National Lung Cancer Audit Report 2012

Report for the audit period 2011

Prepared in partnership with:

The Healthcare Quality Improvement Partnership (HQIP) promotes quality in healthcare. HQIP holds commissioning and funding responsibility for the National Lung Cancer Audit and other national clinical audits as part of the National Clinical Audit & Patient Outcomes Programme (NCAPOP).

Health and Social Care Information Centre (HSCIC) is England's central, authoritative source of essential data and statistical information for frontline decision makers in health and social care. The HSCIC managed the publication of the 2011 annual report.

The Royal College of Physicians (RCP) plays a leading role in the delivery of high quality patient care by setting standards of medical practice and promoting clinical excellence. We provide physicians in the United Kingdom and overseas with education, training and support throughout their careers. As an independent body representing over 27,500 fellows and members worldwide, we advise and work with government, the public, patients and other professions to improve health and healthcare.

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Purpose

The purpose of this document, the eighth annual report of the National Lung Cancer Audit, is to summarise the key findings of the audit for patients diagnosed with lung cancer or mesothelioma who were first seen in 2011. The history, purpose and methodology of the audit have been extensively documented and further details can be obtained from the HSCIC Website.

Based on the comments of service users we have again produced this short report highlighting key issues. More extensive analyses on the 2011 data, including case mix-adjusted data in an electronic spreadsheet format will be available from the HSCIC website in due course (http://www.ic.nhs.uk/lung)

Every trust or health board in England, Wales and Scotland have participated in the audit however because of differences in reporting schedules, standards and targets the Scottish data are tabulated separately. Northern Ireland and Guernsey have also participated in the audit. Unfortunately the Northern Ireland data was not available in time to be included in this report but will be made available electronically.

Details of care provided by individual organisation in this report is based on "place first seen" in secondary care. Place first seen is chosen since in the vast majority of cases it represents the location of the multidisciplinary team that co-ordinates the investigation and treatment of the individual patient. As a result some tertiary centres may appear to have little input into the care of lung cancer and mesothelioma patients and to submit little data to the audit, however, on the contrary, they usually provide the most complex care for the most difficult patients and submit treatment data on behalf of other organisations. Information about the number and types of treatment provided by these tertiary centres is provided in figure 6.

All data presented refers to cases submitted to the National Lung Cancer Audit unless otherwise stated.

Key messages

- The audit has collected data on 38,528 patients in Great Britain for this audit period, representing approximately 93 per cent of the expected number of new lung cancer cases. This is thought to represent almost all cases of lung cancer presenting to secondary care.
- The quality of the submitted data is of a high standard and has shown further improvements compared to earlier years, once again allowing detailed comparison of cancer networks, hospital trusts or health boards. Collection of high quality data has become embedded practice for most lung cancer teams, whilst overall there is little scope for improvement, a few individual organisations should review their processes for data collection in order to improve the validity of their submissions. This is particularly relevant to data on Disease Stage and Performance Status.
- Recording of co-morbidity and lung function is generally poor. Organisations should endeavour to collect this data to the same standard as other data items, in order to improve the accuracy of case-mix adjustment and therefore the comparison of organisations performance.
- Some organisations continue to submit data that indicates sub-optimal care, both in terms of the investigative/diagnostic pathway and the treatments given to patients. It is not good enough to blame such results on poor quality data submitted to the audit, clinical teams need to take more responsibility for the data that is submitted to the audit, since good data is the cornerstone of quality improvement.
- Overall measures of the standards of care are largely similar to those seen last year, albeit with small rises in the proportion of patients having surgery, and anti-cancer treatment. In many cases the measures of treatment now approach those seen in other Western Healthcare systems. Despite these improvements, there remains marked variation across trusts, health boards and networks and differences in case-mix do not appear to explain the whole of this variation. Poor data completeness in a few areas, especially where trusts fall at the lower extreme of these measures, may contribute to some of the variation seen.

1: Percentage of patients receiving a histological / cytological diagnosis

	England and Wales			Scotland			Guernsey	
	2011	2010	2009	2011	2010	2009	2011	2010
n	33,463	32,347	32,068	4,655	4,427	4,234	41	42
Mean	76.9	76.0	75.6	71.8	77.1	77.7	75.6	95.2
Lower Quartile	72.1	70.5	70.9	68.1	70.0	69.5	n/a	n/a
Median	78.0	76.5	77.5	74.2	75.3	76.1	n/a	n/a
Upper Quartile	83.5	83.6	85.2	78,1	79.4	81.4	n/a	n/a

2: Percentage of patients receiving an operation*

	England and Wales			Scotland			Guernsey	
	2011	2010	2009	2011	2010	2009	2011	2010
n	33,463	32,347	32,068	4,655	4,427	4,234	41	42
Mean	14.7	13.7	13.7	10.7	11.1	11.3	7.3	11.9
Lower Quartile	11.0	9.4	9.7	8.9	7.6	7.2	n/a	n/a
Median	14.0	13	12.4	10.6	9.9	10.0	n/a	n/a
Upper Quartile	16.5	17.1	16.1	11.5	11.7	11.5	n/a	n/a

* Proportion of patients with histologically confirmed NSCLC receiving surgical resection is shown in Table 2

3: Percentage of patients receiving any anti cancer treatment

	England and Wales			Scotland			Guernsey	
	2011	2010	2009	2011	2010	2009	2011	2010
n	33,463	32,347	32,068	4,655	4,427	4,234	41	42
Mean	60.1	58.4	59.1	59.7	63.9	64.6	56.1	69.0
Lower Quartile	55.0	52.4	54.0	56.9	57.4	58.0	n/a	n/a
Median	59.9	59.8	60.5	60.4	61.6	62.4	n/a	n/a
Upper Quartile	65.7	64.8	66.5	65.3	66.8	69.2	n/a	n/a

4: Percentage of patients receiving a CT scan before bronchoscopy

	England and Wales			Scotland			Guernsey	
	2011	2010	2009	2011	2010	2009	2011	2010
n	33,463	32,347	32,068	4,655	4,427	4,234	41	42
Mean	87.8	84.8	80.7	91.1	92.2	86.4	94.7	80.0
Lower Quartile	83.2	74.4	74.2	91.0	86.3	81.3	n/a	n/a
Median	89.4	86.1	82.4	92.5	93.6	83.5	n/a	n/a
Upper Quartile	94.7	93.2	91.5	95.8	97.1	91.4	n/a	n/a

5: Percentage of patients discussed at MDT

	England and Wales			Scotland			Guernsey	
	2011	2010	2009	2011	2010	2009	2011	2010
n	33,463	32,347	32,068	4,655	4,427	4,234	41	42
Mean	96.2	96.4	94.1	95.3	94.4	95.3	100.0	n/a
Lower Quartile	95.1	94.6	92.2	92.3	86.6	91.5	n/a	n/a
Median	98.1	97.6	96.5	97.7	95.6	93.6	n/a	n/a
Upper Quartile	99.3	99.2	98.9	98.9	97.1	98.1	n/a	n/a

- There is good evidence that the audit data has been used in many organisations to drive service improvement and by inference improve the standards of care and patient outcomes. As with the issues over data quality, there remains an urgent need for all cancer networks, trusts and health boards to take responsibility for their data and use it to review and improve their local lung cancer services. This report contains a toolkit to help with this process.
- Patients, patient advocates and service commissioners have an important role to play in challenging lung cancer teams to explain and improve their performance.

Case Study 1
Royal Cornwall Hospitals NHS Trust (REF): Improved pathology turnaround times

The lung cancer team at Royal Cornwall Hospitals used the Improving Lung Cancer Outcomes project (which used NLCA data to underpin its methodology) to speed up the processing and review of bronchial biopsy specimens.

The team worked closely with their pathology department colleagues. A number of steps were taken:

- They established the key timings of the various pathology processes which would enable results to be ready for discussion by the team (next day).
- The team found ways to meet those timings, which included the hand delivery of specimens to the pathology department, immediately after clinic, and making sure the samples were prepared and set in fixative the same night.

As a result of the team's improvement efforts:

- bronchial biopsy specimens are consistently ready for review by the team within 24 hours
- the length of time that patients wait to receive a lung cancer diagnosis is reduced

The Royal Cornwall Hospitals NHS Trust lung cancer team lead said:

'We gained an insight into the workings and difficulties of pathology department that we worked alongside but rarely communicated with. In taking part in the project, time was set aside to discuss and agree on changes that resulted in improved turnaround of results. The net benefit was bronchoscopy biopsies were available (cancer: yes or no) to be discussed at the meeting that week.'

Recommendations (England and Wales)

1. All hospitals trusts and health boards should participate in this national audit, should submit data on all patients presenting to secondary care diagnosed with either lung cancer or mesothelioma, and should complete all relevant data fields for each individual patient.
2. Data completeness for key fields should exceed 85 per cent and for MDT completeness should exceed 95 per cent (See appendix 2 Local Action Plan).
3. Data completeness for the co-morbidity field should exceed 85 per cent, and for patients with Stage I-II and PS0-1, completeness for FEV1 and FEV1% should exceed 75 per cent.
4. Maintain the level of 95 per cent of patients submitted to the audit being discussed at a Multidisciplinary Team Meeting.
5. Histological/Cytological confirmation rates below 75 per cent should be reviewed to determine whether best practice is being followed and whether patients have access to the whole range of biopsy techniques.
6. Non Small Cell Lung Cancer, not otherwise specified (NSCLC NOS) rate of more than 20 per cent should be reviewed to ensure that best practice histological diagnostic techniques including immunohistochemistry are being followed, in order that patients receive appropriate chemotherapy regimens.
7. At least 80 per cent of patients are seen by a lung cancer specialist nurse; at least 80 per cent of patients should have a lung cancer specialist nurse present at the time of diagnosis (note that these data are not available for Wales).
8. For patients undergoing bronchoscopy at least 95 per cent should have a CT scan prior to the procedure.
9. Surgical resection rates for NSCLC below the England and Wales average of 14 per cent should be reviewed. Furthermore for early stage (I and II) disease, rates below 52 per cent should be reviewed to ensure that patient on the margins of operability/resectability are being offered access to specialist thoracic surgical expertise (including second opinions).
10. Active anti-cancer treatment rates below the England and Wales average of 60 per cent should be reviewed.
11. Chemotherapy rates for small cell lung cancer below the England and Wales average of 65 per cent should be reviewed.
12. Chemotherapy rates for good performance status (0-1) stage IIIB / IV NSCLC lung cancer below the England and Wales average of 55 per cent should be reviewed.

A local action planning toolkit is provided at the end of this document 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. Organisations whose results in 2011 meet these recommendations should work to maintain their high standards and exceed them where appropriate.

It is important to stress that these quality measures are not targets, since in some cases there will be valid reasons for variation, such as case-mix and patient choice. Where applicable, organisations should take the case-mix adjusted results (to be published separately) into consideration in the evaluation of their service, although it is noted that in general case-mix does not explain the whole of the variation in practice across organisations.

Performance against these recommendations is highlighted by a system of colour-coding in the data tables (for England).

Scotland

The above recommendations do not apply to Scotland, therefore the data in the tables are not colour coded. NHS Quality Improvement Scotland published National Lung Cancer Standards in March 2008. Health boards in all Scottish networks participate in comparing 2011 results measured against these standards, and where variance is shown action plans can be developed by networks and health boards and monitored by Regional Cancer Advisory Groups.

As part of the Scottish Government's National Cancer Quality Programme new Quality Performance Indicators (QPIs) for Lung Cancer will be implemented in 2013 and will be subject to a clinical governance process through Healthcare Improvement Scotland which has overall responsibility for monitoring the quality of cancer care.

Northern Ireland

Northern Ireland participated in the audit for the third time this year; their data will be published electronically in due course. In general, Northern Ireland follow the standards and recommendations for England and Wales.

Summary details of key findings

How many people were diagnosed with lung cancer?

In 2011 there were 33,832 patient records submitted from England and Wales (figure 1), 4655 submitted from Scotland (figure 2), and 41 submitted form Guernsey (figure 3). Combined, this is approximately 93 per cent of the expected annual incidence and probably almost all of those cases presenting to secondary care (some cases are diagnosed and treated in primary care, or are diagnosed at a post-mortem).

Of these records, 370 were not suitable for further analysis (mainly from the English submissions) as there was no "date first seen" recorded, meaning that it was not possible to be certain that these were cases from 2011. Figures 1, 2, and 3 show the incidence by cancer type.

Figure 1
Number of patient records submitted to the NLCA – England and Wales

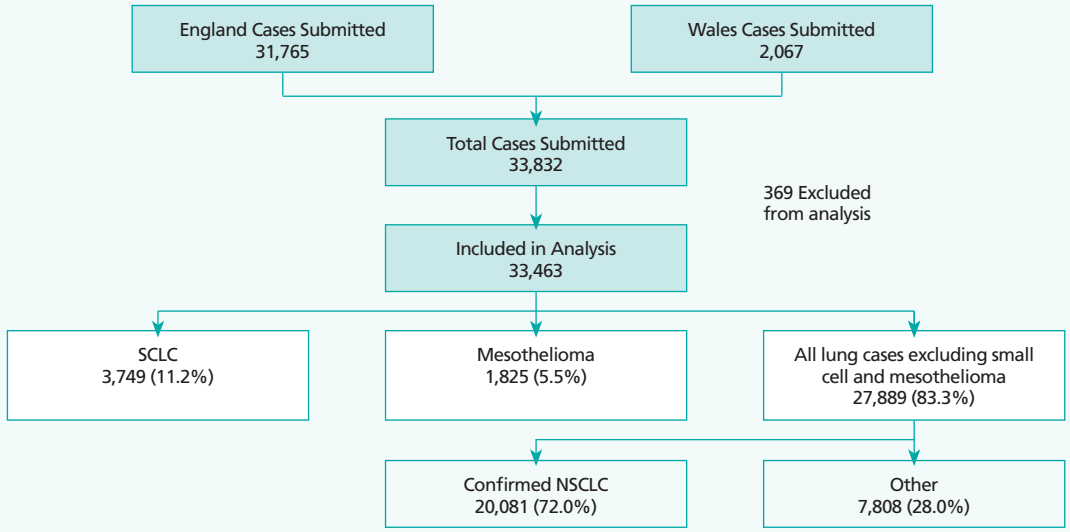


Figure 2
Number of patient records submitted to the NLCA – Scotland

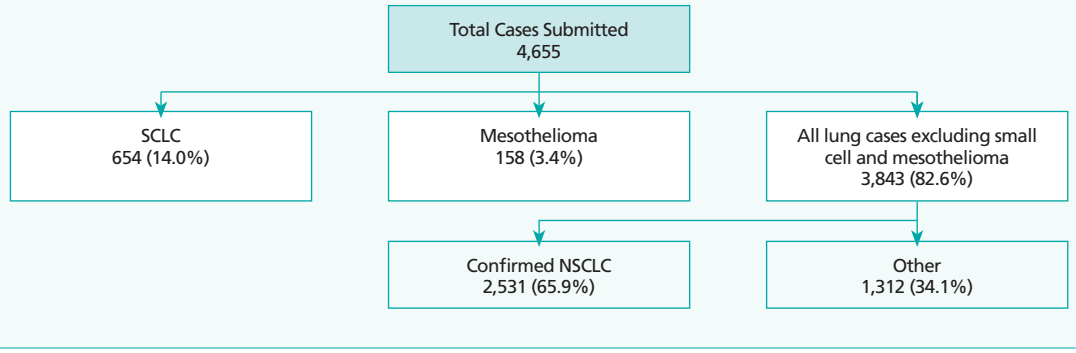
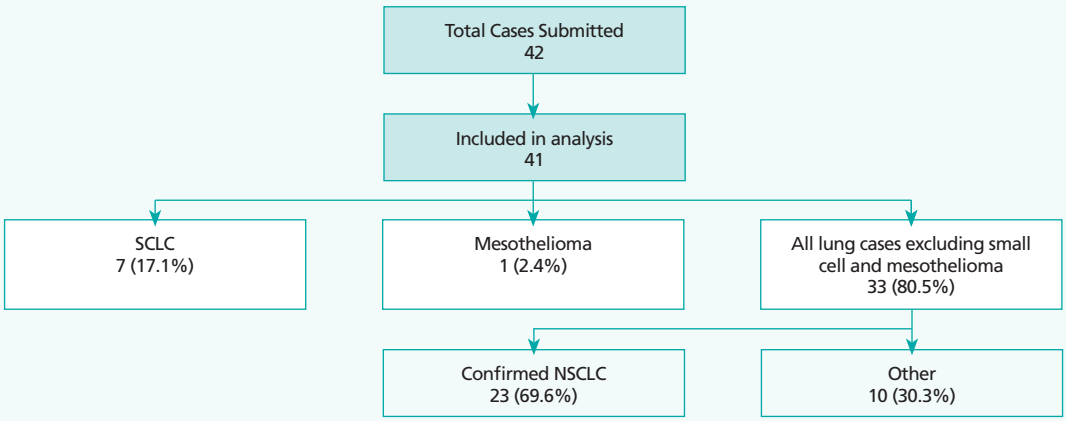


Figure 3
Number of patient records submitted to the NLCA – Guernsey



How accurate are the data in this report?

Data submitted to the National Lung Cancer Audit need to be as complete as possible in terms of healthcare organisation participation, population coverage and data field completeness both to ensure the representative nature of the information and to make case-mix adjustment possible. Please refer to previous versions of the Annual Report for a full explanation of this issue.

Healthcare Organisation Participation

Every trust or health board in England and Wales, and every health board in Scotland has participated in the audit. Princess Elizabeth Hospital, Guernsey has also participated in the audit. Northern Ireland participated, however their data is not shown in this report.

Population Coverage

Figures 1-3 show that the audit has captured approximately 93 per cent of the expected number of cases nationally and almost all of those presenting to secondary care. The "Data Completeness" section in table 1a shows the number of cases and per cent of expected cases (based on historic cancer registry returns) submitted by network, trust or health board (key to codes are given in appendix 1) across England and Wales. table 1b shows similar data for Scottish networks, and 1c for Guernsey. These results were very important in the early days of the audit, but since data submissions reached around 100 per cent of expected (figure 4), they have become less so. However, they can still be useful in interpreting "odd" results in the performance data.

The colour coding in the tables for England reflects the targets set in the 2010 Local Action Plan (LAP). Note that for case ascertainment (per cent of expected), to achieve green status over 75 per cent of the expected number of cases must have been submitted, trusts attaining 50 – 75 per cent are coded amber whilst trusts submitting less that 50 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 throughout. Many of the trusts in this category fully participate in the audit by submitting treatment data for other trusts. However their full contribution to the audit process may not be reflected by the way these audit results are presented. The treatment data entered by these trusts are shown in figure 6

Data Field Completeness

Similarly, tables 1a-1c indicate the data completeness for the key non-mandatory fields of Stage and Performance Status (PS) and the data completeness for the MDT discussion indicator and for the recording of treatment. Comparison with previous years (figure 5 for England and Wales) shows that data field completeness continues to improve. In Scotland data completeness shows continued high levels.

Figure 4
Case Ascertainment England & Wales (2011) (based on the expected number of presentations to secondary care)

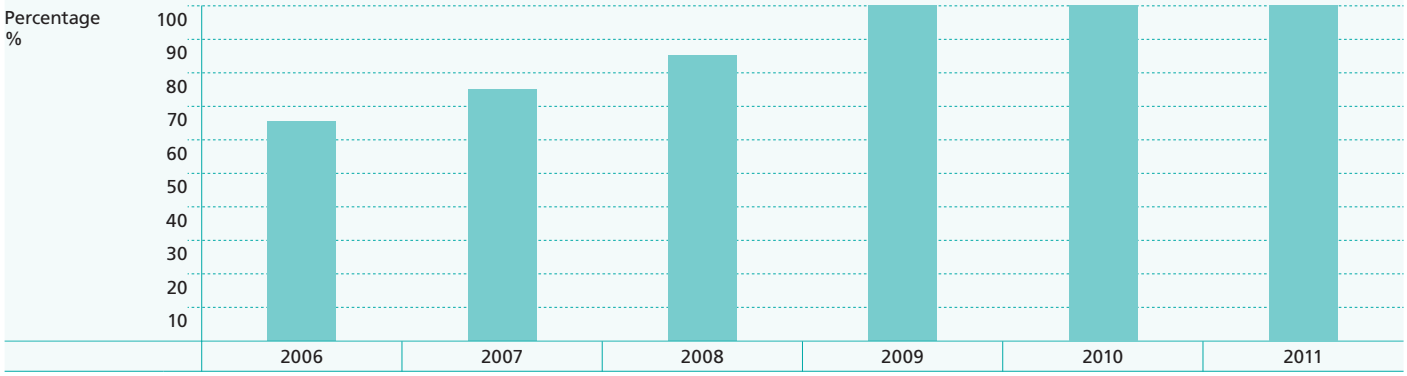


Figure 5
Data completeness England and Wales (2011)

What is the standard of care given to patients?

Table 2a lists headline indicators (Process, Specialist Nursing, Imaging and Outcome for England and Wales) by network, trust or health board (key to codes given in appendix 1) for all lung cancer and mesothelioma cases across England and Wales. These indicators have been chosen to reflect the overall standard of care provided to patients. In interpreting these figures, the above caveats regarding data completeness referred to previously must be borne in mind. Furthermore, the results as presented do not take into account the case-mix of patients. Adjustments to the results to account for case-mix will be available from the HSCIC website in due course. Where applicable, organisations should take the case-mix adjusted results into consideration in the evaluation of their service since although case-mix does not explain the whole of the variation in practice across organisations, it may show a particular result to be, or not to be, a statistical outlier. The colour coding in the tables for England reflects the targets set in the 2010 Local Action Plan (LAP).

