network Manager		

Recommendation	Achieved Y/N/P/NK	Planned Action	Suggested Actions	Suggested Responsibility	Date plan actioned	Date issue resolves
Process of Care						
Over 95 per cent of patients submitted to the audit are discussed at an MDT			Liaise with cancer waiting times team to identify lung cancer referrals. Liaise with radiology department to identify all imaging suspicious of lung cancer or mesothelioma. Liaise with pathology department to identify cases	MDT chair, Lung cancer clinical lead		
The Histological Confirmation Rate is at least 75 per cent			Ensure all histological diagnoses are submitted to the audit. Liaise with pathology department to identify cases. Review clinical diagnoses and diagnostics protocols if HCR is below optimum	MDT chair, Lung cancer clinical lead		
Over 60 per cent of patients are seen by a lung cancer specialist nurse			Review the specialist nurse service, ensuring all nursing posts are staffed and that clear referral pathways exist	MDT chair, Lung cancer clinical lead, specialist nurse		
Over 40 per cent of patients have a lung cancer specialist nurse present at the time of diagnosis			Review the specialist nurse service, allocate extra nursing support alongside lung cancer clinics	MDT chair, Lung cancer clinical lead, specialist nurse		
Clinical Outcomes						
Surgical resection rates below the national mean of 10 per cent must be reviewed			Ensure that all surgical resections are submitted to the audit. If data is complete then review treatment policies for early stage lung cancer in patients with good performance status. Ensure that thoracic surgeon attends MDT meetings	MDT chair, Lung cancer clinical lead, thoracic surgeons		
The proportion of patients receiving any active anti-cancer treatment should exceed the national mean of 51 per cent			Ensure that all treatments are submitted to the audit. Review treatment policies for lung cancer patients	MDT chair, Lung cancer clinical lead. MDT members		
The chemotherapy rate for small cell lung cancer should exceed the national mean of 62 per cent			Ensure that all treatments are submitted to the audit. Review treatment policies for small cell lung cancer patients	MDT chair, Lung cancer clinical lead. MDT members		

Appendix 3 Glossary

Glossary

adenocarcinoma a cancer of glandular tissue e.g. the mucus-secreting cells that line the airways in lung cancer this is classified as a type of non-small cell lung cancer. It is less strongly associated with smoking than some other types of lung cancer

anti-cancer treatment treatment to cure or control cancer progression

asbestos a fibrous silicate material

Cancer Network a system within the NHS to organise the integrated care of cancer patients across a region

case ascertainment number of cases recorded as a proportion of those expected

Casemix a means of classifying patients for comparing quality of care

Casemix – adjusted performance and outcome data corrected for various factors including the age, social deprivation, extent of disease and fitness of the populations under study

CEEU Clinical Evaluation and Effectiveness Unit at the Royal College of Physicians

chemotherapy drugs used in the treatment of cancer

co-morbidity co-existent illness(es) to the disease under consideration

cytological from the study of cells

deprivation absence of expected level of social provision

diagnosis confirming the presence of the disease

histological from the study of tissues

Interquartile range the range of a particular variable excluding the highest quarter and lowest quarter of the values recorded

MDT multi-disciplinary team

mesothelioma cancer of the lining of the lung caused by asbestos

NCASP National Clinical Audit Support Programme

Network see 'Cancer Network'

NLCA National Lung Cancer Audit

non-small cell carcinoma a group of lung cancer including squamous carcinoma and adenocarcinoma

NSCLC non-small cell lung cancer

Performance Status a systematic method of recording the ability of an individual to undertake the tasks of normal daily life compared with that of a normal person

peritoneum membrane lining the abdominal cavity

radiotherapy cancer treatment using radiation

SCLC small cell lung cancer (small cell carcinoma)

small cell carcinoma type of neuroendocrine lung cancer strongly associated with smoking

squamous cell carcinoma cancer of cells that cover or line organs of the body e.g. line the tubes of the lung. In lung cancer this is classified as a type of non-small cell lung cancer, it is strongly associated with smoking

staging / stage the anatomical extent of a cancer

surgical resection an operation to remove abnormal tissues or organs

WHO World Health Organisation

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 **0845 300 6016**

 **www.ic.nhs.uk**

 **enquiries@ic.nhs.uk**

 The NHS Information Centre for health and social care
1 Trevelyan Square
Boar Lane
Leeds
LS1 6AE