Whilst some of the headline indicators relate to Wales, not all do this is because there are additional indicators agreed by the Cancer National Specialist Advisory Group (NSAS) lung cancer sub group that are audited internally in Wales.

Similar data for Scotland are shown in table 2b. LAP targets do not apply to Scotland; hence the data are not colour coded. National Lung Cancer Standards published by NHS Quality Improvement Scotland in 2008 include standards for rate of histological confirmation (minimum 75 per cent) and percentage SCLC having chemotherapy (minimum 60 per cent) however these do not specify rates of resection or anti-cancer treatment.

Data for Guernsey are shown in table 2c

Improvements in Care

Further details of the changes in the key outputs of the audit are shown in the tables in the "Key Messages" section on page 5. For England and Wales, the proportion of patients receiving a histological/cytological diagnosis shows a marginal increase to 76.9 per cent the proportion of patients discussed at an MDT remains stable at 96 per cent, and an increase to almost 88 per cent in the proportion of patients who receive a CT scan prior to a bronchoscopy procedure. The anti-cancer treatment rate and the overall surgical treatment rate have both increased by one percentage point this year to 60.1 per cent and 14.7 per cent respectively.

It is clear from the information in the results tables that there remains a marked variation in the outputs that the audit measures across organisations. This is apparent both at network and even more markedly at trust or health board level. In the latter case, some of the more extreme variation is explained by low numbers of cases, or poor quality data, so a useful way of reporting the variation is the "interquartile range" (IQR), describing the range of values in the middle 50 per cent. In England and Wales, the IQR for histological/cytological confirmation is 72.1-83.5 per cent, for surgical treatment it is 11.0-16.5 per cent whilst for anti-cancer treatment it is 55.0-65.7 per cent. Similar variation is apparent for Scotland and Guernsey.

Case Study 2
Essex Cancer Network Improves Surgical Resection Rate

Previous NLCA audit reports showed resection rates for Essex Cancer Network (N38) were low and especially at Southend University Hospital NHS Foundation Trust (RAJ). As a result of the NLCA publication this became the focus of a network wide audit and the following changes were made to clinical practice:

1. The lead clinicians have meetings with the radiologist to discuss CT scans and plan staging and diagnostics
2. All patients of borderline fitness for surgery were seen by a cardiothoracic surgeon
3. If the patient was turned down by the surgeon at the MDT, the patient was to be offered a second opinion if felt appropriate by the referring physician
4. All patients with metastases on a PET scan were confirmed by biopsy

These changes resulted in a doubling of resection rate in the first six months of 2012 and that trend is continuing. The main difference has not been the surgeons taking on more borderline cases in terms of fitness though this has certainly contributed, but more aggressive staging.

For example - a man with bilateral lung nodules and mediastinal lymph nodes on PET had an EBUS followed by a mediastinotomy followed by wedge resection of one nodule which turned out to be benign and finally a lobectomy for a T1b N0 adenocarcinoma.

Case-Mix Adjustment

A typical explanation for different audit results from different organisations (trusts, health boards or cancer networks) is that there is a different "case-mix". For example, a organisation with a low treatment rate might argue that the patients they treat are older, more socially deprived, have more advanced disease, or poorer fitness (performance status).

The National Lung Cancer Audit collects data that allows such factors to be taken into account. Taking anti-cancer treatment as an example, a statistical technique known as "logistic regression" calculates the likelihood of a patient in an organisation getting treatment compared to a baseline (typically the largest organisation) assuming that patients are matched for their case-mix.

This measure of likelihood of treatment is called an "odds ratio". The baseline organisation will always have an odds ratio of 1.0. If organisation X has an odds ratio of 0.9, we can say that patients in that hospital are 10 per cent less likely to have treatment (1.0 minus 0.9, converted to a percentage). Odds ratios have a further benefit, in that they provide so-called "confidence intervals", indicating how confident we can be that the observed differences are statistically important.

Improvements in data collection mean that stage and performance status are now recorded in around 90 per cent of cases. In order to further refine the statistical analyses, it is important in future that organisations improve recording of co-morbidity and lung function. As mentioned in "Key Recommendations", we have suggested that data completeness for the co-morbidity field should exceed 85 per cent and for patients with Stage I-II and PS0-1, completeness for FEV1 and FEV1% should exceed 75 per cent.

Case-mix adjusted data in an electronic spreadsheet format will be available from the HSCIC website in due course.

The Lung Cancer Nurse Specialist

A common theme in evaluation of patient and carer experience is the importance of input from the lung cancer specialist nurse. Ideally this input should occur at all stages of the lung cancer pathway, from referral through investigation, to treatment and survivorship, and including end-of-life care and bereavement. The audit is uniquely placed to record the input of specialist nurses and to support service improvement plans which attempt to match capacity to demand.

This year, there have been improvements in the key measure of proportion of patients receiving the input of a lung cancer nurse specialist (LCNS) with the overall figure rising from 64 per cent last year to 80 per cent this year. Likewise the proportion of patients who have the LCNS present at the time they are given their diagnosis has risen from 38 per cent to 55 per cent. Most organisations continue to fall short of the recommendation of 80 per cent on each of these two measures, and they are encouraged to use this comparative audit data, alongside workforce and activity data, as levers to drive service improvement.

Converting data into service improvement

The National Lung Cancer Audit in England is mandatory through the NHS Standard Contract and hospitals must make a statement of their participation in their Quality Accounts submissions.

However collecting data is only part of the audit process and it is important that the data is used to improve the services provided to patients and the outcomes of their treatment. There are numerous examples of local organisations doing just this, some working within the Improving Outcomes in Lung Cancer Project (ILCOP) others working independently within trusts and cancer networks. Furthermore, national organisations such as the National Institute for Health and Clinical Excellence, the British Thoracic Society and the National Cancer Peer Review Programme have all utilised data from the audit in their work programmes for lung cancer. Examples of some of the uses of the audit data are described in the list on page 13.

National Institute for Health and Clinical Excellence (NICE): Guideline development programme	To support the development and health economic assessment of the 2011 update of their 'Guideline on the Management of Lung Cancer'
National Institute for Health and Clinical Excellence (NICE): Quality Standards programme	To support the development of the Quality Standard for Lung Cancer and provide measures for a number of key elements
National Cancer Peer Review Programme (part of the National Cancer Action Team)	To provide data for the 'Clinical Lines of Enquiry' – outcome measures for the assessment of Lung Cancer Multi-Disciplinary Teams in England
Nottingham University – 'LUCADA Fellowship' Funded by the Royal College of Physicians	An academic MD fellowship based on the use and interpretation of data from the NLCA has resulted in three peer-reviewed publications to date
European Respiratory Society Thoracic Oncology Assembly : 'European Initiative for the Quality Management of Lung Cancer'	Underpinning the long term goal of a pan-European comparative audit of lung cancer performance and outcomes
LungPATH – a National Audit and Service Improvement programme in lung cancer pathology in collaboration with Guy's and St Thomas' Hospital and King's College London	A programme, based on the elements of the NLCA that examine the pathological diagnosis of lung cancer, this national audit (funded by an unrestricted educational grant from the pharmaceutical industry) is examining the variations in the quality of the process of the pathological diagnosis of lung cancer and explore factors that explain this variation in England
Society of Cardiothoracic Surgeons, the National Cancer Intelligence Network and Nottingham University	Examining the detail underpinning the variation in surgical resection rates and surgical outcomes for lung cancer patients across the UK
The Health Foundation	Improving Lung Cancer Outcomes - described separately
The Government's 'Transparency Policy'	The NLCA has been chosen as an example of a data source for the initial release of data as the pilot for the Government's Transparency Agenda in December 2011
The Roy Castle Lung Cancer Foundation	Data from the NLCA formed a major part of the report: 'Explaining Variations in Lung Cancer' published by the Roy Castle Lung Cancer Foundation in June 2011
The Department of Health and Cancer Research UK's International Cancer Benchmarking Partnership and the UK Cancer Registries: the collection of staging data on lung cancer	Data on the stage of cancers is essential for the interpretation of variations in cancer survival both within the UK and across national boundaries. The collection of staging data for lung cancer in the NLCA has improved the proportion of patients with stage recorded in the Cancer Registries having significant impact such initiatives as the International Cancer Benchmarking Partnership
Oxford University Department of Biomedical Engineering	Ph.D. project on clinical decision support and machine learning. The output of the work will be in the form of a clinical decision support platform, intended to act as a software tool to assist the clinicians in coming to informed, timely, safe and effective decisions in lung cancer care.
NHS Atlas of Variation version 2.0, 2011	Data on variation in surgical resection rate derived from the 2009 NLCA are being included in the second edition of the NHS Atlas of Variation. This is part of a wider programme of trying to drive up standards of care and reduce inappropriate variation in care and health outcomes across the UK.
Scottish Government Health Directorate: Detect Cancer Early programme	From 2012 routine quarterly staging data is being supplied by health boards from audit within the three Scottish cancer networks to measure the target to increase the number of Scottish people diagnosed with stage 1 cancer by 25 per cent for three cancer types including lung cancer.

Improving Outcomes in Lung Cancer Project (ILCOP)

ILCOP has been funded by the Health Foundation and is hosted by the Royal College of Physicians. The project used NLCA data and a new patient experience questionnaire with the aim of:

a) Supporting teams to deliver local improvements in outcomes and patient experience

b) Identifying reasons for variation

c) Contributing to the knowledge base around how best to engage clinicians in quality improvement activities.

ILCOP achieved a high level of engagement from the multidisciplinary teams who felt that the process was supportive yet opened up the possibility of legitimate challenge to existing ways of working. Over 230 healthcare professionals took part in the project. The multidisciplinary service reviews were described by 99 per cent of the participants as "good" or "excellent" in their ability to identify areas for improvement. More than 70 quality improvement plans were submitted to the core project team.

Local data collection demonstrated improvements in a number of areas. One site was able to reduce the time that patients wait for chemotherapy from 12 days to 2 days by streamlining the diagnostic pathway. This had an impact in the total number of small cell lung cancer patients being able to access treatment (57 per cent in 2010, and 71 per cent in 2011). Another site showed improvements in their patient satisfaction survey with a 20 per cent increase in the number of patients who reported that information about diagnosis was given with sensitivity and care. Final project evaluation through indicators from the National Lung Cancer Audit is expected to be available towards the end of 2012.

Trust and Health Board performance

Handling of low case numbers

It should be noted that trusts or health boards submitting very low numbers of cases with high levels of data completeness have been omitted from all tables to ensure that no details about specific patients can be identified in this report. Because of this network totals may not equal the sum of the composite trusts or health boards. For example, in a trust with only two submitted cases of lung cancer, with 100 per cent data completeness and a resection rate of 100 per cent, it would be possible to know the details of treatment of all lung cancer patients seen at that trust. However in most cases, each reported value is composed of multiple variables so it is impossible to surmise information about specific individuals from this report.

Data groupings

The data has been divided into four groups for analysis:-

- All cases of lung cancer submitted to the audit (this includes lung cancer and mesothelioma). This is the default grouping on which all analyses have been carried out unless otherwise specified.
- NSCLC – non-small cell lung cancer or, more correctly, this should be considered NOT small cell lung cancer. This group includes all lung cancers including those that are clinically diagnosed, but excludes pathological diagnoses of small cell lung cancer and clinical/pathological diagnoses of mesothelioma.
- Histologically confirmed non-small cell lung cancer – all cases of non-small cell lung cancer that are confirmed by a histological or cytological specimen.
- Small cell lung cancer – all cases of lung cancer that are confirmed to be of small cell type by a histological or cytological specimen.

Figure 6: Tertiary centres

Most activity relating to lung cancer initial diagnosis occurs in the secondary care organisations which range from small district general hospitals, to large teaching hospitals. Subsequent treatment often take place in the same hospital, or for some smaller hospitals, the patient may be transferred to another secondary care organisation. Activity in these organisations is well represented by the audit since the analysis of cases by "place first seen" allocates patients to the decision-making multidisciplinary team.

However, there are several tertiary centres which do not provide diagnostic services and which are therefore only rarely the "place first seen". These centres do provide a very important treatment service for patients both in their local area, but also on a regional/national basis, and for this reason we have chosen to record their activity separately, as shown in the table below. Due to the absence of a common denominator, it is not possible to compare outcomes in these organisations at the present time.

Figure 6
Tertiary centres

Centre Code	Centre Name	Surgery (n)	Chemotherapy (n)	Radiotherapy including Brachytherapy (n)
7A4BV	University Hospital Of Wales	93	n/a	n/a
RBV	The Christie NHS Foundation Trust	n/a	449	715
REN	The Clatterbridge Cancer Centre NHS Foundation Trust	n/a	519	569
RGM	Papworth Hospital NHS Foundation Trust	71	n/a	n/a
RM2	University Hospital of South Manchester NHS Foundation Trust	325	241	n/a
RPY	The Royal Marsden NHS Foundation Trust	n/a	172	170
RT3	Royal Brompton and Harefield NHS Foundation Trust	256	n/a	n/a

Case Study 3
West Suffolk Hospitals NHS Trust (RGR) reduction in waiting time for patients with Small Cell Lung Cancer

This trust determined that reduction in waiting times would mean that more patients were able to receive treatment before they deteriorated and became too ill for chemotherapy.

NLCA data demonstrated that prior to undertaking ILCOP the treatment rates for SCLC were between 50 per cent and 60 per cent and following the project they increased to over 70 per cent.

This was achieved by implementing an alert system to flag up patients with the very aggressive small cell lung cancer which allowed fast track booking of oncology appointments. There was an impressive reduction in waiting times from 12 to 2 days following the implementation of this plan.

They then followed this up by assessing whether this reduction in waiting times meant that more patients were able to receive treatment before they deteriorated and became too ill for chemotherapy.

At the time of publication of this report in December 2012, organisations will be collecting data on patients first seen in 2012, in preparation for submission to the audit at the end of June 2013. It is anticipated that these data will be analysed and published in December 2013.

Organisations should take note of the following:

- It is anticipated that data on co-morbidities will be included in future case-mix adjustment. Strategies to ensure high quality data submission should be adopted. Note that for the purposes of the NLCA, only co-morbidities that influence treatment decisions should be recorded (see data manual for further details).
- It is anticipated that data on lung function (FEV1 absolute and percentage of predicted) will be included in future case-mix adjustment. Strategies to ensure high quality data submission should be adopted.

Table 1a
Data completeness for key fields England and Wales (2011 all)

Code	Expected number	Actual number	% of expected	MDT Completeness (%)	Performance Status Completeness (%)	Stage Completeness (%)	PS & Stage Completeness (%)	Treatment Recorded (%)	Data Completeness Seen by Nurse Specialist (%)	Data Completeness Nurse Specialist present at Diagnosis (%)	CT Scan Field Completed (%)	Bronchoscopy Field Completed (%)
N01 Total	**989**	**1,128**	**114**	**98.2**	**87.2**	**91.4**	**81.7**	**92.6**	**84.5**	**82.3**	**92.2**	**42.8**
RTX	184	267	145	98.1	81.3	91.4	76.4	89.5	69.3	68.9	87.3	41.6
RXL	242	287	119	99.0	97.9	93.0	92.0	99.7	92.0	84.0	94.4	49.5
RXN	136	269	198	99.3	78.8	85.9	70.3	91.4	91.1	90.7	90.3	31.6
RXR	427	305	71	96.7	89.8	94.8	86.9	89.5	84.9	84.9	96.1	47.5
N02 Total	**2,184**	**2,432**	**111**	**93.4**	**86.4**	**92.1**	**83.3**	**88.2**	**79.8**	**68.5**	**91.7**	**74.8**
RBT	120	126	105	86.5	23.8	88.1	20.6	88.1	49.2	49.2	96.0	96.0
RJN	108	115	107	98.3	98.3	98.3	97.4	96.5	98.3	96.5	99.1	97.4
RM2	236	288	122	89.9	87.8	85.1	76.7	84.0	44.4	44.4	91.0	34.0
RM3	220	228	104	99.6	99.6	98.7	98.7	93.9	98.7	93.9	99.1	98.7
RM4	92	97	105	96.9	95.9	96.9	94.8	93.8	97.9	89.7	97.9	88.7
RMC	220	227	103	95.2	93.4	96.5	92.5	90.7	92.1	77.5	95.2	90.3
RMP	150	150	100	90.7	60.0	80.0	54.7	92.7	65.3	56.7	88.0	69.3
RRF	200	243	122	92.6	84.8	93.8	84.0	88.5	80.7	80.7	86.0	58.0
RW3	120	134	112	94.8	92.5	91.8	88.1	76.1	90.3	77.6	91.0	85.1
RW6	573	603	105	94.0	93.4	94.0	91.9	88.9	84.1	55.1	92.9	84.7
RWJ	145	220	152	90.0	86.4	87.7	82.3	80.0	84.5	77.3	78.2	46.4
N03 Total	**1,535**	**1,891**	**123**	**99.3**	**91.8**	**96.1**	**88.8**	**86.5**	**88.1**	**78.4**	**96.0**	**66.6**
LLCU	428	405	95	100.0	99.0	97.0	96.0	92.8	100.0	92.8	100.0	100.0
RBL	119	325	273	99.7	96.0	98.5	94.5	77.8	99.4	87.4	99.7	99.4
RBN	221	238	108	100.0	98.3	94.1	92.9	97.5	84.9	77.3	97.9	23.9
REM	323	341	106	99.1	86.2	98.2	85.6	93.3	68.0	62.8	85.6	44.6
REN	48	2	4	50.0	0.0	50.0	0.0	100.0	0.0	0.0	0.0	0.0
RJR	121	194	160	100.0	89.2	92.8	83.5	89.7	81.4	80.9	96.9	37.1
RVY	82	170	207	98.2	94.7	96.5	92.4	96.5	85.9	85.9	97.1	38.2
RWW	193	216	112	97.2	74.5	93.1	70.4	54.2	92.6	56.5	96.3	86.1
N06 Total	**1,811**	**1,978**	**109**	**99.5**	**95.4**	**88.0**	**84.8**	**91.2**	**98.0**	**82.9**	**99.9**	**99.2**
RAE	240	293	122	99.0	93.2	85.0	81.2	85.7	99.7	86.0	100.0	100.0
RCB	173	202	117	99.0	96.5	77.7	75.2	93.6	100.0	89.6	100.0	100.0
RCD	91	110	121	98.2	97.3	95.5	93.6	89.1	90.9	60.9	99.1	98.2
RCF	118	118	100	99.2	96.6	80.5	80.5	92.4	96.6	91.5	99.2	100.0
RR8	565	575	102	99.8	99.5	91.7	91.7	93.7	100.0	85.6	100.0	100.0
RWY	244	239	98	100.0	90.0	88.3	79.9	91.6	97.1	80.8	100.0	100.0
RXF	380	441	116	99.8	93.2	89.8	84.4	90.5	96.1	78.7	100.0	97.1
N07 Total	**753**	**815**	**108**	**99.1**	**96.6**	**87.9**	**85.0**	**95.0**	**88.2**	**50.2**	**96.9**	**93.0**
RCC	126	131	104	97.7	95.4	90.1	86.3	93.9	98.5	87.8	98.5	97.7
RJL	226	317	140	100.0	95.0	94.0	89.6	95.6	95.3	85.5	96.5	87.4
RWA	401	367	92	98.9	98.4	81.7	80.7	94.8	78.5	6.3	96.7	96.2
N08 Total	**1,246**	**1,362**	**109**	**99.9**	**99.3**	**92.7**	**92.1**	**89.8**	**85.6**	**78.9**	**99.6**	**98.8**
RFF	131	183	140	100.0	98.4	87.4	85.8	97.8	97.3	89.6	100.0	99.5
RFR	144	198	138	100.0	100.0	98.0	98.0	59.1	99.5	94.4	100.0	100.0
RFS	174	184	106	98.9	98.9	92.9	91.8	94.0	98.4	82.6	100.0	96.2
RHQ	480	445	93	100.0	100.0	94.4	94.4	92.4	58.7	58.7	98.7	98.4
RP5	317	352	111	100.0	98.6	90.1	89.2	97.4	99.1	88.1	100.0	99.7

Table 1a (continued)
Data completeness for key fields England and Wales (2011 all)

Code	Expected number	Actual number	% of expected	MDT Completeness (%)	Performance Status Completeness (%)	Stage Completeness (%)	PS & Stage Completeness (%)	Treatment Recorded (%)	Data Completeness Seen by Nurse Specialist (%)	Data Completeness Nurse Specialist present at Diagnosis (%)	CT Scan Field Completed (%)	Bronchoscopy Field Completed (%)
N11 Total	**1,066**	**1,113**	**104** ●	**94.1** ▲	**95.2** ●	**92.2** ●	**90.4** ●	**92.7** ●	**91.9** ●	**85.1** ●	**94.2** ●	**49.2** ▲
RBK	158	162	103 ●	98.1 ●	97.5 ●	95.7 ●	95.7 ●	95.1 ●	98.8 ●	90.7 ●	97.5 ●	74.1 ▲
RR1	404	414	103 ●	87.4 ▲	91.3 ●	83.8 ▲	80.9 ▲	91.3 ●	90.6 ●	84.5 ▲	87.2 ●	57.0 ▲
RRK	245	267	109 ●	97.4 ●	96.6 ●	99.3 ●	96.3 ●	95.9 ●	91.4 ●	90.3 ●	98.5 ●	26.2 ▲
RXK	259	270	104 ●	98.5 ●	98.5 ●	95.9 ●	95.9 ●	90.4 ●	90.4 ●	77.4 ▲	98.5 ●	45.2 ▲
N12 Total	**414**	**506**	**122** ●	**98.6** ●	**91.1** ●	**86.2** ●	**78.9** ▲	**90.9** ●	**79.1** ▲	**69.8** ▲	**99.8** ●	**93.3** ●
RJC	5	93	1860 ●	94.6 ▲	80.6 ▲	93.5 ●	76.3 ▲	80.6 ▲	93.5 ●	88.2 ●	100.0 ●	96.8 ●
RKB	249	204	82 ●	100.0 ●	99.5 ●	78.9 ▲	78.4 ▲	97.1 ●	97.1 ●	83.8 ▲	100.0 ●	93.1 ●
RLT	96	114	119 ●	100.0 ●	97.4 ●	95.6 ●	93.0 ●	88.6 ●	94.7 ●	81.6 ▲	100.0 ●	100.0 ●
RWP00	64	95	148 ●	97.9 ●	75.8 ▲	83.2 ▲	65.3 ▲	90.5 ●	7.4 ▲	7.4 ▲	98.9 ●	82.1 ▲
N20 Total	**532**	**575**	**108** ●	**98.8** ●	**80.5** ▲	**81.6** ▲	**68.3** ▲	**93.4** ●	**83.5** ▲	**81.0** ▲	**92.3** ●	**58.6** ▲
RC9	109	186	171 ●	96.8 ●	78.0 ▲	71.5 ▲	57.0 ▲	91.4 ●	72.0 ▲	67.7 ▲	99.5 ●	66.1 ▲
RWG	217	187	86 ●	100.0 ●	74.9 ▲	82.4 ▲	64.2 ▲	95.7 ●	93.0 ●	90.9 ●	87.2 ●	44.4 ▲
RWH	206	202	98 ●	99.5 ●	88.1 ●	90.1 ●	82.7 ▲	93.1 ●	85.1 ●	84.2 ▲	90.6 ●	64.9 ▲
N21 Total	**862**	**690**	**80** ●	**98.1** ●	**94.2** ●	**92.2** ●	**88.4** ●	**91.7** ●	**93.6** ●	**72.5** ▲	**98.6** ●	**90.4** ●
RAS	100	107	107 ●	96.3 ●	86.9 ●	86.0 ●	77.6 ▲	95.3 ●	90.7 ●	90.7 ●	93.5 ●	69.2 ▲
RC3	75	90	120 ●	96.7 ●	94.4 ●	93.3 ●	90.0 ●	92.2 ●	95.6 ●	83.3 ▲	96.7 ●	92.2 ●
RFW	70	94	134 ●	95.7 ●	95.7 ●	94.7 ●	92.6 ●	89.4 ●	97.9 ●	0.0 ▲	100.0 ●	97.9 ●
RQM	80	58	73 ■	100.0 ●	96.6 ●	93.1 ●	91.4 ●	96.6 ●	100.0 ●	89.7 ●	100.0 ●	100.0 ●
RT3 ◆	148 ◆	19 ◆	13 ◆	89.5 ◆	68.4 ◆	47.4 ◆	36.8 ◆	100.0 ◆	94.7 ◆	42.1 ◆	100.0 ◆	21.1 ◆
RV8	100	88	88 ●	100.0 ●	98.9 ●	93.2 ●	92.0 ●	94.3 ●	90.9 ●	80.7 ▲	100.0 ●	100.0 ●
RYJ	289	234	81 ●	100.0 ●	96.6 ●	96.6 ●	93.2 ●	88.0 ●	91.9 ●	84.2 ▲	100.0 ●	96.2 ●
N22 Total	**732**	**812**	**111** ●	**98.2** ●	**94.5** ●	**93.5** ●	**88.9** ●	**94.0** ●	**97.5** ●	**88.2** ●	**98.9** ●	**98.2** ●
RAL	86	91	106 ●	100.0 ●	100.0 ●	100.0 ●	100.0 ●	100.0 ●	100.0 ●	96.7 ●	100.0 ●	100.0 ●
RAP	84	95	113 ●	100.0 ●	97.9 ●	89.5 ●	89.5 ●	85.3 ●	97.9 ●	88.4 ●	100.0 ●	98.9 ●
RKE	98	112	114 ●	100.0 ●	94.6 ●	92.9 ●	88.4 ●	93.8 ●	97.3 ●	83.0 ▲	100.0 ●	98.2 ●
RQW	113	157	139 ●	96.2 ●	93.6 ●	86.0 ●	79.6 ▲	87.9 ●	100.0 ●	85.4 ●	100.0 ●	100.0 ●
RRV	139	113	81 ●	99.1 ●	82.3 ▲	98.2 ●	81.4 ▲	97.3 ●	90.3 ●	74.3 ▲	95.6 ●	93.8 ●
RVL	212	244	115 ●	96.7 ●	97.1 ●	95.5 ●	94.3 ●	97.5 ●	98.4 ●	95.5 ●	98.4 ●	98.0 ●
N23 Total	**780**	**635**	**81** ●	**99.1** ●	**59.7** ▲	**89.0** ●	**58.3** ▲	**86.8** ●	**82.5** ▲	**79.5** ▲	**86.9** ●	**69.0** ▲
RF4	340	206	61 ■	99.0 ●	1.9 ▲	77.7 ▲	1.9 ▲	80.6 ▲	58.7 ▲	57.3 ▲	78.2 ▲	38.3 ▲
RGC	115	119	104 ●	99.2 ●	91.6 ●	94.1 ●	89.1 ●	78.2 ▲	97.5 ●	86.6 ●	94.1 ●	92.4 ●
RNH	115	100	87 ●	99.0 ●	62.0 ▲	92.0 ●	62.0 ▲	87.0 ●	81.0 ▲	81.0 ▲	71.0 ▲	43.0 ▲
RNJ	110	115	105 ●	98.3 ●	95.7 ●	95.7 ●	93.0 ●	96.5 ●	97.4 ●	94.8 ●	98.3 ●	96.5 ●
RQX	100	95	95 ●	100.0 ●	98.9 ●	95.8 ●	95.8 ●	98.9 ●	98.9 ●	98.9 ●	100.0 ●	100.0 ●
N24 Total	**873**	**702**	**80** ●	**98.4** ●	**87.3** ●	**84.6** ▲	**76.9** ▲	**89.0** ●	**80.8** ▲	**65.8** ▲	**94.3** ●	**77.9** ▲
RJ1	273	121	44 ▲	99.2 ●	63.6 ▲	74.4 ▲	49.6 ▲	100.0 ●	89.3 ●	68.6 ▲	100.0 ●	97.5 ●
RJ2	116	108	93 ●	99.1 ●	87.0 ●	89.8 ●	82.4 ▲	81.5 ▲	85.2 ●	65.7 ▲	99.1 ●	87.0 ●
RJZ	114	109	96 ●	99.1 ●	99.1 ●	89.9 ●	89.9 ●	68.8 ▲	99.1 ●	86.2 ●	99.1 ●	99.1 ●
RYQ	370	364	98 ●	97.8 ●	91.8 ●	84.9 ▲	80.5 ▲	93.7 ●	71.2 ▲	58.8 ▲	89.6 ●	62.4 ▲
N25 Total	**785**	**655**	**83** ●	**96.0** ●	**76.3** ▲	**78.0** ▲	**66.6** ▲	**82.9** ▲	**84.7** ▲	**66.1** ▲	**98.3** ●	**69.0** ▲
RAX	159	117	74 ■	97.4 ●	81.2 ▲	87.2 ●	75.2 ▲	93.2 ●	96.6 ●	88.9 ●	100.0 ●	93.2 ●
RJ6	132	144	109 ●	96.5 ●	91.0 ●	95.1 ●	86.8 ●	93.1 ●	98.6 ●	89.6 ●	98.6 ●	62.5 ▲
RJ7	239	173	72 ■	94.8 ▲	86.7 ●	82.1 ▲	76.3 ▲	79.8 ▲	71.1 ▲	52.6 ▲	96.5 ●	87.9 ●
RPY ◆	0 ◆	17 ◆	0 ◆	76.5 ◆	76.5 ◆	64.7 ◆	47.1 ◆	94.1 ◆	88.2 ◆	17.6 ◆	94.1 ◆	29.4 ◆
RVR	245	199	81 ●	98.0 ●	55.3 ▲	58.8 ▲	41.7 ▲	70.9 ▲	79.9 ▲	52.3 ▲	99.5 ●	47.2 ▲

Table 1a (continued)
Data completeness for key fields England and Wales (2011 all)

Code	Expected number	Actual number	% of expected	MDT Completeness (%)	Performance Status Completeness (%)	Stage Completeness (%)	PS & Stage Completeness (%)	Treatment Recorded (%)	Data Completeness Seen by Nurse Specialist (%)	Data Completeness Nurse Specialist present at Diagnosis (%)	CT Scan Field Completed (%)	Bronchoscopy Field Completed (%)
N26 Total	**920**	**1,156**	**126** ●	**99.9** ●	**92.8** ●	**89.3** ●	**83.9** ▲	**92.6** ●	**92.9** ●	**84.0** ▲	**97.6** ●	**91.5** ●
RA9	156	201	129 ●	99.5 ●	99.0 ●	97.5 ●	97.0 ●	95.5 ●	99.5 ●	85.1 ●	99.5 ●	99.5 ●
RBZ	85	119	140 ●	100.0 ●	91.6 ●	81.5 ▲	74.8 ▲	95.8 ●	99.2 ●	94.1 ●	92.4 ●	26.1 ▲
REF	223	265	119 ●	100.0 ●	98.5 ●	90.9 ●	90.6 ●	93.6 ●	97.0 ●	95.1 ●	99.2 ●	97.7 ●
RH8	200	235	118 ●	100.0 ●	93.6 ●	93.2 ●	87.7 ●	95.7 ●	94.0 ●	84.3 ▲	98.3 ●	99.6 ●
RK9	256	336	131 ●	100.0 ●	84.5 ▲	83.0 ▲	71.4 ▲	86.9 ●	82.7 ▲	70.8 ▲	96.4 ●	99.4 ●
N27 Total	**402**	**419**	**104** ●	**97.4** ●	**93.8** ●	**84.7** ▲	**80.4** ▲	**94.7** ●	**95.0** ●	**76.4** ▲	**97.1** ●	**94.0** ●
RBD	82	108	132 ●	98.1 ●	87.0 ●	94.4 ●	83.3 ▲	90.7 ●	92.6 ●	88.9 ●	98.1 ●	95.4 ●
RD3	150	155	103 ●	100.0 ●	100.0 ●	88.4 ●	88.4 ●	99.4 ●	100.0 ●	80.6 ▲	100.0 ●	100.0 ●
RDZ	170	156	92 ●	94.2 ▲	92.3 ●	74.4 ▲	70.5 ▲	92.9 ●	91.7 ●	63.5 ▲	93.6 ●	87.2 ●
N28 Total	**843**	**887**	**105** ●	**94.9** ▲	**68.8** ▲	**74.0** ▲	**57.2** ▲	**91.2** ●	**71.3** ▲	**71.3** ▲	**87.8** ●	**30.0** ▲
RA3	82	92	112 ●	90.2 ▲	62.0 ▲	65.2 ▲	48.9 ▲	90.2 ●	57.6 ▲	57.6 ▲	67.4 ▲	23.9 ▲
RA4	62	89	144 ●	96.6 ●	57.3 ▲	71.9 ▲	43.8 ▲	87.6 ●	80.9 ▲	80.9 ▲	94.4 ●	32.6 ▲
RA7	180	130	72 ■	97.7 ●	96.2 ●	92.3 ●	91.5 ●	94.6 ●	76.2 ▲	76.2 ▲	87.7 ●	25.4 ▲
RBA	121	128	106 ●	78.9 ▲	10.2 ▲	55.5 ▲	9.4 ▲	85.9 ●	59.4 ▲	59.4 ▲	66.4 ▲	31.3 ▲
RD1	170	184	108 ●	100.0 ●	93.5 ●	81.0 ▲	77.2 ▲	96.7 ●	88.0 ●	88.0 ●	95.1 ●	45.1 ▲
RVJ	228	264	116 ●	98.9 ●	72.7 ▲	72.7 ▲	56.8 ▲	89.8 ●	64.4 ▲	64.4 ▲	98.1 ●	22.3 ▲
N29 Total	**437**	**563**	**129** ●	**98.9** ●	**94.3** ●	**90.6** ●	**87.6** ●	**90.1** ●	**92.4** ●	**71.8** ▲	**95.9** ●	**93.1** ●
RLQ	74	109	147 ●	100.0 ●	88.1 ●	85.3 ●	77.1 ▲	89.0 ●	100.0 ●	30.3 ▲	99.1 ●	100.0 ●
RTE	244	323	132 ●	99.1 ●	95.0 ●	92.6 ●	90.4 ●	91.0 ●	89.2 ●	76.8 ▲	96.3 ●	88.5 ●
RWP50	119	131	110 ●	97.7 ●	97.7 ●	90.1 ●	89.3 ●	88.5 ●	93.9 ●	93.9 ●	92.4 ●	98.5 ●
N30 Total	**1,031**	**1,164**	**113** ●	**99.5** ●	**85.6** ●	**82.0** ▲	**72.8** ▲	**89.1** ●	**96.0** ●	**86.0** ●	**97.3** ●	**83.2** ▲
RD7	112	174	155 ●	100.0 ●	77.6 ▲	76.4 ▲	63.2 ▲	77.6 ▲	100.0 ●	81.6 ▲	100.0 ●	100.0 ●
RD8	96	133	139 ●	100.0 ●	64.7 ▲	40.6 ▲	28.6 ▲	84.2 ▲	79.7 ▲	78.9 ▲	93.2 ●	41.4 ▲
RHW	206	172	84 ●	99.4 ●	95.9 ●	89.0 ●	84.9 ▲	93.6 ●	100.0 ●	91.3 ●	100.0 ●	99.4 ●
RN3	113	183	162 ●	100.0 ●	96.2 ●	91.8 ●	88.0 ●	92.3 ●	100.0 ●	86.3 ●	100.0 ●	98.9 ●
RTH	303	307	101 ●	99.0 ●	80.5 ▲	89.3 ●	73.3 ▲	92.8 ●	94.8 ●	88.3 ●	96.1 ●	75.2 ▲
RXQ	201	195	97 ●	99.0 ●	95.9 ●	88.7 ●	85.6 ●	89.7 ●	98.5 ●	86.2 ●	94.9 ●	80.0 ▲
N31 Total	**1,092**	**1,167**	**107** ●	**97.3** ●	**92.3** ●	**89.0** ●	**84.0** ▲	**90.0** ●	**76.9** ▲	**68.6** ▲	**90.4** ●	**70.7** ▲
RHM	448	234	52 ■	97.9 ●	94.4 ●	98.7 ●	93.6 ●	89.7 ●	52.1 ▲	35.5 ▲	99.6 ●	97.9 ●
RHU	279	383	137 ●	97.4 ●	90.1 ●	77.0 ▲	71.0 ▲	89.0 ●	72.3 ▲	70.8 ▲	78.6 ▲	35.8 ▲
RN1	94	104	111 ●	88.5 ▲	83.7 ▲	90.4 ●	81.7 ▲	93.3 ●	77.9 ▲	58.7 ▲	80.8 ▲	80.8 ▲
RN5	39	100	256 ●	98.0 ●	91.0 ●	97.0 ●	89.0 ●	92.0 ●	99.0 ●	78.0 ▲	100.0 ●	100.0 ●
RNZ	71	95	134 ●	98.9 ●	97.9 ●	90.5 ●	90.5 ●	96.8 ●	97.9 ●	88.4 ●	97.9 ●	97.9 ●
RR2	53	104	196 ●	98.1 ●	95.2 ●	97.1 ●	94.2 ●	91.3 ●	98.1 ●	96.2 ●	98.1 ●	99.0 ●
RYR16	108	147	136 ●	100.0 ●	95.9 ●	91.8 ●	89.1 ●	83.7 ▲	84.4 ▲	83.7 ▲	96.6 ●	53.7 ▲
N32 Total	**540**	**662**	**123** ●	**99.7** ●	**73.1** ▲	**82.5** ▲	**66.9** ▲	**87.5** ●	**82.9** ▲	**79.2** ▲	**99.4** ●	**93.8** ●
RA2	109	100	92 ●	100.0 ●	4.0 ▲	39.0 ▲	4.0 ▲	88.0 ●	57.0 ▲	57.0 ▲	100.0 ●	100.0 ●
RDU	116	201	173 ●	100.0 ●	94.5 ●	89.1 ●	85.1 ●	97.5 ●	94.0 ●	85.6 ●	100.0 ●	94.0 ●
RTK	159	172	108 ●	99.4 ●	74.4 ▲	95.9 ●	73.3 ▲	83.7 ▲	85.5 ●	81.4 ▲	99.4 ●	84.3 ▲
RTP	156	189	121 ●	99.5 ●	85.7 ●	86.2 ●	75.1 ▲	79.9 ▲	82.5 ▲	82.0 ▲	98.4 ●	98.9 ●
N33 Total	**620**	**660**	**107** ●	**99.2** ●	**90.6** ●	**93.5** ●	**85.9** ●	**92.7** ●	**87.3** ●	**87.3** ●	**95.9** ●	**52.4** ▲
RXC	229	266	116 ●	98.9 ●	97.7 ●	98.1 ●	97.0 ●	92.5 ●	86.8 ●	86.8 ●	98.9 ●	80.8 ▲
RXH	251	246	98 ●	100.0 ●	83.3 ▲	92.3 ●	77.6 ▲	91.5 ●	85.4 ●	85.4 ●	93.5 ●	30.5 ▲
RYR18	140	146	104 ●	98.6 ●	89.7 ●	87.0 ●	79.5 ▲	95.2 ●	91.1 ●	91.1 ●	94.5 ●	37.7 ▲

Table 1a (continued)
Data completeness for key fields England and Wales (2011 all)

Code	Expected number	Actual number	% of expected	MDT Completeness (%)	Performance Status Completeness (%)	Stage Completeness (%)	PS & Stage Completeness (%)	Treatment Recorded (%)	Data Completeness Seen by Nurse Specialist (%)	Data Completeness Nurse Specialist present at Diagnosis (%)	CT Scan Field Completed (%)	Bronchoscopy Field Completed (%)
N34 Total	**903**	**975**	**108** ●	**98.5** ●	**86.1** ●	**79.9** ▲	**75.8** ▲	**84.3** ▲	**47.7** ▲	**42.4** ▲	**97.4** ●	**96.8** ●
RN7	121	130	107 ●	100.0 ●	96.2 ●	78.5 ▲	76.9 ▲	96.2 ●	98.5 ●	77.7 ▲	100.0 ●	100.0 ●
RPA	205	148	72 ■	99.3 ●	91.2 ●	64.2 ▲	62.2 ▲	65.5 ▲	88.5 ●	88.5 ●	100.0 ●	100.0 ●
RVV	374	470	126 ●	99.8 ●	97.4 ●	98.9 ●	97.4 ●	94.7 ●	0.2 ▲	0.0 ▲	99.8 ●	99.8 ●
RWF	203	227	112 ●	94.3 ▲	53.3 ▲	51.5 ▲	39.2 ▲	68.3 ▲	90.3 ●	79.7 ▲	89.4 ●	86.8 ●
N35 Total	**1,105**	**1,092**	**99** ●	**95.6** ●	**81.2** ▲	**78.9** ▲	**72.2** ▲	**91.3** ●	**82.9** ▲	**81.5** ▲	**91.4** ●	**63.2** ▲
RJD	160	154	96 ●	100.0 ●	99.4 ●	89.6 ●	89.0 ●	93.5 ●	87.7 ●	87.7 ●	100.0 ●	48.7 ▲
RJE	310	316	102 ●	98.1 ●	72.5 ▲	67.1 ▲	51.9 ▲	91.5 ●	73.1 ▲	72.8 ▲	93.4 ●	51.3 ▲
RL4	205	222	108 ●	99.5 ●	99.1 ●	97.7 ●	97.3 ●	95.9 ●	99.5 ●	93.2 ●	99.5 ●	99.5 ●
RNA	180	141	78 ●	73.0 ▲	23.4 ▲	35.5 ▲	19.1 ▲	88.7 ●	53.2 ▲	53.2 ▲	60.3 ▲	22.7 ▲
RWP31	42	45	107 ●	97.8 ●	97.8 ●	93.3 ●	93.3 ●	86.7 ●	91.1 ●	91.1 ●	80.0 ▲	97.8 ●
RXW	208	214	103 ●	99.1 ●	97.2 ●	94.9 ●	94.4 ●	87.4 ●	94.4 ●	94.4 ●	96.7 ●	72.9 ▲
N36 Total	**2,134**	**2,687**	**126** ●	**99.5** ●	**96.2** ●	**95.1** ●	**92.1** ●	**94.9** ●	**94.5** ●	**87.8** ●	**98.0** ●	**87.8** ●
RE9	134	180	134 ●	100.0 ●	97.2 ●	82.8 ▲	80.6 ▲	98.3 ●	90.0 ●	90.0 ●	100.0 ●	100.0 ●
RLN	226	279	124 ●	98.9 ●	100.0 ●	85.3 ●	85.3 ●	93.2 ●	87.1 ●	86.7 ●	96.1 ●	65.9 ▲
RNL	170	242	142 ●	98.3 ●	83.1 ▲	93.8 ●	79.3 ▲	83.1 ▲	85.1 ●	80.6 ▲	93.0 ●	79.3 ▲
RR7	132	225	171 ●	100.0 ●	88.4 ●	95.6 ●	85.3 ●	95.6 ●	99.6 ●	88.9 ●	97.3 ●	95.6 ●
RTD	166	302	182 ●	100.0 ●	99.3 ●	100.0 ●	99.3 ●	96.0 ●	100.0 ●	86.4 ●	100.0 ●	100.0 ●
RTF	364	371	102 ●	98.4 ●	95.4 ●	92.5 ●	91.1 ●	91.4 ●	96.2 ●	83.3 ▲	97.3 ●	96.5 ●
RTR	270	377	140 ●	100.0 ●	98.7 ●	100.0 ●	98.7 ●	100.0 ●	99.5 ●	95.0 ●	100.0 ●	100.0 ●
RVW	300	324	108 ●	100.0 ●	98.8 ●	100.0 ●	98.8 ●	100.0 ●	99.7 ●	90.4 ●	100.0 ●	100.0 ●
RXP	372	387	104 ●	100.0 ●	99.2 ●	98.2 ●	97.4 ●	94.8 ●	89.7 ●	87.9 ●	97.7 ●	58.4 ▲
N37 Total	**1,368**	**1,519**	**111** ●	**91.4** ▲	**81.2** ▲	**79.6** ▲	**68.4** ▲	**91.2** ●	**81.6** ▲	**76.6** ▲	**82.1** ▲	**50.0** ▲
RC1	57	65	114 ●	100.0 ●	96.9 ●	75.4 ▲	73.8 ▲	96.9 ●	66.2 ▲	66.2 ▲	98.5 ●	40.0 ▲
RCX[1]	112	140	125 ●	44.3 ▲	77.9 ▲	87.9 ●	70.7 ▲	89.3 ●	90.0 ●	90.0 ●	92.9 ●	50.7 ▲
RGN	108	173	160 ●	98.8 ●	91.3 ●	85.5 ●	79.2 ▲	98.8 ●	91.9 ●	90.8 ●	98.8 ●	57.2 ▲
RGP	131	201	153 ●	96.0 ●	87.1 ●	78.1 ▲	72.6 ▲	89.6 ●	94.5 ●	81.6 ▲	95.5 ●	91.5 ●
RGQ	171	212	124 ●	99.1 ●	94.8 ●	86.8 ●	83.5 ▲	96.7 ●	99.1 ●	86.8 ●	99.1 ●	99.1 ●
RGR	52	108	208 ●	100.0 ●	94.4 ●	95.4 ●	91.7 ●	91.7 ●	92.6 ●	91.7 ●	92.6 ●	25.9 ▲
RGT	103	203	197 ●	100.0 ●	91.6 ●	81.3 ▲	75.9 ▲	79.3 ▲	67.5 ▲	58.6 ▲	6.4 ▲	2.5 ▲
RM1	338	350	104 ●	91.1 ▲	57.7 ▲	66.6 ▲	41.7 ▲	95.7 ●	67.4 ▲	67.4 ▲	86.6 ●	35.1 ▲
RQQ	35	67	191 ●	85.1 ▲	55.2 ▲	70.1 ▲	49.3 ▲	70.1 ▲	56.7 ▲	52.2 ▲	95.5 ●	19.4 ▲
N38 Total	**678**	**859**	**127** ●	**99.5** ●	**99.0** ●	**96.2** ●	**95.6** ●	**94.8** ●	**98.8** ●	**87.9** ●	**90.2** ●	**83.5** ▲
RAJ	192	220	115 ●	99.5 ●	97.7 ●	99.1 ●	97.7 ●	97.7 ●	97.7 ●	92.7 ●	100.0 ●	100.0 ●
RDD	176	201	114 ●	100.0 ●	100.0 ●	100.0 ●	100.0 ●	98.5 ●	100.0 ●	81.1 ▲	100.0 ●	99.5 ●
RDE	176	248	141 ●	100.0 ●	100.0 ●	100.0 ●	100.0 ●	100.0 ●	100.0 ●	82.7 ▲	100.0 ●	100.0 ●
RQ8	134	190	142 ●	98.4 ●	97.9 ●	83.7 ▲	82.6 ▲	80.5 ▲	97.4 ●	96.3 ●	55.8 ▲	25.8 ▲
N39 Total	**1,923**	**2,291**	**119** ●	**99.7** ●	**83.1** ▲	**83.9** ▲	**73.0** ▲	**86.2** ●	**83.9** ▲	**57.3** ▲	**85.3** ●	**79.2** ▲
RJF	62	132	213 ●	100.0 ●	99.2 ●	100.0 ●	99.2 ●	94.7 ●	99.2 ●	83.3 ▲	99.2 ●	99.2 ●
RK5	170	221	130 ●	98.6 ●	95.5 ●	97.3 ●	93.2 ●	91.4 ●	99.5 ●	98.2 ●	100.0 ●	94.6 ●
RNQ	146	206	141 ●	100.0 ●	97.1 ●	92.7 ●	90.8 ●	56.3 ▲	98.5 ●	95.1 ●	98.5 ●	88.8 ●
RNS	142	188	132 ●	99.5 ●	93.6 ●	85.1 ●	80.9 ▲	96.8 ●	97.3 ●	89.9 ●	99.5 ●	98.9 ●
RTG	257	304	118 ●	99.7 ●	78.6 ▲	70.1 ▲	57.9 ▲	92.1 ●	96.1 ●	81.3 ▲	48.7 ▲	18.1 ▲
RWD	349	356	102 ●	99.4 ●	65.2 ▲	73.3 ▲	54.8 ▲	79.8 ▲	35.1 ▲	32.3 ▲	53.4 ▲	53.1 ▲
RWE	465	479	103 ●	100.0 ●	78.9 ▲	84.3 ▲	68.3 ▲	85.6 ●	77.7 ▲	53.9 ▲	98.7 ●	96.2 ●
RX1	332	403	121 ●	99.8 ●	83.6 ▲	85.4 ●	74.2 ▲	92.6 ●	98.0 ●	0.0 ▲	99.0 ●	99.0 ●

[1] RCX report because of a technical problem QEHKL (RCX) data shown are incomplete. This has been addressed locally. Correct data are available from the Trust if required.

Table 1a (continued)
Data completeness for key fields England and Wales (2011 all)

Code	Expected number	Actual number	% of expected	MDT Completeness (%)	Performance Status Completeness (%)	Stage Completeness (%)	PS & Stage Completeness (%)	Treatment Recorded (%)	Data Completeness Seen by Nurse Specialist (%)	Data Completeness Nurse Specialist present at Diagnosis (%)	CT Scan Field Completed (%)	Bronchoscopy Field Completed (%)
England Total	**28,558**	**31,395**	**110** ●	**97.8** ●	**88.5** ●	**88.1** ●	**80.9** ▲	**90.4** ●	**86.2** ●	**75.5** ▲	**94.0** ●	**76.9** ▲
NWW Total	**476**	**494**	**104**	**99.6**	**96.0**	**96.0**	**92.1**	**89.9**	**92.3**	**0.2**	**93.3**	**41.7**
7A1A1	182	188	103	98.9	96.8	96.8	93.6	85.1	94.7	0.5	91.0	40.4
7A1A4	152	195	128	100.0	96.4	97.4	94.4	92.8	88.7	0.0	99.0	44.1
7A1AU	142	111	78	100.0	93.7	91.9	85.6	92.8	94.6	0.0	87.4	39.6
SWCN Total	**1,523**	**1,574**	**103**	**99.9**	**97.9**	**97.6**	**95.6**	**91.9**	**80.4**	**0.1**	**94.5**	**38.6**
7A2AG	60	46	77	100.0	95.7	97.8	95.7	87.0	67.4	0.0	91.3	32.6
7A2AJ	32	37	116	100.0	97.3	100.0	97.3	78.4	0.0	0.0	89.2	51.4
7A2AL	79	125	158	100.0	99.2	100.0	99.2	97.6	83.2	0.0	93.6	44.8
7A2BL	65	91	140	100.0	97.8	92.3	90.1	80.2	20.9	0.0	89.0	36.3
7A3B7	97	104	107	100.0	99.0	97.1	96.2	92.3	95.2	0.0	95.2	55.8
7A3C4	123	95	77	100.0	98.9	100.0	98.9	91.6	87.4	1.1	97.9	32.6
7A3C7	117	102	87	100.0	100.0	98.0	98.0	92.2	86.3	0.0	94.1	25.5
7A3CJ	80	86	108	100.0	100.0	98.8	98.8	79.1	73.3	0.0	94.2	44.2
7A4BV	125	3	2	100.0	100.0	100.0	100.0	100.0	66.7	0.0	66.7	0.0
7A4C1	185	255	138	100.0	96.5	95.3	91.8	98.4	95.7	0.0	95.3	45.5
7A5B1	131	133	102	100.0	97.7	99.2	97.0	92.5	83.5	0.0	92.5	25.6
7A5B3	123	111	90	100.0	94.6	98.2	92.8	96.4	91.0	0.0	97.3	36.0
7A6AM	110	114	104	100.0	98.2	99.1	97.4	88.6	88.6	0.0	98.2	42.1
7A6AR	196	272	139	99.6	98.2	97.1	95.2	93.0	80.9	0.4	94.5	34.6
Wales Total	**1,999**	**2,068**	**104**	**99.9**	**97.4**	**97.2**	**94.7**	**91.4**	**83.3**	**0.1**	**94.2**	**39.4**
LUCADA Total	**30,557**	**33,463**	**110** ●	**97.9** ●	**89.1** ●	**88.7** ●	**81.8** ▲	**90.4** ●	**86.0** ●	**70.8** ▲	**94.0** ●	**74.5** ▲
Range Network												
Min			80.1	91.4	59.7	74.0	57.2	82.9	47.7	42.4	82.1	30.0
LQ			104.3	97.6	83.7	82.9	72.9	89.0	81.8	69.5	91.8	59.8
Median			108.7	98.9	91.5	89.0	83.6	91.2	85.2	78.7	95.9	78.6
UQ			117.9	99.5	95.0	92.6	88.7	92.7	92.8	83.2	97.9	93.1
Max			128.8	99.9	99.3	97.6	95.6	95.0	98.8	88.2	99.9	99.2
Range Trust												
Min			44.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LQ			101.7	98.0	85.3	85.0	75.2	88.1	82.6	70.8	93.5	44.7
Median			110.4	99.3	94.7	92.3	86.3	92.3	91.9	84.0	98.1	87.9
UQ			134.3	100.0	97.9	96.7	93.5	95.7	98.2	89.7	100.0	99.0
Max			1860	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Counts aggregated by place first seen

Indicator	Definition	▲	■	●
Expected number	Completeness of data based on Expected Annual Cases in Table 1a of the National Lung Cancer Audit 2010			
Actual number	Number of cases with date first seen in year specified			
% of expected	Completeness of data based on Expected Annual Cases in Table 1a of the National Lung Cancer Audit 2010	<50%	50-75%	≥75%
MDT Completeness (%)	Complete when MDT Discussion Indicator is Y or N (denominator = all cases)	<95%		
Performance Status Completeness (%)	Complete when Performance status is present (excluding Not Recorded (5)) (denominator = all cases)	<85%		
Stage Completeness (%)	Complete when stage can be derived from the following fields: 1) Final pre-treatment TNM category 2) Pathological TNM category 3) Site Specific Stage Classification (excluding Unknown (X)) 4) Post Treatment Site Specific Stage Classification (excluding Unknown (X)) (denominator = all cases)	<85%		≥85%
PS & Stage Completeness (%)	Complete when Performance Status and Stage are both complete (as defined above) (denominator = all cases)	<85%		≥85%
Treatment Recorded (%)	Complete when date present for Brachytherapy, Anti-cancer drug regimen, Surgery, Teletherapy, Palliative or Active Monitoring (denominator = all cases)	<85%		≥85%
Data Completeness Seen by Nurse Specialist (%)	Complete when Patient Assessed by a Lung Cancer Nurse Specialist is Y or N (denominator = all cases)	<85%		≥85%
Data Completeness Nurse Specialist present at Diagnosis (%)	Complete when Lung Cancer Nurse Specialist Present When Received Diagnosis is Y or N (denominator = all cases)	<85%		≥85%
CT Scan Field Completed (%)	Complete when CT Scan is Y or N (denominator = all cases)	<85%		≥85%
Bronchoscopy Field Completed (%)	Complete when Bronchoscopy is Y or N (denominator = all cases) (except Wales)	<85%		≥85%

◆ Tertiary Trust standards do not apply

Table 1b
Data completeness for key fields Scotland (2011 all)

Health Board	Actual number (all)	Expected number	% of expected	MDT completeness (%)	Performance status completeness (%)	Stage completeness (%)	Treatment recorded (%)	Data completeness seen by nurse specialist (%)	CT scan field completed (%)	Bronchoscopy field completed (%)
SCAN	**1,233**	**1,320**	**93**	**99.9**	**94.7**	**96.6**	**99.9**	**99.4**	**99.7**	**100.0**
Borders	89	96	93	100.0	100.0	100.0	100.0	97.8	100.0	100.0
D and G	104	146	71	100.0	85.6	73.1	100.0	100.0	100.0	100.0
Fife	321	325	99	99.7	86.9	96.9	100.0	99.7	100.0	100.0
Lothian	719	753	95	100.0	98.9	99.4	99.9	99.4	99.4	100.0
WoSCAN	**2,465**	**2,679**	**92**	**100.0**	**92.3**	**90.2**	**100.0**	**92.5**	**99.9**	**99.7**
Ayrshire and Arran	338	342	99	100.0	92.0	97.6	100.0	100.0	99.7	99.7
Clyde	373	393	95	100.0	96.8	96.5	100.0	95.4	100.0	100.0
Forth Valley	193	252	77	100.0	100.0	97.4	100.0	100.0	100.0	100.0
Lanarkshire	517	535	97	99.8	90.1	79.3	100.0	82.0	99.8	98.8
North Glasgow	690	710	97	100.0	87.2	86.5	100.0	90.1	100.0	100.0
South Glasgow	354	447	79	100.0	96.9	95.5	100.0	98.3	100.0	100.0
NoSCAN	**957**	**1079**	**89**	**100.0**	**93.6**	**93.8**	**100.0**	**99.4**	**100.0**	**100.0**
Grampian	361	410	88	100.0	86.2	87.3	100.0	100.0	100.0	100.0
Orkney	0	4	0							
Shetland	17	5	340							
Highland	191	213	90	100.0	96.8	99.5	100.0	97.2	100.0	100.0
Argyll and Clyde (H)	12	34	35							
Western Isles	13	12	108							
Tayside	363	401	91	100.0	99.4	97.2	100.0	100.0	100.0	100.0
Total	**4,655**	**5,078**	**91.7**	**100.0**	**93.2**	**92.6**	**100.0**	**95.8**	**99.9**	**99.8**
Range Health Board										
Min			0	99.7	85.6	73.1	99.9	82.0	99.4	98.8
LQ			79	100.0	87.2	87.3	100.0	97.2	100.0	100.0
Median			93	100.0	96.8	96.9	100.0	99.4	100.0	100.0
UQ			97	100.0	98.9	97.6	100.0	100.0	100.0	100.0
Max			340	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 1c
Data completeness for key fields Guernsey (2011 all)

Code	Expected number	Actual number	% of expected	MDT Completeness (%)	Performance Status Completeness (%)	Stage Completeness (%)	PS & Stage Completeness (%)	Treatment Recorded (%)	Data Completeness Seen by Nurse Specialist (%)	Data Completeness Nurse Specialist present at Diagnosis (%)	CT Scan Field Completed (%)	Bronchoscopy Field Completed (%)
2011 Total	**36**	**41**	**114**	**100.0**	**100.0**	**97.6**	**97.6**	**85.4**	**n/a**	**100.0**	**100.0**	**68.3**

Counts aggregated by place first seen

Indicator	Definition
Expected number	Completeness of data based on Expected Annual Cases in Table 1a of the National Lung Cancer Audit 2010*
Actual number	Number of cases with date first seen in year specified
% of expected	Completeness of data based on Expected Annual Cases in Table 1a of the National Lung Cancer Audit 2010*
MDT Completeness (%)	Complete when MDT Discussion Indicator is Y or N (denominator = all cases)
Performance Status Completeness (%)	Complete when Performance status is present (excluding Not Recorded (5)) (denominator = all cases)
Stage Completeness (%)	Complete when stage can be derived from the following fields: 1) Final pre-treatment TNM category 2) Pathological TNM category 3) Site Specific Stage Classification (excluding Unknown (X)) 4) Post Treatment Site Specific Stage Classification (excluding Unknown (X)) (denominator = all cases)
PS & Stage Completeness (%)	Complete when Performance Status and Stage are both complete (as defined above) (denominator = all cases)
Treatment Recorded (%)	Complete when date present for Brachytherapy, Anti-cancer drug regimen, Surgery, Teletherapy, Palliative or Active Monitoring (denominator = all cases)
Data Completeness Seen by Nurse Specialist (%)	Complete when Patient Assessed by a Lung Cancer Nurse Specialist is Y or N (denominator = all cases)
Data Completeness Nurse Specialist present at Diagnosis (%)	Complete when Lung Cancer Nurse Specialist Present When Received Diagnosis is Y or N (denominator = all cases)
CT Scan Field Completed (%)	Complete when CT Scan is Y or N (denominator = all cases)
Bronchoscopy Field Completed (%)	Complete when Bronchoscopy is Y or N (denominator = all cases) (except Wales)

* http://www.ic.nhs.uk/webfiles/Services/NCASP/audits%20and%20reports/NHSIC_National_Lung_Cancer_Audit_2010_V1.0.pdf

Table 2a
Process, nursing, imaging and clinical measures England and Wales (2011 all) part I

Code	Actual number	% of expected	Discussed at MDT (%)	Histological diagnosis (%)	Patient seen by nurse specialist (%)	Nurse specialist present at diagnosis (%)	% Having active treatment	% of patients receiving CT before bronchoscopy	% receiving surgery all cases	% receiving radiotherapy
N01 Total	**1,128**	**114** ●	**91.9** ▲	**83.9** ●	**84.4** ●	**67.3** ▲	**58.1** ▲	**93.3** ●	**10.3**	**31.6**
RTX	267	145 ●	92.9 ▲	75.3 ●	69.3 ▲	68.9 ▲	54.7 ▲	91.9 ●	6.0	28.8
RXL	287	119 ●	84.7 ▲	77.7 ●	91.6 ●	75.3 ▲	66.6 ●	97.3 ●	12.9	33.8
RXN	269	198 ●	95.5 ●	91.8 ●	91.1 ●	39.8 ▲	54.3 ▲	89.4 ▲	12.3	32.7
RXR	305	71 ■	94.8 ▲	90.2 ●	84.9 ●	82.6 ●	56.4 ▲	93.7 ●	9.8	30.8
N02 Total	**2,432**	**111** ●	**92.1** ▲	**73.1** ▲	**69.5** ▲	**47.7** ▲	**58.9** ▲	**89.2** ▲	**13.4**	**29.5**
RBT	126	105 ●	86.5 ▲	78.6 ●	49.2 ▲	6.3 ▲	68.3 ●	84.5 ▲	22.2	32.5
RJN	115	107 ●	98.3 ●	72.2 ▲	98.3 ●	88.7 ●	60.9 ●	98.4 ●	13.0	35.7
RM2 ◆	288 ◆	122 ◆	86.8 ◆	70.1 ◆	44.4 ◆	14.2 ◆	53.5 ◆	90.9 ◆	18.8 ◆	20.5 ◆
RM3	228	104 ●	99.6 ●	75.4 ●	93.9 ●	78.9 ▲	57.9 ▲	97.2 ●	16.7	30.3
RM4	97	105 ●	96.9 ●	68.0 ▲	90.7 ●	80.4 ●	54.6 ▲	85.3 ▲	12.4	16.5
RMC	227	103 ●	88.5 ▲	67.0 ▲	78.9 ▲	62.6 ▲	59.0 ▲	90.2 ●	11.9	32.6
RMP	150	100 ●	88.0 ▲	74.7 ▲	60.0 ▲	46.7 ▲	64.0 ●	83.7 ▲	11.3	38.0
RRF	243	122 ●	92.6 ▲	80.2 ●	80.7 ●	35.4 ▲	60.9 ●	88.6 ▲	10.7	37.0
RW3	134	112 ●	94.8 ▲	75.4 ●	86.6 ●	67.2 ▲	55.2 ▲	92.9 ●	14.9	34.3
RW6	603	105 ●	93.5 ▲	68.7 ▲	55.2 ▲	42.1 ▲	56.7 ▲	87.7 ▲	10.8	26.2
RWJ	220	152 ●	89.1 ▲	82.3 ●	77.3 ▲	48.6 ▲	64.5 ●	88.2 ▲	10.9	30.5
N03 Total	**1,891**	**123** ●	**93.4** ▲	**66.6** ▲	**81.8** ●	**47.5** ▲	**55.7** ▲	**90.5** ●	**16.9**	**29.9**
LLCU[2]	405	95 ●	88.4 ▲	78.0 ●	93.1 ●	76.3 ▲	67.2 ●	94.2 ●	17.5	38.8
RBL	325	273 ●	89.8 ▲	70.2 ▲	87.4 ●	63.1 ▲	55.4 ▲	85.1 ▲	20.3	30.8
RBN	238	108 ●	98.3 ●	59.2 ▲	84.9 ●	19.7 ▲	50.0 ▲	78.6 ▲	14.7	23.5
REM	341	106 ●	98.2 ●	70.1 ▲	63.0 ▲	0.3 ▲	53.7 ▲	87.3 ▲	15.2	27.9
REN ◆	2 ◆	4 ◆	0.0 ◆	100.0 ◆	0.0 ◆	0.0 ◆	50.0 ◆	0.0 ◆	50.0 ◆	0.0 ◆
RJR	194	160 ●	99.0 ●	57.2 ▲	80.9 ●	53.1 ▲	54.6 ▲	94.3 ●	13.9	35.1
RVY	170	207 ●	91.2 ▲	61.2 ▲	85.9 ●	71.8 ▲	54.1 ▲	98.4 ●	16.5	27.6
RWW	216	112 ●	92.6 ▲	55.1 ▲	76.4 ▲	51.4 ▲	46.8 ▲	95.8 ●	18.5	19.4
N06 Total	**1,978**	**109** ●	**98.6** ●	**70.9** ▲	**84.0** ●	**63.5** ▲	**59.5** ▲	**93.5** ●	**15.2**	**24.2**
RAE	293	122 ●	98.0 ●	59.7 ▲	86.0 ●	62.8 ▲	56.3 ▲	95.2 ●	16.4	22.9
RCB	202	117 ●	96.0 ●	71.8 ▲	90.6 ●	89.6 ●	54.5 ▲	95.9 ●	16.3	29.2
RCD	110	121 ●	97.3 ●	79.1 ●	69.1 ▲	44.5 ▲	56.4 ▲	98.0 ●	11.8	12.7
RCF	118	100 ●	99.2 ●	73.7 ▲	93.2 ●	77.1 ▲	61.9 ●	96.2 ●	16.9	31.4
RR8	575	102 ●	98.8 ●	73.4 ▲	85.6 ●	56.3 ▲	66.6 ●	93.2 ●	16.3	29.4
RWY	239	98 ●	100.0 ●	69.0 ▲	80.8 ●	51.0 ▲	64.0 ●	84.9 ▲	7.9	29.3
RXF	441	116 ●	99.5 ●	72.8 ▲	80.7 ●	69.4 ▲	52.2 ▲	94.1 ●	16.8	14.1
N07 Total	**815**	**108** ●	**97.9** ●	**71.7** ▲	**72.0** ▲	**44.4** ▲	**60.6** ●	**84.9** ▲	**19.9**	**21.2**
RCC	131	104 ●	96.9 ●	63.4 ▲	93.1 ●	84.0 ●	49.6 ▲	96.6 ●	13.0	15.3
RJL	317	140 ●	98.1 ●	69.4 ▲	85.8 ●	73.5 ▲	58.7 ▲	81.0 ▲	18.9	23.3
RWA	367	92 ●	98.1 ●	76.6 ●	52.6 ▲	5.2 ▲	66.2 ●	83.8 ▲	23.2	21.5
N08 Total	**1,362**	**109** ●	**99.8** ●	**73.9** ▲	**80.0** ●	**62.8** ▲	**53.8** ▲	**88.2** ▲	**12.6**	**20.0**
RFF	183	140 ●	99.5 ●	75.4 ●	90.7 ●	82.5 ●	57.4 ▲	83.8 ▲	14.8	10.9
RFR	198	138 ●	100.0 ●	70.2 ▲	94.4 ●	93.4 ●	37.9 ▲	89.5 ▲	8.6	5.6
RFS	184	106 ●	98.9 ●	77.2 ●	90.2 ●	67.9 ▲	51.6 ▲	79.2 ▲	12.5	10.9
RHQ	445	93 ●	100.0 ●	74.6 ▲	58.7 ▲	44.9 ▲	59.3 ▲	94.6 ●	15.1	27.9
RP5	352	111 ●	100.0 ●	72.4 ▲	88.1 ●	55.4 ▲	55.1 ▲	90.8 ●	10.8	27.8

[2] LLCU report that there was an error in their MDT data and that their 'discussed at MDT' rate is 98%

Table 2a (continued)
Process, nursing, imaging and clinical measures England and Wales (2011 all) part I

Code	Actual number	% of expected	Discussed at MDT (%)	Histological diagnosis (%)	Patient seen by nurse specialist (%)	Nurse specialist present at diagnosis (%)	% Having active treatment	% of patients receiving CT before bronchoscopy	% receiving surgery all cases	% receiving radiotherapy
N11 Total	**1,113**	**104** ●	**93.6** ▲	**77.0** ●	**87.5** ●	**65.4** ▲	**59.0** ▲	**91.7** ●	**18.1**	**25.4**
RBK	162	103 ●	98.1 ●	83.3 ●	96.9 ●	79.6 ▲	58.0 ▲	96.3 ●	15.4	22.8
RR1	414	103 ●	87.2 ▲	71.5 ▲	88.4 ●	68.4 ▲	57.7 ▲	81.4 ▲	18.6	17.9
RRK	267	109 ●	96.6 ●	82.4 ●	90.6 ●	50.9 ▲	61.0 ●	96.2 ●	23.2	33.7
RXK	270	104 ●	97.8 ●	76.3 ●	77.4 ▲	66.7 ▲	59.6 ▲	92.7 ●	14.1	30.4
N12 Total	**506**	**122** ●	**96.2** ●	**81.2** ●	**72.1** ▲	**62.3** ▲	**63.0** ●	**78.8** ▲	**13.4**	**24.5**
RJC	93	1860 ●	91.4 ▲	81.7 ●	88.2 ●	68.8 ▲	60.2 ●	74.5 ▲	12.9	18.3
RKB	204	82 ●	98.0 ●	80.9 ●	87.7 ●	82.4 ●	71.1 ●	97.1 ●	12.3	30.9
RLT	114	119 ●	98.2 ●	83.3 ●	85.1 ●	70.2 ▲	62.3 ●	52.5 ▲	15.8	24.6
RWP00	95	148 ●	94.7 ▲	78.9 ●	7.4 ▲	3.2 ▲	49.5 ▲	76.7 ▲	13.7	16.8
N20 Total	**575**	**108** ●	**98.4** ●	**79.1** ●	**82.1** ●	**65.2** ▲	**53.6** ▲	**88.5** ▲	**15.1**	**20.0**
RC9	186	171 ●	96.2 ●	78.0 ●	67.7 ▲	60.8 ▲	45.7 ▲	84.3 ▲	24.2	15.6
RWG	187	86 ●	100.0 ●	79.7 ●	93.0 ●	62.0 ▲	55.1 ▲	91.9 ●	7.0	18.2
RWH	202	98 ●	99.0 ●	79.7 ●	85.1 ●	72.3 ▲	59.4 ▲	90.6 ●	14.4	25.7
N21 Total	**690**	**80** ●	**97.8** ●	**78.7** ●	**76.8** ▲	**63.9** ▲	**62.8** ●	**92.4** ●	**13.0**	**34.1**
RAS	107	107 ●	96.3 ●	71.0 ▲	90.7 ●	86.0 ●	55.1 ▲	98.0 ●	14.0	35.5
RC3	90	120 ●	96.7 ●	50.0 ▲	84.4 ●	82.2 ●	51.1 ▲	90.9 ●	3.3	28.9
RFW	94	134 ●	95.7 ●	77.7 ●	3.2 ▲	0.0 ▲	67.0 ●	97.1 ●	14.9	39.4
RQM	58	73 ■	98.3 ●	96.6 ●	89.7 ●	58.6 ▲	82.8 ●	87.8 ▲	10.3	50.0
RT3 ◆	19 ◆	13 ◆	84.2 ◆	100.0 ◆	84.2 ◆	26.3 ◆	89.5 ◆	75.0 ◆	31.6 ◆	47.4 ◆
RV8	88	88 ●	100.0 ●	86.4 ●	89.8 ●	71.6 ▲	56.8 ▲	88.2 ▲	17.0	12.5
RYJ	234	81 ●	100.0 ●	84.6 ●	88.5 ●	73.9 ▲	64.1 ●	92.2 ●	13.2	36.3
N22 Total	**812**	**111** ●	**97.8** ●	**80.5** ●	**92.2** ●	**78.4** ▲	**63.4** ●	**83.0** ▲	**15.1**	**29.9**
RAL	91	106 ●	98.9 ●	90.1 ●	97.8 ●	93.4 ●	60.4 ●	96.8 ●	20.9	25.3
RAP	95	113 ●	100.0 ●	83.2 ●	92.6 ●	84.2 ●	65.3 ●	97.9 ●	12.6	40.0
RKE	112	114 ●	98.2 ●	71.4 ▲	94.6 ●	74.1 ▲	55.4 ▲	100.0 ●	14.3	19.6
RQW	157	139 ●	96.2 ●	80.3 ●	86.0 ●	59.2 ▲	65.0 ●	89.4 ▲	19.1	43.9
RRV	113	81 ●	99.1 ●	91.2 ●	83.2 ●	58.4 ▲	72.6 ●	87.5 ▲	19.5	27.4
RVL	244	115 ●	96.7 ●	75.4 ●	97.1 ●	94.3 ●	62.3 ●	62.4 ▲	9.8	24.6
N23 Total	**635**	**81** ●	**96.9** ●	**79.2** ●	**80.2** ●	**57.8** ▲	**53.9** ▲	**88.2** ▲	**8.8**	**18.9**
RF4	206	61 ■	94.2 ▲	80.1 ●	57.3 ▲	18.4 ▲	51.0 ▲	87.2 ▲	2.4	16.0
RGC	119	104 ●	96.6 ●	85.7 ●	89.9 ●	74.8 ▲	52.9 ▲	90.9 ●	14.3	17.6
RNH	100	87 ●	99.0 ●	78.0 ●	81.0 ●	77.0 ▲	42.0 ▲	78.6 ▲	6.0	14.0
RNJ	115	105 ●	97.4 ●	84.3 ●	94.8 ●	71.3 ▲	64.3 ●	92.5 ●	13.0	35.7
RQX	95	95 ●	100.0 ●	64.2 ▲	98.9 ●	85.3 ●	61.1 ●	92.1 ●	13.7	11.6
N24 Total	**702**	**80** ●	**98.0** ●	**85.2** ●	**74.4** ▲	**59.1** ▲	**56.1** ▲	**89.7** ▲	**13.4**	**24.8**
RJ1	121	44 ▲	98.3 ●	96.7 ●	86.0 ●	68.6 ▲	76.9 ●	92.2 ●	21.5	38.0
RJ2	108	93 ●	98.1 ●	77.8 ●	83.3 ●	36.1 ▲	48.1 ▲	87.5 ▲	10.2	8.3
RJZ	109	96 ●	99.1 ●	83.5 ●	86.2 ●	86.2 ●	53.2 ▲	81.1 ▲	16.5	30.3
RYQ	364	98 ●	97.5 ●	84.1 ●	64.3 ▲	54.7 ▲	52.5 ▲	93.3 ●	10.7	23.6
N25 Total	**655**	**83** ●	**91.6** ▲	**82.6** ●	**79.8** ▲	**52.7** ▲	**56.8** ▲	**80.7** ▲	**12.2**	**19.5**
RAX	117	74 ■	95.7 ●	90.6 ●	94.9 ●	82.9 ●	60.7 ●	80.0 ▲	18.8	21.4
RJ6	144	109 ●	94.4 ▲	88.9 ●	93.8 ●	89.6 ●	59.0 ▲	95.3 ●	13.9	20.1
RJ7	173	72 ■	89.6 ▲	83.8 ●	69.4 ▲	28.9 ▲	64.7 ●	77.4 ▲	15.6	17.3
RPY ◆	17 ◆	0 ◆	70.6 ◆	88.2 ◆	82.4 ◆	5.9 ◆	82.4 ◆	0.0 ◆	0.0 ◆	35.3 ◆
RVR	199	81 ●	91.0 ▲	72.4 ▲	70.4 ▲	33.7 ▲	42.7 ▲	68.4 ▲	5.5	17.1

Table 2a (continued)
Process, nursing, imaging and clinical measures England and Wales (2011 all) part I

Code	Actual number	% of expected	Discussed at MDT (%)	Histological diagnosis (%)	Patient seen by nurse specialist (%)	Nurse specialist present at diagnosis (%)	% Having active treatment	% of patients receiving CT before bronchoscopy	% receiving surgery all cases	% receiving radiotherapy
N26 Total	**1,156**	**126** ●	**95.9** ●	**76.0** ●	**84.3** ●	**65.1** ▲	**65.2** ●	**90.1** ●	**15.1**	**40.9**
RA9	201	129 ●	94.5 ▲	73.1 ▲	86.6 ●	68.2 ▲	67.2 ●	91.8 ●	14.4	47.3
RBZ	119	140 ●	93.3 ▲	68.9 ▲	94.1 ●	64.7 ▲	52.1 ▲	74.2 ▲	11.8	21.8
REF	265	119 ●	98.9 ●	80.0 ●	95.1 ●	72.5 ▲	77.0 ●	96.3 ●	18.1	49.1
RH8	235	118 ●	97.4 ●	83.4 ●	84.7 ●	78.7 ▲	68.1 ●	85.7 ▲	14.0	46.4
RK9	336	131 ●	94.3 ▲	71.7 ▲	70.8 ▲	47.9 ▲	57.4 ▲	91.0 ●	15.2	33.6
N27 Total	**419**	**104** ●	**96.4** ●	**76.8** ●	**77.8** ▲	**61.6** ▲	**61.6** ●	**87.7** ▲	**13.4**	**25.5**
RBD	108	132 ●	98.1 ●	77.8 ●	90.7 ●	59.3 ▲	59.3 ▲	94.7 ●	14.8	18.5
RD3	155	103 ●	97.4 ●	85.2 ●	81.3 ●	63.9 ▲	61.3 ●	81.3 ▲	11.6	23.9
RDZ	156	92 ●	94.2 ▲	67.9 ▲	65.4 ▲	60.9 ▲	63.5 ●	88.6 ▲	14.1	32.1
N28 Total	**887**	**105** ●	**91.7** ▲	**76.8** ●	**71.3** ▲	**42.1** ▲	**61.3** ●	**92.0** ●	**18.0**	**29.2**
RA3	92	112 ●	85.9 ▲	87.0 ●	57.6 ▲	28.3 ▲	67.4 ●	100.0 ●	18.5	26.1
RA4	89	144 ●	96.6 ●	71.9 ▲	80.9 ●	70.8 ▲	51.7 ▲	100.0 ●	13.5	20.2
RA7	130	72 ■	94.6 ▲	83.8 ●	76.2 ▲	2.3 ▲	81.5 ●	96.9 ●	34.6	35.4
RBA	128	106 ●	76.6 ▲	70.3 ▲	59.4 ▲	39.8 ▲	64.8 ●	72.5 ▲	14.8	28.9
RD1	184	108 ●	100.0 ●	78.8 ●	88.0 ●	77.7 ▲	55.4 ▲	96.4 ●	14.1	34.8
RVJ	264	116 ●	92.0 ▲	73.1 ▲	64.4 ▲	33.0 ▲	54.9 ▲	89.8 ▲	15.5	26.5
N29 Total	**563**	**129** ●	**96.3** ●	**80.6** ●	**78.5** ▲	**55.8** ▲	**66.8** ●	**78.8** ▲	**17.4**	**37.1**
RLQ	109	147 ●	99.1 ●	79.8 ●	65.1 ▲	25.7 ▲	64.2 ●	84.5 ▲	14.7	32.1
RTE	323	132 ●	96.0 ●	77.1 ●	76.8 ▲	51.7 ▲	69.7 ●	83.6 ▲	18.9	39.6
RWP50	131	110 ●	94.7 ▲	90.1 ●	93.9 ●	90.8 ●	61.8 ●	61.1 ▲	16.0	35.1
N30 Total	**1,164**	**113** ●	**97.3** ●	**86.5** ●	**86.3** ●	**69.8** ▲	**62.0** ●	**89.5** ▲	**17.9**	**21.2**
RD7	174	155 ●	98.3 ●	78.7 ●	81.6 ●	66.1 ▲	35.6 ▲	76.0 ▲	16.1	3.4
RD8	133	139 ●	98.5 ●	97.0 ●	79.7 ▲	70.7 ▲	64.7 ●	72.7 ▲	12.8	23.3
RHW	172	84 ●	96.5 ●	81.4 ●	92.4 ●	55.8 ▲	66.9 ●	100.0 ●	10.5	43.6
RN3	183	162 ●	98.9 ●	84.7 ●	86.9 ●	65.0 ▲	57.4 ▲	96.6 ●	19.7	14.8
RTH	307	101 ●	95.8 ●	87.3 ●	88.3 ●	78.5 ▲	73.0 ●	94.3 ●	26.4	17.3
RXQ	195	97 ●	97.4 ●	91.3 ●	86.2 ●	75.4 ▲	66.7 ●	88.1 ▲	14.4	28.2
N31 Total	**1,167**	**107** ●	**95.8** ●	**79.1** ●	**72.8** ▲	**55.2** ▲	**68.3** ●	**89.9** ▲	**15.8**	**36.0**
RHM	234	52 ■	96.6 ●	78.2 ●	52.1 ▲	29.1 ▲	74.8 ●	96.9 ●	15.8	49.1
RHU	383	137 ●	96.3 ●	78.9 ●	72.1 ▲	67.6 ▲	68.7 ●	92.0 ●	15.1	29.8
RN1	104	111 ●	86.5 ▲	84.6 ●	61.5 ▲	46.2 ▲	69.2 ●	76.2 ▲	14.4	32.7
RN5	100	256 ●	97.0 ●	74.0 ▲	80.0 ●	61.0 ▲	66.0 ●	91.1 ●	14.0	33.0
RNZ	95	134 ●	98.9 ●	78.9 ●	89.5 ●	44.2 ▲	72.6 ●	89.5 ▲	20.0	43.2
RR2	104	196 ●	95.2 ●	87.5 ●	96.2 ●	85.6 ●	65.4 ●	87.0 ▲	20.2	30.8
RYR16	147	136 ●	97.3 ●	74.8 ▲	83.7 ●	52.4 ▲	57.1 ▲	89.5 ▲	13.6	34.7
N32 Total	**662**	**123** ●	**97.0** ●	**83.2** ●	**79.5** ▲	**51.8** ▲	**56.3** ▲	**87.5** ▲	**16.5**	**19.2**
RA2	100	92 ●	93.0 ▲	88.0 ●	57.0 ▲	8.0 ▲	58.0 ▲	89.1 ▲	13.0	32.0
RDU	201	173 ●	100.0 ●	82.1 ●	86.1 ●	50.2 ▲	56.7 ▲	97.1 ●	15.4	17.9
RTK	172	108 ●	94.2 ▲	80.8 ●	81.4 ●	70.3 ▲	52.9 ▲	61.3 ▲	17.4	15.7
RTP	189	121 ●	98.4 ●	84.1 ●	82.5 ●	59.8 ▲	58.2 ▲	88.6 ▲	18.5	16.9
N33 Total	**660**	**107** ●	**98.8** ●	**75.2** ●	**87.3** ●	**65.9** ▲	**53.2** ▲	**84.2** ▲	**10.6**	**29.4**
RXC	266	116 ●	98.9 ●	81.6 ●	86.8 ●	68.0 ▲	54.9 ▲	82.8 ▲	13.2	30.5
RXH	246	98 ●	98.8 ●	67.1 ▲	85.4 ●	66.3 ▲	51.2 ▲	89.3 ▲	8.5	28.0
RYR18	146	104 ●	98.6 ●	76.7 ●	91.1 ●	61.0 ▲	52.7 ▲	81.8 ▲	9.6	29.5

Table 2a (continued)
Process, nursing, imaging and clinical measures England and Wales (2011 all) part I

Code	Actual number	% of expected	Discussed at MDT (%)	Histological diagnosis (%)	Patient seen by nurse specialist (%)	Nurse specialist present at diagnosis (%)	% Having active treatment	% of patients receiving CT before bronchoscopy	% receiving surgery all cases	% receiving radiotherapy
N34 Total	**975**	**108** ●	**97.3** ●	**80.0** ●	**44.9** ▲	**37.7** ▲	**62.8** ●	**55.8** ▲	**18.9**	**40.7**
RN7	130	107 ●	100.0 ●	88.5 ●	96.9 ●	69.2 ▲	73.1 ●	97.6 ●	21.5	26.9
RPA	148	72 ■	99.3 ●	69.6 ▲	88.5 ●	88.5 ●	55.4 ▲	23.1 ▲	12.8	43.9
RVV	470	126 ●	99.1 ●	79.6 ●	0.0 ▲	0.0 ▲	64.0 ●	12.5 ▲	16.6	45.5
RWF	227	112 ●	90.7 ▲	82.8 ●	79.7 ▲	64.8 ▲	59.0 ▲	100.0 ●	26.0	36.6
N35 Total	**1,092**	**99** ●	**94.6** ▲	**82.9** ●	**81.5** ●	**64.3** ▲	**65.4** ●	**82.0** ▲	**20.1**	**34.0**
RJD	154	96 ●	98.7 ●	89.0 ●	87.7 ●	57.8 ▲	67.5 ●	57.3 ▲	20.1	36.4
RJE	316	102 ●	98.1 ●	77.2 ●	72.8 ▲	43.7 ▲	62.7 ●	90.7 ●	17.7	34.5
RL4	222	108 ●	98.6 ●	76.1 ●	93.2 ●	91.0 ●	60.4 ●	92.8 ●	19.4	23.0
RNA	141	78 ●	68.8 ▲	89.4 ●	53.2 ▲	31.9 ▲	64.5 ●	84.4 ▲	26.2	36.2
RWP31	45	107 ●	95.6 ●	91.1 ●	91.1 ●	84.4 ●	71.1 ●	70.4 ▲	11.1	40.0
RXW	214	103 ●	99.1 ●	87.9 ●	94.4 ●	88.8 ●	72.4 ●	81.4 ▲	22.4	40.2
N36 Total	**2,687**	**126** ●	**98.9** ●	**76.1** ●	**88.9** ●	**72.7** ▲	**59.5** ▲	**88.1** ▲	**12.6**	**27.4**
RE9	180	134 ●	100.0 ●	66.7 ▲	90.0 ●	90.0 ●	47.2 ▲	87.3 ▲	11.1	12.2
RLN	279	124 ●	97.8 ●	76.3 ●	86.7 ●	65.9 ▲	58.8 ▲	84.3 ▲	12.9	29.7
RNL	242	142 ●	98.3 ●	90.1 ●	83.9 ●	63.2 ▲	59.9 ▲	88.2 ▲	16.1	35.5
RR7	225	171 ●	99.1 ●	73.8 ▲	93.8 ●	72.4 ▲	60.0 ●	84.8 ▲	13.3	15.6
RTD	302	182 ●	100.0 ●	77.2 ●	86.4 ●	80.5 ●	57.9 ▲	91.1 ●	14.6	24.5
RTF	371	102 ●	97.6 ●	72.2 ▲	84.4 ●	45.8 ▲	54.4 ▲	78.8 ▲	8.9	18.3
RTR	377	140 ●	99.7 ●	78.0 ●	95.0 ●	92.6 ●	65.3 ●	95.5 ●	13.0	35.8
RVW	324	108 ●	97.8 ●	74.1 ▲	90.4 ●	63.6 ▲	64.2 ●	87.3 ▲	10.2	41.7
RXP	387	104 ●	100.0 ●	75.5 ●	89.4 ●	83.7 ●	61.5 ●	93.6 ●	14.0	25.6
N37 Total	**1,519**	**111** ●	**90.0** ▲	**80.0** ●	**78.3** ▲	**55.6** ▲	**65.5** ●	**84.6** ▲	**13.3**	**36.7**
RC1	65	114 ●	100.0 ●	95.4 ●	66.2 ▲	16.9 ▲	76.9 ●	96.0 ●	12.3	49.2
RCX	140	125 ●	39.3 ▲	83.6 ●	90.0 ●	60.7 ▲	66.4 ●	93.0 ●	20.0	30.0
RGN	173	160 ●	98.8 ●	83.2 ●	91.9 ●	45.7 ▲	76.3 ●	84.1 ▲	13.9	57.8
RGP	201	153 ●	95.0 ●	74.6 ▲	82.6 ●	61.7 ▲	59.7 ▲	92.9 ●	9.5	27.4
RGQ	212	124 ●	93.9 ▲	85.4 ●	86.8 ●	67.0 ▲	75.5 ●	77.4 ▲	12.3	60.4
RGR	108	208 ●	100.0 ●	79.6 ●	92.6 ●	75.9 ▲	49.1 ▲	85.7 ▲	10.2	12.0
RGT	203	197 ●	100.0 ●	79.3 ●	67.5 ▲	56.2 ▲	60.1 ●	50.0 ▲	10.3	37.9
RM1	350	104 ●	91.1 ▲	74.6 ▲	67.4 ▲	49.7 ▲	67.7 ●	77.2 ▲	16.3	29.4
RQQ	67	191 ●	83.6 ▲	79.1 ●	56.7 ▲	49.3 ▲	41.8 ▲	87.5 ▲	11.9	10.4
N38 Total	**859**	**127** ●	**99.4** ●	**80.8** ●	**89.4** ●	**76.8** ▲	**59.8** ▲	**81.4** ▲	**11.9**	**30.8**
RAJ	220	115 ●	99.5 ●	75.0 ●	97.7 ●	89.5 ●	56.8 ▲	79.2 ▲	8.2	21.8
RDD	201	114 ●	100.0 ●	80.1 ●	81.1 ●	70.1 ▲	63.2 ●	86.0 ▲	14.9	26.9
RDE	248	141 ●	99.6 ●	83.9 ●	82.7 ●	56.0 ▲	70.2 ●	94.9 ●	15.7	50.8
RQ8	190	142 ●	98.4 ●	84.2 ●	97.4 ●	96.3 ●	46.3 ▲	61.2 ▲	7.9	19.5
N39 Total	**2,291**	**119** ●	**98.0** ●	**76.2** ●	**76.3** ▲	**46.6** ▲	**61.1** ●	**89.2** ▲	**18.1**	**26.7**
RJF	132	213 ●	98.5 ●	79.5 ●	86.4 ●	68.9 ▲	69.7 ●	96.4 ●	30.3	16.7
RK5	221	130 ●	96.8 ●	84.2 ●	99.1 ●	91.9 ●	59.3 ▲	85.1 ▲	11.3	25.3
RNQ	206	141 ●	98.1 ●	65.5 ▲	95.1 ●	83.5 ●	52.4 ▲	93.9 ●	20.9	18.4
RNS	188	132 ●	98.4 ●	64.4 ▲	90.4 ●	54.8 ▲	53.2 ▲	80.4 ▲	16.0	29.8
RTG	304	118 ●	97.0 ●	77.6 ●	81.3 ●	58.6 ▲	67.8 ●	63.0 ▲	20.7	35.9
RWD	356	102 ●	95.5 ●	79.8 ●	34.3 ▲	19.9 ▲	63.2 ●	85.0 ▲	16.3	18.0
RWE	479	103 ●	99.8 ●	67.6 ▲	77.7 ▲	51.8 ▲	60.8 ●	96.5 ●	16.1	29.6
RX1	403	121 ●	99.3 ●	87.8 ●	76.4 ▲	0.0 ▲	60.8 ●	97.2 ●	19.4	30.8
England Total	**31,395**	**110** ●	**96.0** ●	**77.2** ●	**79.4** ▲	**58.7** ▲	**60.2** ●	**87.7** ▲	**15.0**	**28.5**

Table 2a (continued)
Process, nursing, imaging and clinical measures England and Wales (2011 all) part I

Code	Actual number	% of expected	Discussed at MDT (%)	Histological diagnosis (%)	Patient seen by nurse specialist (%)	Nurse specialist present at diagnosis (%)	% Having active treatment	% of patients receiving CT before bronchoscopy	% receiving surgery all cases	% receiving radiotherapy
NWW Total	**494**	**104**	**99.4**	**71.5**	**92.3**	**n/a**	**60.7**	**92.6**	**8.9**	**41.5**
7A1A1	188	103	98.9	70.7	94.7	n/a	61.2	90.5	10.6	42.6
7A1A4	195	128	99.5	74.4	88.7	n/a	61.0	96.5	7.2	41.0
7A1AU	111	78	100.0	67.6	94.6	n/a	59.5	88.6	9.0	40.5
SWCN Total	**1,574**	**103**	**99.0**	**73.6**	**80.4**	**n/a**	**59.3**	**89.1**	**10.7**	**39.4**
7A2AG	46	77	100.0	69.6	67.4	n/a	43.5	93.3	8.7	28.3
7A2AJ	37	116	100.0	78.4	0.0	n/a	56.8	94.7	8.1	37.8
7A2AL	125	158	100.0	82.4	83.2	n/a	64.0	91.1	9.6	28.0
7A2BL	91	140	87.9	71.4	20.9	n/a	51.6	87.9	11.0	29.7
7A3B7	104	107	100.0	66.3	95.2	n/a	64.4	74.1	11.5	51.0
7A3C4	95	77	100.0	76.8	87.4	n/a	58.9	100.0	6.3	37.9
7A3C7	102	87	100.0	71.6	86.3	n/a	48.0	88.5	9.8	27.5
7A3CJ	86	108	100.0	80.2	73.3	n/a	72.1	52.6	10.5	58.1
7A4BV	3	2	100.0	66.7	66.7	n/a	66.7	0.0	66.7	33.3
7A4C1	255	138	100.0	71.4	95.7	n/a	57.6	91.3	13.3	36.5
7A5B1	133	102	97.7	78.9	83.5	n/a	67.7	94.1	13.5	52.6
7A5B3	111	90	100.0	69.4	91.0	n/a	67.6	95.0	12.6	49.5
7A6AM	114	104	100.0	68.4	88.6	n/a	56.1	93.8	7.9	46.5
7A6AR	272	139	99.3	73.9	80.9	n/a	56.3	97.9	9.2	33.8
Wales Total	**2,068**	**104**	**99.1**	**73.1**	**83.3**	**n/a**	**59.6**	**90.0**	**10.3**	**39.9**
LUCADA Total	**33,463**	**110 ●**	**96.2 ●**	**76.9 ●**	**79.6 ▲**	**55.1 ▲**	**60.1 ●**	**87.8 ▲**	**14.7**	**29.2**
Range Network										
Min		80.1	90.0	66.6	44.9	0.1	53.2	55.8	8.8	18.9
LQ		104.3	94.9	75.4	76.4	48.7	57.1	84.3	12.6	24.3
Median		108.7	97.2	78.9	80.1	60.4	60.2	88.4	14.3	29.3
UQ		117.9	98.3	80.8	84.4	65.2	62.8	90.1	17.3	34.1
Max		128.8	99.8	86.5	92.3	78.4	68.3	93.5	20.1	41.5
Range Trust/Health Board										
Min		44.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LQ		101.7	95.1	72.1	76.6	41.0	55.0	83.2	11.0	20.2
Median		110.4	98.1	78.0	86.0	62.6	59.9	89.4	14.0	29.4
UQ		134.3	99.3	83.5	91.1	75.7	65.7	94.7	16.5	35.9
Max		1860.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Counts aggregated by place first seen trust.

Indicator	Definition	▲	■	●
Actual number	Number of cases with date first seen in year specified			
% of expected	Completeness of data in cohort based on Expected Annual Cases in Table 1a of the National Lung Cancer Audit 2010*	<50%	50-75%	≥75%
Discussed at MDT (%)	Complete when MDT Discussion Indicator = Y (denominator = all cases)	<95%		≥95%
Histological diagnosis (%)	Complete when Histology is present or Basis of diagnosis equals 5, 6 or 7 (denominator = all cases)	<75%		≥75%
Patient seen by nurse Specialist (%)	Complete when Patient Assessed by a Lung Cancer Nurse Specialist = Y (denominator = all cases)	<80%		≥80%
Nurse specialist present at diagnosis (%)	Complete when Lung Cancer Nurse Specialist Present When Received Diagnosis = Y (denominator = all cases)	<80%		≥80%
% Having active treatment	Complete when date present for Brachytherapy, Anti-cancer drug regimen, Surgery or Teletherapy (denominator = all cases)	<80%		≥60%
% of patients receiving CT before bronchoscopy	Complete when CT Scan Date before or equal to Bronchoscopy Date (denominator = cases with Bronchoscopy Date present)	<80%		≥90%
% receiving surgery all cases	Complete when Surgery Procedure Date is present (denominator = all cases)			
% receiving radiotherapy	Complete when either Teletherapy Treatment Course Start Date or Brachytherapy Therapy Treatment Course Start Date is present (denominator = all cases)			
◆ Tertiary Trust standards do not apply				

Table 2a
Process, nursing, imaging and clinical measures England and Wales (2011 all) part II

Code	Actual number	% of expected	Number of NSCLC	% of NSCLC having Surgery	NSCLC Stage IA, IB, IIA or IIB	% of NSCLC Stage IA, IB, IIA or IIB having surgery	PS0-1 NSCLC Stage IA, IB, IIA or IIB	% PS0-1 NSCLC Stage IA, IB, IIA or IIB having FEV1 absolute and % predicted
N01 Total	**1,128**	**114** ●	**941**	**10.5** ▲	**201**	**42.8** ▲	**133**	**43.6**
RTX	267	145 ●	221	5.9 ▲	45	26.7 ▲	28	50.0
RXL	287	119 ●	235	12.3 ▲	49	51.0 ▲	35	82.9
RXN	269	198 ●	224	13.8 ▲	45	57.8 ●	28	50.0
RXR	305	71 ■	261	10.0 ▲	62	37.1 ▲	42	2.4
N02 Total	**2,432**	**111** ●	**2,013**	**15.3** ●	**491**	**42.4** ▲	**321**	**29.6**
RBT	126	105 ●	99	25.3 ●	27	59.3 ●	6	0.0
RJN	115	107 ●	90	15.6 ●	23	43.5 ▲	13	61.5
RM2 ◆	288 ◆	122 ◆	241 ◆	21.6 ◆	93 ◆	41.9 ◆	77 ◆	0.0 ◆
RM3	228	104 ●	197	18.8 ●	46	65.2 ●	35	31.4
RM4	97	105 ●	75	16.0 ●	16	50.0 ▲	7	14.3
RMC	227	103 ●	178	14.0 ●	44	45.5 ▲	26	76.9
RMP	150	100 ●	123	11.4 ▲	24	33.3 ▲	6	50.0
RRF	243	122 ●	198	12.6 ▲	43	34.9 ▲	35	85.7
RW3	134	112 ●	112	17.0 ●	16	31.3 ▲	10	60.0
RW6	603	105 ●	531	11.9 ▲	117	36.8 ▲	74	0.0
RWJ	220	152 ●	169	12.4 ▲	42	33.3 ▲	32	50.0
N03 Total	**1,891**	**123** ●	**1,626**	**16.7** ●	**432**	**52.8** ●	**199**	**63.8**
LLCU	405	95 ●	341	17.9 ●	96	59.4 ●	58	81.0
RBL	325	273 ●	268	17.9 ●	72	50.0 ▲	29	100.0
RBN	238	108 ●	214	14.5 ●	52	50.0 ▲	16	68.8
REM	341	106 ●	286	17.1 ●	80	48.8 ▲	28	7.1
REN ◆	2 ◆	4 ◆	2 ◆	50.0 ◆	0 ◆	0.0 ◆	0 ◆	0.0 ◆
RJR	194	160 ●	168	13.1 ▲	39	48.7 ▲	21	61.9
RVY	170	207 ●	150	15.3 ●	38	55.3 ●	22	90.9
RWW	216	112 ●	197	18.8 ●	55	54.5 ●	25	20.0
N06 Total	**1,978**	**109** ●	**1,617**	**15.4** ●	**406**	**47.3** ▲	**252**	**45.6**
RAE	293	122 ●	257	17.5 ●	69	44.9 ▲	44	2.3
RCB	202	117 ●	159	17.0 ●	33	63.6 ●	30	0.0
RCD	110	121 ●	87	13.8 ▲	16	50.0 ▲	10	60.0
RCF	118	100 ●	91	12.1 ▲	19	47.4 ▲	14	64.3
RR8	575	102 ●	476	16.4 ●	137	43.1 ▲	71	73.2
RWY	239	98 ●	196	9.2 ▲	41	34.1 ▲	23	82.6
RXF	441	116 ●	351	16.5 ●	91	54.9 ●	60	46.7
N07 Total	**815**	**108** ●	**648**	**19.4** ●	**127**	**63.0** ●	**97**	**33.0**
RCC	131	104 ●	104	15.4 ●	23	47.8 ▲	14	21.4
RJL	317	140 ●	252	17.9 ●	42	66.7 ●	30	70.0
RWA	367	92 ●	292	22.3 ●	62	66.1 ●	53	15.1
N08 Total	**1,362**	**109** ●	**1,109**	**14.1** ●	**263**	**45.6** ▲	**160**	**90.0**
RFF	183	140 ●	148	15.5 ●	35	42.9 ▲	22	77.3
RFR	198	138 ●	171	9.9 ▲	54	27.8 ▲	21	100.0
RFS	184	106 ●	152	11.8 ▲	28	50.0 ▲	17	88.2
RHQ	445	93 ●	361	17.5 ●	91	54.9 ●	68	89.7
RP5	352	111 ●	277	12.6 ▲	55	47.3 ▲	32	93.8

Number of PS0-1 NSCLC Stage IIIB or IV	% PS0-1 Stage IIIB or IV NSCLC having chemotherapy	Number of histologically confirmed NSCLC	% histologically confirmed NSCLC having surgery	Number of pre-treatment NSCLC	% pre-treatment NSCLC histology NOS	Number of patients small cell lung cancer	% small cell receiving chemotherapy	Code
225	**62.2** ●	**760**	**13.0**	**758**	**11.7**	**127**	**77.2** ●	**N01 Total**
59	55.9 ●	156	8.3	153	19.0	30	80.0 ●	RTX
47	83.0 ●	171	17.0	171	15.2	37	78.4 ●	RXL
44	63.6 ●	202	15.3	202	4.5	27	77.8 ●	RXN
75	53.3 ▲	231	11.3	232	10.8	33	72.7 ●	RXR
505	**45.7** ▲	**1,367**	**21.4**	**1,336**	**26.0**	**297**	**70.0** ●	**N02 Total**
8	25.0 ▲	72	33.3	71	16.9	18	61.1 ▲	RBT
24	41.7 ▲	61	19.7	61	13.1	12	91.7 ●	RJN
50 ◆	48.0 ◆	156 ◆	32.1 ◆	152 ◆	11.2 ◆	32 ◆	68.8 ◆	RM2
46	43.5 ▲	141	26.2	138	25.4	25	64.0 ▲	RM3
19	63.2 ●	45	26.7	44	27.3	15	86.7 ●	RM4
27	55.6 ●	105	22.9	99	16.2	34	64.7 ▲	RMC
15	73.3 ●	85	16.5	83	32.5	19	73.7 ●	RMP
71	36.6 ▲	150	14.7	149	15.4	33	66.7 ●	RRF
28	35.7 ▲	79	22.8	73	24.7	20	50.0 ▲	RW3
163	45.4 ▲	342	17.0	336	35.1	55	69.1 ●	RW6
54	50.0 ▲	131	16.0	130	47.7	33	84.8 ●	RWJ
289	**59.5** ●	**999**	**26.5**	**982**	**10.0**	**183**	**66.7** ●	**N03 Total**
62	77.4 ●	252	23.4	247	6.1	49	61.2 ▲	LLCU
57	49.1 ▲	171	27.5	170	14.1	33	72.7 ●	RBL
29	55.2 ●	117	23.9	119	8.4	18	72.2 ●	RBN
48	58.3 ●	184	26.1	184	11.4	40	67.5 ●	REM
0 ◆	0.0 ◆	2 ◆	50.0 ◆	2 ◆	0.0 ◆	0 ◆	0.0 ◆	REN
37	54.1 ▲	88	25.0	88	10.2	16	62.5 ▲	RJR
34	64.7 ●	85	27.1	85	9.4	12	75.0 ●	RVY
22	45.5 ▲	100	37.0	87	12.6	15	60.0 ▲	RWW
345	**60.3** ●	**1,053**	**22.8**	**1,039**	**13.2**	**254**	**68.9** ●	**N06 Total**
49	57.1 ●	141	29.8	141	12.8	28	78.6 ●	RAE
32	34.4 ▲	103	26.2	101	20.8	27	55.6 ▲	RCB
18	77.8 ●	64	14.1	56	17.9	19	57.9 ▲	RCD
26	61.5 ●	60	18.3	60	18.3	14	92.9 ●	RCF
97	74.2 ●	330	22.7	330	16.7	69	72.5 ●	RR8
43	72.1 ●	122	14.8	121	14.0	35	80.0 ●	RWY
80	45.0 ▲	233	24.9	230	2.2	62	58.1 ▲	RXF
178	**51.1** ▲	**426**	**24.6**	**388**	**24.7**	**100**	**67.0** ●	**N07 Total**
26	57.7 ●	56	26.8	50	8.0	21	76.2 ●	RCC
70	65.7 ●	158	26.6	147	24.5	35	74.3 ●	RJL
82	36.6 ▲	212	22.6	191	29.3	44	56.8 ▲	RWA
272	**59.2** ●	**758**	**20.4**	**703**	**19.5**	**187**	**70.6** ●	**N08 Total**
39	61.5 ●	104	22.1	94	26.6	29	72.4 ●	RFF
38	63.2 ●	112	15.2	100	13.0	23	56.5 ▲	RFR
30	46.7 ▲	111	15.3	101	15.8	24	75.0 ●	RFS
89	73.0 ●	248	25.4	247	23.5	59	83.1 ●	RHQ
76	44.7 ▲	183	19.1	161	15.5	52	59.6 ▲	RP5

Table 2a (continued)
Process, nursing, imaging and clinical measures England and Wales (2011 all) part II

Code	Actual number	% of expected	Number of NSCLC	% of NSCLC having Surgery	NSCLC Stage IA, IB, IIA or IIB	% of NSCLC Stage IA, IB, IIA or IIB having surgery	PS0-1 NSCLC Stage IA, IB, IIA or IIB	% PS0-1 NSCLC Stage IA, IB, IIA or IIB having FEV1 absolute and % predicted
N11 Total	**1,113**	**104** ●	**936**	**18.2** ●	**230**	**59.6** ●	**156**	**59.0**
RBK	162	103 ●	137	15.3 ●	31	51.6 ▲	20	55.0
RR1	414	103 ●	354	17.8 ●	87	58.6 ●	57	49.1
RRK	267	109 ●	215	23.7 ●	64	65.6 ●	44	79.5
RXK	270	104 ●	230	15.2 ●	48	58.3 ●	35	51.4
N12 Total	**506**	**122** ●	**426**	**13.8** ▲	**68**	**58.8** ●	**50**	**44.0**
RJC	93	1860 ●	78	15.4 ●	18	55.6 ●	9	0.0
RKB	204	82 ●	177	13.6 ▲	24	58.3 ●	22	36.4
RLT	114	119 ●	90	14.4 ●	17	58.8 ●	12	75.0
RWP00	95	148 ●	81	12.3 ▲	9	66.7 ●	7	71.4
N20 Total	**575**	**108** ●	**464**	**15.5** ●	**76**	**43.4** ▲	**50**	**16.0**
RC9	186	171 ●	157	22.9 ●	22	54.5 ●	14	21.4
RWG	187	86 ●	147	5.4 ▲	15	6.7 ▲	5	100.0
RWH	202	98 ●	160	17.5 ●	39	51.3 ▲	31	0.0
N21 Total	**690**	**80** ●	**590**	**13.4** ▲	**109**	**53.2** ●	**78**	**78.2**
RAS	107	107 ●	86	15.1 ●	8	62.5 ●	6	100.0
RC3	90	120 ●	79	2.5 ▲	8	25.0 ▲	4	75.0
RFW	94	134 ●	78	15.4 ●	19	57.9 ●	15	86.7
RQM	58	73 ■	46	13.0 ▲	7	71.4 ●	7	85.7
RT3 ◆	19 ◆	13 ◆	18 ◆	33.3 ◆	2 ◆	100.0 ◆	1 ◆	100.0 ◆
RV8	88	88 ●	78	17.9 ●	16	56.3 ●	12	100.0
RYJ	234	81 ●	205	12.7 ▲	49	49.0 ▲	33	60.6
N22 Total	**812**	**111** ●	**676**	**15.5** ●	**123**	**56.1** ●	**76**	**59.2**
RAL	91	106 ●	75	22.7 ●	14	64.3 ●	8	100.0
RAP	95	113 ●	77	15.6 ●	9	55.6 ●	5	80.0
RKE	112	114 ●	97	15.5 ●	19	42.1 ▲	10	90.0
RQW	157	139 ●	128	20.3 ●	32	53.1 ●	19	36.8
RRV	113	81 ●	93	20.4 ●	25	64.0 ●	17	64.7
RVL	244	115 ●	206	7.8 ▲	24	58.3 ●	17	35.3
N23 Total	**635**	**81** ●	**552**	**8.5** ▲	**98**	**34.7** ▲	**50**	**64.0**
RF4	206	61 ■	182	1.6 ▲	20	5.0 ▲	0	0.0
RGC	119	104 ●	98	14.3 ●	23	39.1 ▲	18	61.1
RNH	100	87 ●	91	5.5 ▲	10	30.0 ▲	6	0.0
RNJ	115	105 ●	92	15.2 ●	23	56.5 ●	15	93.3
RQX	95	95 ●	89	12.4 ▲	22	36.4 ▲	11	63.6
N24 Total	**702**	**80** ●	**603**	**13.9** ▲	**124**	**49.2** ▲	**69**	**26.1**
RJ1	121	44 ▲	107	22.4 ●	32	59.4 ●	12	0.0
RJ2	108	93 ●	93	11.8 ▲	22	45.5 ▲	14	0.0
RJZ	109	96 ●	97	18.6 ●	22	63.6 ●	15	60.0
RYQ	364	98 ●	306	10.1 ▲	48	37.5 ▲	28	32.1
N25 Total	**655**	**83** ●	**551**	**12.0** ▲	**96**	**46.9** ▲	**54**	**88.9**
RAX	117	74 ■	93	18.3 ●	21	61.9 ●	12	100.0
RJ6	144	109 ●	118	13.6 ▲	14	42.9 ▲	9	77.8
RJ7	173	72 ■	144	16.7 ●	35	60.0 ●	26	92.3
RPY ◆	17 ◆	0 ◆	15 ◆	0.0 ◆	1 ◆	0.0 ◆	0 ◆	0.0 ◆
RVR	199	81 ●	177	5.1 ▲	24	20.8 ▲	7	71.4

Number of PS0-1 NSCLC Stage IIIB or IV	% PS0-1 Stage IIIB or IV NSCLC having chemotherapy	Number of histologically confirmed NSCLC	% histologically confirmed NSCLC having surgery	Number of pre-treatment NSCLC	% pre-treatment NSCLC histology NOS	Number of patients small cell lung cancer	% small cell receiving chemotherapy	Code
225	**62.7** ●	**684**	**24.9**	**678**	**16.2**	**112**	**65.2** ●	**N11 Total**
20	80.0 ●	112	18.8	112	18.8	17	47.1 ▲	RBK
88	64.8 ●	238	26.5	233	18.5	34	64.7 ▲	RR1
52	53.8 ▲	168	30.4	167	13.2	32	68.8 ●	RRK
65	61.5 ●	166	21.1	166	14.5	29	72.4 ●	RXK
150	**43.3** ▲	**332**	**17.8**	**296**	**6.1**	**63**	**68.3** ●	**N12 Total**
20	55.0 ●	61	19.7	53	5.7	13	92.3 ●	RJC
87	39.1 ▲	139	17.3	114	2.6	23	60.9 ▲	RKB
25	40.0 ▲	71	18.3	68	8.8	17	76.5 ●	RLT
18	55.6 ●	61	16.4	61	9.8	10	40.0 ▲	RWP00
91	**45.1** ▲	**345**	**19.1**	**323**	**22.9**	**62**	**62.9** ▲	**N20 Total**
25	20.0 ▲	117	26.5	106	21.7	14	42.9 ▲	RC9
30	53.3 ▲	109	7.3	101	19.8	24	66.7 ●	RWG
36	55.6 ●	119	22.7	116	26.7	24	70.8 ●	RWH
178	**52.2** ▲	**445**	**17.8**	**405**	**21.5**	**74**	**58.1** ▲	**N21 Total**
20	25.0 ▲	55	23.6	42	71.4	16	62.5 ▲	RAS
29	48.3 ▲	35	5.7	25	52.0	8	75.0 ●	RC3
21	33.3 ▲	58	20.7	49	20.4	8	50.0 ▲	RFW
9	77.8 ●	44	13.6	44	4.5	10	80.0 ●	RQM
3 ◆	100.0 ◆	18 ◆	33.3 ◆	15 ◆	13.3 ◆	0 ◆	0.0 ◆	RT3
29	69.0 ●	66	21.2	64	17.2	9	33.3 ▲	RV8
67	55.2 ●	169	15.4	166	11.4	23	52.2 ▲	RYJ
162	**57.4** ●	**520**	**19.8**	**477**	**14.9**	**93**	**64.5** ▲	**N22 Total**
12	75.0 ●	66	25.8	55	1.8	10	50.0 ▲	RAL
18	44.4 ▲	61	19.7	51	15.7	17	47.1 ▲	RAP
23	52.2 ▲	66	22.7	64	6.3	9	77.8 ●	RKE
21	42.9 ▲	97	25.8	84	15.5	21	33.3 ▲	RQW
23	52.2 ▲	83	22.9	82	15.9	13	92.3 ●	RRV
65	66.2 ●	147	10.2	141	22.7	23	91.3 ●	RVL
80	**63.8** ●	**420**	**10.7**	**412**	**11.7**	**53**	**66.0** ●	**N23 Total**
1	0.0 ▲	141	2.1	141	7.1	17	58.8 ▲	RF4
27	55.6 ●	81	17.3	78	5.1	14	50.0 ▲	RGC
18	44.4 ▲	69	7.2	69	13.0	5	60.0 ▲	RNH
10	90.0 ●	74	18.9	71	11.3	14	85.7 ●	RNJ
24	79.2 ●	55	16.4	53	32.1	3	100.0 ●	RQX
142	**59.2** ●	**502**	**16.5**	**439**	**16.9**	**70**	**68.6** ●	**N24 Total**
19	78.9 ●	103	23.3	92	17.4	9	66.7 ●	RJ1
26	69.2 ●	70	14.3	52	15.4	10	50.0 ▲	RJ2
27	29.6 ▲	80	22.5	80	11.3	10	60.0 ▲	RJZ
70	61.4 ●	249	12.4	215	19.1	41	75.6 ●	RYQ
129	**69.0** ●	**439**	**14.8**	**425**	**18.8**	**59**	**57.6** ▲	**N25 Total**
18	83.3 ●	82	20.7	81	21.0	14	57.1 ▲	RAX
29	72.4 ●	102	14.7	99	12.1	20	50.0 ▲	RJ6
45	75.6 ●	117	20.5	114	23.7	14	78.6 ●	RJ7
4 ◆	75.0 ◆	13 ◆	0.0 ◆	11 ◆	36.4 ◆	1 ◆	100.0 ◆	RPY
33	48.5 ▲	123	7.3	118	16.9	10	40.0 ▲	RVR

Table 2a (continued)
Process, nursing, imaging and clinical measures England and Wales (2011 all) part II

Code	Actual number	% of expected	Number of NSCLC	% of NSCLC having Surgery	NSCLC Stage IA, IB, IIA or IIB	% of NSCLC Stage IA, IB, IIA or IIB having surgery	PS0-1 NSCLC Stage IA, IB, IIA or IIB	% PS0-1 NSCLC Stage IA, IB, IIA or IIB having FEV1 absolute and % predicted
N26 Total	**1,156**	**126** ●	**928**	**13.8** ▲	**187**	**52.9** ●	**129**	**36.4**
RA9	201	129 ●	171	12.9 ▲	39	46.2 ▲	27	92.6
RBZ	119	140 ●	97	10.3 ▲	13	61.5 ●	7	28.6
REF	265	119 ●	206	16.5 ●	45	60.0 ●	34	11.8
RH8	235	118 ●	188	11.2 ▲	36	47.2 ▲	27	0.0
RK9	336	131 ●	266	15.4 ●	54	53.7 ●	34	47.1
N27 Total	**419**	**104** ●	**342**	**15.2** ●	**63**	**69.8** ●	**49**	**79.6**
RBD	108	132 ●	92	15.2 ●	19	68.4 ●	16	68.8
RD3	155	103 ●	116	14.7 ●	20	60.0 ●	14	85.7
RDZ	156	92 ●	134	15.7 ●	24	79.2 ●	19	84.2
N28 Total	**887**	**105** ●	**734**	**19.3** ●	**163**	**66.3** ●	**102**	**27.5**
RA3	92	112 ●	73	19.2 ●	13	76.9 ●	9	22.2
RA4	89	144 ●	73	13.7 ▲	15	33.3 ▲	8	0.0
RA7	130	72 ■	118	36.4 ●	47	78.7 ●	40	15.0
RBA	128	106 ●	106	14.2 ●	8	100.0 ●	1	0.0
RD1	184	108 ●	139	15.1 ●	32	43.8 ▲	15	0.0
RVJ	264	116 ●	225	17.3 ●	48	70.8 ●	29	69.0
N29 Total	**563**	**129** ●	**469**	**17.7** ●	**111**	**59.5** ●	**80**	**25.0**
RLQ	109	147 ●	87	16.1 ●	15	73.3 ●	11	81.8
RTE	323	132 ●	274	19.0 ●	76	57.9 ●	56	19.6
RWP50	131	110 ●	108	15.7 ●	20	55.0 ●	13	0.0
N30 Total	**1,164**	**113** ●	**944**	**18.0** ●	**207**	**54.6** ●	**142**	**61.3**
RD7	174	155 ●	156	15.4 ●	26	38.5 ▲	15	0.0
RD8	133	139 ●	90	12.2 ▲	8	50.0 ▲	5	0.0
RHW	172	84 ●	146	12.3 ▲	29	51.7 ▲	21	100.0
RN3	183	162 ●	148	18.9 ●	42	57.1 ●	29	89.7
RTH	307	101 ●	243	27.2 ●	71	62.0 ●	46	73.9
RXQ	195	97 ●	161	14.3 ●	31	51.6 ▲	26	23.1
N31 Total	**1,167**	**107** ●	**925**	**14.3** ●	**152**	**52.6** ●	**104**	**56.7**
RHM	234	52 ■	174	9.8 ▲	30	33.3 ▲	16	93.8
RHU	383	137 ●	314	15.9 ●	43	58.1 ●	33	0.0
RN1	104	111 ●	79	17.7 ●	20	55.0 ●	9	77.8
RN5	100	256 ●	83	14.5 ●	11	45.5 ▲	6	100.0
RNZ	95	134 ●	75	20.0 ●	12	83.3 ●	11	27.3
RR2	104	196 ●	85	12.9 ▲	15	66.7 ●	14	100.0
RYR16	147	136 ●	115	11.3 ▲	21	42.9 ▲	15	93.3
N32 Total	**662**	**123** ●	**553**	**15.4** ●	**106**	**48.1** ▲	**57**	**61.4**
RA2	100	92 ●	87	9.2 ▲	7	14.3 ▲	0	0.0
RDU	201	173 ●	159	17.0 ●	42	52.4 ●	26	26.9
RTK	172	108 ●	149	17.4 ●	34	55.9 ●	17	82.4
RTP	189	121 ●	158	15.2 ●	23	39.1 ▲	14	100.0
N33 Total	**660**	**107** ●	**533**	**10.9** ▲	**122**	**36.9** ▲	**56**	**16.1**
RXC	266	116 ●	218	13.3 ▲	62	38.7 ▲	36	2.8
RXH	246	98 ●	202	8.4 ▲	36	33.3 ▲	9	22.2
RYR18	146	104 ●	112	10.7 ▲	24	37.5 ▲	11	54.5

	Number of PS0-1 NSCLC Stage IIIB or IV	% PS0-1 Stage IIIB or IV NSCLC having chemotherapy	Number of histologically confirmed NSCLC	% histologically confirmed NSCLC having surgery	Number of pre-treatment NSCLC	% pre-treatment NSCLC histology NOS	Number of patients small cell lung cancer	% small cell receiving chemotherapy	Code
	248	**57.3** ●	**658**	**18.8**	**652**	**18.3**	**130**	**69.2** ●	**N26 Total**
	39	53.8 ▲	119	18.5	115	5.2	17	76.5 ●	RA9
	28	60.7 ●	61	13.1	61	44.3	11	54.5 ▲	RBZ
	59	50.8 ▲	154	22.1	154	26.0	36	72.2 ●	REF
	58	67.2 ●	149	14.1	147	7.5	30	83.3 ●	RH8
	64	54.7 ▲	175	22.3	175	20.0	36	55.6 ▲	RK9
	110	**52.7** ▲	**249**	**20.5**	**239**	**14.6**	**42**	**76.2** ●	**N27 Total**
	30	60.0 ●	70	20.0	67	13.4	8	75.0 ●	RBD
	34	58.8 ●	93	18.3	93	10.8	24	75.0 ●	RD3
	46	43.5 ▲	86	23.3	79	20.3	10	80.0 ●	RDZ
	124	**63.7** ●	**531**	**26.4**	**524**	**14.1**	**70**	**68.6** ●	**N28 Total**
	11	72.7 ●	61	23.0	61	9.8	11	72.7 ●	RA3
	8	62.5 ●	48	20.8	48	33.3	4	75.0 ●	RA4
	21	71.4 ●	97	44.3	96	9.4	6	100.0 ●	RA7
	6	100.0 ●	68	22.1	67	14.9	10	70.0 ●	RBA
	35	37.1 ▲	102	20.6	100	15.0	23	65.2 ●	RD1
	43	74.4 ●	155	23.9	152	11.8	16	56.3 ▲	RVJ
	120	**35.8** ▲	**364**	**22.8**	**360**	**30.0**	**66**	**62.1** ▲	**N29 Total**
	26	50.0 ▲	68	20.6	68	19.1	14	64.3 ▲	RLQ
	70	35.7 ▲	201	25.9	197	38.1	35	68.6 ●	RTE
	24	20.8 ▲	95	17.9	95	21.1	17	47.1 ▲	RWP50
	253	**53.0** ▲	**790**	**20.5**	**751**	**29.3**	**132**	**70.5** ●	**N30 Total**
	42	38.1 ▲	119	18.5	98	31.6	13	61.5 ▲	RD7
	18	66.7 ●	86	12.8	87	20.7	29	75.9 ●	RD8
	41	53.7 ▲	115	15.7	103	54.4	14	64.3 ▲	RHW
	35	51.4 ▲	122	21.3	117	31.6	19	73.7 ●	RN3
	53	60.4 ●	204	30.4	203	15.8	37	70.3 ●	RTH
	64	53.1 ▲	144	16.0	143	32.2	20	70.0 ●	RXQ
	290	**50.0** ▲	**690**	**19.0**	**643**	**21.2**	**137**	**75.2** ●	**N31 Total**
	53	47.2 ▲	125	13.6	116	12.9	35	88.6 ●	RHM
	95	37.9 ▲	234	20.9	221	24.0	41	68.3 ●	RHU
	15	66.7 ●	63	22.2	50	48.0	12	91.7 ●	RN1
	29	62.1 ●	58	20.7	53	13.2	12	83.3 ●	RN5
	27	63.0 ●	56	26.8	51	11.8	10	70.0 ●	RNZ
	33	48.5 ▲	73	15.1	71	26.8	8	87.5 ●	RR2
	38	60.5 ●	81	16.0	81	14.8	19	47.4 ▲	RYR16
	118	**56.8** ●	**445**	**18.7**	**402**	**22.6**	**59**	**55.9** ▲	**N32 Total**
	1	0.0 ▲	76	10.5	66	33.3	5	80.0 ●	RA2
	40	70.0 ●	124	21.8	124	16.9	26	46.2 ▲	RDU
	29	41.4 ▲	117	22.2	84	11.9	14	57.1 ▲	RTK
	48	56.3 ●	128	17.2	128	29.7	14	64.3 ▲	RTP
	118	**46.6** ▲	**371**	**15.4**	**368**	**18.2**	**72**	**56.9** ▲	**N33 Total**
	48	58.3 ●	169	17.2	169	14.2	29	55.2 ▲	RXC
	34	50.0 ▲	122	13.1	119	16.0	26	61.5 ▲	RXH
	36	27.8 ▲	79	15.2	79	30.4	17	52.9 ▲	RYR18

Table 2a (continued)
Process, nursing, imaging and clinical measures England and Wales (2011 all) part II

Code	Actual number	% of expected	Number of NSCLC	% of NSCLC having Surgery	NSCLC Stage IA, IB, IIA or IIB	% of NSCLC Stage IA, IB, IIA or IIB having surgery	PS0-1 NSCLC Stage IA, IB, IIA or IIB	% PS0-1 NSCLC Stage IA, IB, IIA or IIB having FEV1 absolute and % predicted
N34 Total	**975**	**108** ●	**802**	**17.3** ●	**126**	**61.1** ●	**90**	**16.7**
RN7	130	107 ●	105	20.0 ●	19	57.9 ●	16	93.8
RPA	148	72 ■	132	11.4 ▲	19	47.4 ▲	12	0.0
RVV	470	126 ●	378	14.8 ●	62	54.8 ●	45	0.0
RWF	227	112 ●	187	25.1 ●	26	88.5 ●	17	0.0
N35 Total	**1,092**	**99** ●	**922**	**20.8** ●	**192**	**68.8** ●	**131**	**38.2**
RJD	154	96 ●	115	22.6 ●	26	80.8 ●	20	95.0
RJE	316	102 ●	281	17.1 ●	33	75.8 ●	20	5.0
RL4	222	108 ●	196	19.4 ●	51	52.9 ●	32	87.5
RNA	141	78 ●	120	29.2 ●	30	90.0 ●	18	11.1
RWP31	45	107 ●	35	14.3 ●	7	71.4 ●	5	0.0
RXW	214	103 ●	175	22.9 ●	45	60.0 ●	36	0.0
N36 Total	**2,687**	**126** ●	**2,174**	**13.7** ▲	**487**	**47.6** ▲	**313**	**77.6**
RE9	180	134 ●	147	12.2 ▲	30	43.3 ▲	15	93.3
RLN	279	124 ●	224	12.5 ▲	52	34.6 ▲	29	86.2
RNL	242	142 ●	186	18.8 ●	39	69.2 ●	28	92.9
RR7	225	171 ●	182	14.8 ●	48	41.7 ▲	21	47.6
RTD	302	182 ●	238	15.5 ●	49	59.2 ●	27	85.2
RTF	371	102 ●	311	9.6 ▲	55	49.1 ▲	43	88.4
RTR	377	140 ●	307	15.6 ●	80	50.0 ▲	59	67.8
RVW	324	108 ●	269	11.9 ▲	68	38.2 ▲	41	90.2
RXP	387	104 ●	310	13.9 ▲	66	48.5 ▲	50	60.0
N37 Total	**1,519**	**111** ●	**1,263**	**12.8** ▲	**228**	**47.4** ▲	**137**	**29.9**
RC1	65	114 ●	56	10.7 ▲	5	60.0 ●	5	100.0
RCX	140	125 ●	115	21.7 ●	27	55.6 ●	19	0.0
RGN	173	160 ●	140	12.1 ▲	24	45.8 ▲	18	66.7
RGP	201	153 ●	174	9.2 ▲	30	30.0 ▲	16	0.0
RGQ	212	124 ●	166	9.0 ▲	22	54.5 ●	16	100.0
RGR	108	208 ●	90	8.9 ▲	14	50.0 ▲	10	0.0
RGT	203	197 ●	176	11.4 ▲	38	31.6 ▲	28	3.6
RM1	350	104 ●	289	16.6 ●	59	57.6 ●	21	33.3
RQQ	67	191 ●	57	12.3 ▲	9	55.6 ●	4	0.0
N38 Total	**859**	**127** ●	**698**	**12.2** ▲	**123**	**53.7** ●	**83**	**81.9**
RAJ	220	115 ●	183	8.2 ▲	24	54.2 ●	14	100.0
RDD	201	114 ●	169	15.4 ●	32	59.4 ●	24	100.0
RDE	248	141 ●	194	16.0 ●	39	64.1 ●	29	96.6
RQ8	190	142 ●	152	8.6 ▲	28	32.1 ▲	16	12.5
N39 Total	**2,291**	**119** ●	**1,895**	**18.0** ●	**344**	**60.8** ●	**234**	**76.9**
RJF	132	213 ●	103	32.0 ●	33	75.8 ●	23	65.2
RK5	221	130 ●	166	12.7 ▲	32	50.0 ▲	24	91.7
RNQ	206	141 ●	180	18.3 ●	33	57.6 ●	17	0.0
RNS	188	132 ●	161	16.8 ●	31	58.1 ●	20	60.0
RTG	304	118 ●	252	19.8 ●	51	56.9 ●	43	93.0
RWD	356	102 ●	302	17.9 ●	38	60.5 ●	25	68.0
RWE	479	103 ●	396	15.9 ●	59	62.7 ●	25	96.0
RX1	403	121 ●	333	17.7 ●	66	62.1 ●	57	87.7
England Total	**31,395**	**110** ●	**25,934**	**15.3** ●	**5,455**	**51.7** ▲	**3,452**	**52.7**

Number of PS0-1 NSCLC Stage IIIB or IV	% PS0-1 Stage IIIB or IV NSCLC having chemotherapy	Number of histologically confirmed NSCLC	% histologically confirmed NSCLC having surgery	Number of pre-treatment NSCLC	% pre-treatment NSCLC histology NOS	Number of patients small cell lung cancer	% small cell receiving chemotherapy	Code
199	**51.3** ▲	**612**	**22.5**	**574**	**19.7**	**101**	**76.2** ●	**N34 Total**
27	81.5 ●	91	23.1	91	8.8	13	76.9 ●	RN7
15	40.0 ▲	87	17.2	82	15.9	10	90.0 ●	RPA
126	46.0 ▲	283	19.8	263	22.4	56	73.2 ●	RVV
31	51.6 ▲	151	30.5	138	23.9	22	77.3 ●	RWF
222	**57.2** ●	**739**	**26.0**	**735**	**15.6**	**112**	**75.9** ●	**N35 Total**
30	66.7 ●	99	26.3	99	10.1	26	73.1 ●	RJD
50	64.0 ●	210	22.9	207	14.0	20	70.0 ●	RJE
58	62.1 ●	145	26.2	145	18.6	19	78.9 ●	RL4
1	0.0 ▲	105	33.3	104	8.7	12	75.0 ●	RNA
11	45.5 ▲	31	16.1	31	22.6	7	100.0 ●	RWP31
72	47.2 ▲	149	26.8	149	22.1	28	75.0 ●	RXW
520	**62.1** ●	**1,551**	**18.9**	**1,481**	**28.4**	**348**	**69.3** ●	**N36 Total**
26	46.2 ▲	89	20.2	76	44.7	17	52.9 ▲	RE9
39	79.5 ●	159	15.1	155	39.4	32	71.9 ●	RLN
43	55.8 ●	164	21.3	160	27.5	43	44.2 ▲	RNL
33	60.6 ●	124	21.8	95	25.3	27	77.8 ●	RR7
49	79.6 ●	170	21.8	169	17.2	42	71.4 ●	RTD
105	58.1 ●	215	14.0	199	28.1	33	63.6 ▲	RTF
54	68.5 ●	228	21.1	228	13.2	51	76.5 ●	RTR
72	61.1 ●	187	17.1	187	19.3	38	84.2 ●	RVW
99	55.6 ●	215	19.5	212	50.5	65	72.3 ●	RXP
305	**63.0** ●	**962**	**16.5**	**903**	**12.8**	**153**	**64.7** ▲	**N37 Total**
16	75.0 ●	53	11.3	53	9.4	6	33.3 ▲	RC1
39	66.7 ●	92	27.2	92	21.7	16	68.8 ●	RCX
32	59.4 ●	111	15.3	110	20.0	24	70.8 ●	RGN
52	53.8 ▲	124	12.1	111	7.2	18	72.2 ●	RGP
45	71.1 ●	136	11.0	133	17.3	24	62.5 ▲	RGQ
18	61.1 ●	68	11.8	68	13.2	10	80.0 ●	RGR
36	55.6 ●	135	13.3	108	0.9	13	61.5 ▲	RGT
59	69.5 ●	200	24.0	199	11.6	34	58.8 ▲	RM1
8	37.5 ▲	43	16.3	29	17.2	8	62.5 ▲	RQQ
210	**57.1** ●	**536**	**15.9**	**523**	**19.3**	**92**	**64.1** ▲	**N38 Total**
59	59.3 ●	128	11.7	117	18.8	23	60.9 ▲	RAJ
49	59.2 ●	130	20.0	128	12.5	18	61.1 ▲	RDD
60	66.7 ●	156	19.9	156	21.2	35	77.1 ●	RDE
42	38.1 ▲	122	10.7	122	24.6	16	43.8 ▲	RQ8
460	**47.2** ▲	**1,366**	**23.9**	**1,183**	**21.0**	**244**	**64.3** ▲	**N39 Total**
19	89.5 ●	77	41.6	55	9.1	13	61.5 ▲	RJF
55	47.3 ▲	131	16.0	129	17.8	45	66.7 ●	RK5
41	39.0 ▲	111	29.7	106	80.2	13	30.8 ▲	RNQ
34	35.3 ▲	96	21.9	90	14.4	19	63.2 ▲	RNS
49	55.1 ●	186	26.9	163	18.4	22	68.2 ●	RTG
72	48.6 ▲	232	20.3	191	15.7	41	61.0 ▲	RWD
100	48.0 ▲	247	25.5	207	15.0	52	63.5 ▲	RWE
90	40.0 ▲	285	20.7	242	13.2	39	76.9 ●	RX1
6,268	**55.3** ●	**18,914**	**20.4**	**17,999**	**19.1**	**3,492**	**68.0** ●	**England Total**

Table 2a (continued)
Process, nursing, imaging and clinical measures England and Wales (2011 all) part II

Code	Actual number	% of expected	Number of NSCLC	% of NSCLC having Surgery	NSCLC Stage IA, IB, IIA or IIB	% of NSCLC Stage IA, IB, IIA or IIB having surgery	PS0-1 NSCLC Stage IA, IB, IIA or IIB	% PS0-1 NSCLC Stage IA, IB, IIA or IIB having FEV1 absolute and % predicted
NWW Total	**494**	**104**	**416**	**9.9**	**110**	**30.0**	**59**	**76.3**
7A1A1	188	103	160	11.9	45	35.6	25	96.0
7A1A4	195	128	161	8.1	44	27.3	23	43.5
7A1AU	111	78	95	9.5	21	23.8	11	100.0
SWCN Total	**1,574**	**103**	**1,299**	**11.3**	**280**	**33.6**	**157**	**61.1**
7A2AG	46	77	40	7.5	8	37.5	4	100.0
7A2AJ	37	116	32	9.4	5	40.0	2	100.0
7A2AL	125	158	111	9.9	19	47.4	14	92.9
7A2BL	91	140	73	12.3	12	50.0	8	0.0
7A3B7	104	107	88	12.5	13	38.5	10	0.0
7A3C4	95	77	72	6.9	8	50.0	4	100.0
7A3C7	102	87	86	9.3	17	29.4	10	90.0
7A3CJ	86	108	69	10.1	10	50.0	7	0.0
7A4BV	3	2	3	66.7	0	0.0	0	0.0
7A4C1	255	138	212	12.3	51	19.6	24	83.3
7A5B1	133	102	114	15.8	36	38.9	22	100.0
7A5B3	111	90	93	14.0	23	34.8	15	80.0
7A6AM	114	104	97	8.2	25	24.0	10	100.0
7A6AR	272	139	209	11.0	53	32.1	27	0.0
Wales Total	**2,068**	**104**	**1,715**	**11.0**	**390**	**32.6**	**216**	**65.3**
LUCADA Total	**33,463**	**110** ●	**27,649**	**15.0** ●	**5,845**	**50.4** ▲	**3,668**	**53.4**
Range Network								
Min		80.1		8.5		30.0		16.0
LQ		104.3		13.0		45.9		30.7
Median		108.7		14.8		52.7		57.9
UQ		117.9		17.2		59.3		73.2
Max		128.8		20.8		69.8		90.0
Range Trust/Health Board								
Min		44.3		0.0		0.0		0.0
LQ		101.7		11.6		38.8		6.1
Median		110.4		14.5		51.0		61.5
UQ		134.3		17.2		59.4		89.1
Max		1860.0		100.0		100.0		100.0

Counts aggregated by place first seen trust.

	Number of PS0-1 NSCLC Stage IIIB or IV	% PS0-1 Stage IIIB or IV NSCLC having chemotherapy	Number of histologically confirmed NSCLC	% histologically confirmed NSCLC having surgery	Number of pre-treatment NSCLC	% pre-treatment NSCLC histology NOS	Number of patients small cell lung cancer	% small cell receiving chemotherapy	Code
	111	**63.1**	**275**	**14.5**	**272**	**9.2**	**57**	**75.4**	**NWW Total**
	40	57.5	105	18.1	105	16.2	20	75.0	7A1A1
	50	74.0	111	10.8	110	3.6	26	80.8	7A1A4
	21	47.6	59	15.3	57	7.0	11	63.6	7A1AU
	319	**51.1**	**892**	**16.5**	**884**	**24.4**	**200**	**62.5**	**SWCN Total**
	6	66.7	26	11.5	26	15.4	4	25.0	7A2AG
	4	75.0	25	12.0	25	24.0	4	75.0	7A2AJ
	23	78.3	89	12.4	89	13.5	10	80.0	7A2AL
	25	36.0	47	19.1	47	27.7	15	53.3	7A2BL
	21	47.6	54	20.4	53	30.2	12	50.0	7A3B7
	29	62.1	50	10.0	50	26.0	17	52.9	7A3C4
	23	43.5	57	14.0	56	23.2	13	53.8	7A3C7
	28	50.0	52	13.5	52	17.3	14	85.7	7A3CJ
	2	50.0	2	100.0	2	0.0	0	0.0	7A4BV
	62	45.2	141	18.4	139	28.8	28	78.6	7A4C1
	25	32.0	86	20.9	86	54.7	17	52.9	7A5B1
	24	70.8	61	21.3	60	16.7	12	91.7	7A5B3
	10	40.0	61	13.1	61	18.0	14	42.9	7A6AM
	37	51.4	141	16.3	138	15.9	40	57.5	7A6AR
	430	**54.2**	**1,167**	**16.0**	**1,156**	**20.8**	**257**	**65.4**	**Wales Total**
	6,698	**55.2** ●	**20,081**	**20.1**	**19,155**	**19.2**	**3,749**	**67.9** ●	**LUCADA Total**
		35.8		10.7		6.1		55.9	
		51.1		16.5		14.2		64.2	
		57.2		19.1		18.6		67.7	
		61.7		22.7		22.3		70.4	
		69.0		26.5		30.0		77.2	
		0.0		0.0		0.0		0.0	
		44.6		15.1		11.8		57.0	
		55.2		19.7		16.2		68.3	
		66.0		23.0		23.6		76.5	
		100.0		100.0		80.2		100.0	

Indicator	Definition	▲	■	●
Actual number	Number of cases with date first seen in year specified			
% of expected	Completeness of data in cohort based on Expected Annual Cases in Table 1a of the National Lung Cancer Audit 2010*	<50%	50-75%	≥75%
Number of NSCLC	Number of NSCLC cases	<50%	50-75%	≥75%
% of NSCLC having Surgery	Complete when Surgery Procedure Date is present (denominator = NSCLC cases)	<14%		≥14%
NSCLC Stage IA, IB, IIA or IIB	Number of NSCLC cases with TNM Stage IA, IB, IIA or IIB			
% of NSCLC Stage IA, IB, IIA or IIB having surgery	Complete when Surgery Procedure Date is present (denominator = NSCLC cases with TNM Stage IA, IB, IIA or IIB)	<52%		≥52%
PS0-1 NSCLC Stage IA, IB, IIA or IIB	Number of NSCLC cases with Performance Status 0 or 1 and TNM Stage IA, IB, IIA or IIB			
% PS0-1 Stage IA, IB, IIA or IIB NSCLC having FEV1 absolute and % predicted	Complete when both FEV1 Percentage and FEV1 Absolute Amount are present (denominator = NSCLC cases with Performance Status 0 or 1 and TNM Stage IA, IB, IIA or IIB)			
Number of PS0-1 NSCLC Stage IIIB or IV	Number of NSCLC cases with Performance Status 0 or 1 and TNM Stage IIIB or IV			
% PS0-1 Stage IIIB or IV NSCLC having chemotherapy	Complete when Chemotherapy Start Date is present (denominator = NSCLC cases with Performance Status 0 or 1 and TNM Stage IIIB or IV)	<55%		≥55%
Number of histologically confirmed NSCLC	Number of histologically-confirmed NSCLC cases			
% histologically confirmed NSCLC having surgery	Complete when Surgery Procedure Date is present (denominator = histologically-confirmed NSCLC cases)			
Number of pre-treatment NSCLC	Number of pre-treatment NSCLC cases			
% pre-treatment NSCLC histology NOS	Percentage of pre-treatment NSCLC cases with Histology NOS (M8046/3) (denominator = pre-treatment NSCLC cases)			
Number of patients small cell lung cancer	Number of SCLC cases			
% small cell receiving chemotherapy	Complete when Chemotherapy Start Date is present (denominator = SCLC cases)	<65%		≥65%

◆ Tertiary Trust standards do not apply

Table 2b
Process, nursing, imaging and clinical measures Scotland (2011 all)

Health board	Actual number (Total)	% of expected	Discussed at MDT (%)	Histo-logical diagnosis (%)	Patient seen by nurse specialist (%)	% having active treatment	% of patients receiving CT before bronchos-copy	% receiving surgery all cases	% receiv-ing radio-therapy	Num-ber of histologi-cally con-firmed NSCLC	% histo-logically con-firmed NSCLC having Surgery	Number of patients small cell lung cancer	% small cell receiving chemo-therapy
SCAN	**1,233**	**93**	**97.7**	**66.1**	**80.4**	**56.3**	**96.6**	**10.4**	**35.5**	**622**	**19.6**	**150**	**60.7**
Borders	89	93	98.9	74.2	93.3	62.9	95.8	14.6	39.3	49	26.5	15	53.3
D and G	104	71	93.3	79.8	81.7	65.4	95.5	11.5	29.8	70	17.1	11	81.8
Fife	321	99	99.7	62.6	79.8	50.2	96.0	8.4	27.1	133	19.5	48	60.4
Lothian	719	95	97.4	64.7	78.9	56.9	97.6	10.6	39.6	370	19.2	76	59.2
WoSCAN	**2,465**	**92**	**94.6**	**73.2**	**82.1**	**58.7**	**89.2**	**11.2**	**35.6**	**1,349**	**19.1**	**374**	**69.3**
Ayrshire and Arran	338	99	98.5	73.7	81.1	53.8	91.0	8.9	35.5	187	13.9	55	56.4
Clyde	373	95	91.7	76.1	81.5	58.7	78.5	10.5	38.6	205	18.5	64	53.1
Forth Valley	193	77	100.0	77.2	92.7	65.3	95.5	11.9	39.9	118	18.6	25	80.0
Lanarkshire[3]	517	97	98.1	78.1	78.3	58.6	84.6	15.1	23.2	299	25.4	90	68.9
North Glasgow	690	97	92.3	69.1	80.6	60.4	96.6	10.7	41.3	362	19.3	85	77.6
South Glasgow	354	79	90.1	68.1	86.4	56.5	91.5	8.8	37.0	178	14.0	55	83.6
NoSCAN	**957**	**89**	**94.0**	**75.8**	**80.0**	**66.8**	**91.3**	**9.8**	**46.8**	**560**	**15.9**	**130**	**70.8**
Grampian	361	88	87.3	79.4	67.2	70.1	92.5	11.4	52.9	227	18.1	65	69.2
Orkney	0	0											
Shetland	17	340											
Highland	191	90	97.7	83.3	82.4	68.5	87.7	9.7	39.8	143	14.0	23	82.6
Argyll and Clyde (H)	12	35											
Western Isles	13	108											
Tayside	363	91	98.9	67.5	92.0	62.3	92.0	8.3	44.6	190	14.7	42	66.7
Total	**4,655**	**91.7**	**95.3**	**71.8**	**81.2**	**59.7**	**91.1**	**10.7**	**37.9**	**2,531**	**18.5**	**654**	**67.6**
Range Health Board													
Min		0	87	62.6	67.2	50.2	78.5	8.3	23.2		13.9		53.1
LQ		79	92	68.1	79.8	56.9	91.0	8.9	35.5		14.7		59.2
Median		93	98	74.2	81.5	60.4	92.5	10.6	39.3		18.5		68.9
UQ		97	99	78.1	86.4	65.3	95.8	11.5	39.9		19.3		80.0
Max		340	100	83.3	93.3	70.1	97.6	15.1	52.9		26.5		83.6

[3] Post data submission, NHS Lanarkshire identified additional patients who had been seen by a LCNS, and report that the LCNS figure should be 93 per cent

Table 2c
Process, nursing, imaging and clinical measures Guernsey (2011 all) part I

Code	Actual number	% of expected	Discussed at MDT (%)	Histological diagnosis (%)	Patient seen by nurse Specialist (%)	Nurse specialist present at diagnosis (%)	% Having active treatment	% of patients receiving CT before bronchos-copy	% receiving surgery all cases	% receiving radiotherapy
2011 Total	**41**	**114**	**100.0**	**75.6**	**n/a**	**65.9**	**56.1**	**94.7**	**7.3**	**19.5**

Indicator	Definition
Actual number	Number of cases with date first seen in year specified
% of expected	Completeness of data in cohort based on Expected Annual Cases in Table 1a of the National Lung Cancer Audit 2009*
Discussed at MDT (%)	Complete when MDT Discussion Indicator = Y (denominator = all cases)
Histological diagnosis (%)	Complete when Histology is present or Basis of diagnosis equals 5, 6 or 7 (denominator = all cases)
Patient seen by nurse Specialist (%)	Complete when Patient Assessed by a Lung Cancer Nurse Specialist = Y (denominator = all cases)
Nurse specialist present at diagnosis (%)	Complete when Lung Cancer Nurse Specialist Present When Received Diagnosis = Y (denominator = all cases)
% Having active treatment	Complete when date present for Brachytherapy, Anti-cancer drug regimen, Surgery or Teletherapy (denominator = all cases)
% of patients receiving CT before bronchoscopy	Complete when CT Scan Date before or equal to Bronchoscopy Date (denominator = cases with Bronchoscopy Date present)
% receiving surgery all cases	Complete when Surgery Procedure Date is present (denominator = all cases)
% receiving radiotherapy	Complete when either Teletherapy Treatment Course Start Date or Brachytherapy Therapy Treatment Course Start Date is present (denominator = all cases)

* http://www.ic.nhs.uk/webfiles/Services/NCASP/audits%20and%20reports/NHSIC_National_Lung_Cancer_Audit_2010_V1.0.pdf

Table 2c
Process, nursing, imaging and clinical measures Guernsey (2011 all) part II

Code	Actual number	% of expected	Number of NSCLC	% of NSCLC having Surgery	NSCLC Stage IA, IB, IIA or IIB	% of NSCLC Stage IA, IB, IIA or IIB having surgery	PS0-1 NSCLC Stage IA, IB, IIA or IIB	% PS0-1 NSCLC Stage IA, IB, IIA or IIB having FEV1 absolute and % predicted
2011 Total	41	114	33	9.1	6	50.0	5	100.0

Table 2c (continued)
Process, nursing, imaging and clinical measures Guernsey (2011 all) part II

Code	Number of PS0-1 NSCLC Stage IIIB or IV	% PS0-1 Stage IIIB or IV NSCLC having chemotherapy	Number of histologically confirmed NSCLC	% histologically confirmed NSCLC having surgery	Number of pre-treatment NSCLC	% pre-treatment NSCLC histology NOS	Number of patients small cell lung cancer	% small cell receiving chemotherapy
2011 Total	9	55.6	23	13.0	23	13.0	7	100.0

Indicator	Definition
Actual number	Number of cases with date first seen in year specified
% of expected	Completeness of data in cohort based on Expected Annual Cases in Table 1a of the National Lung Cancer Audit 2009
Number of NSCLC	Number of NSCLC cases
% of NSCLC having Surgery	Complete when Surgery Procedure Date is present (denominator = NSCLC cases)
NSCLC Stage IA, IB, IIA or IIB	Number of NSCLC cases with TNM Stage IA, IB, IIA or IIB
% of NSCLC Stage IA, IB, IIA or IIB having surgery	Complete when Surgery Procedure Date is present (denominator = NSCLC cases with TNM Stage IA, IB, IIA or IIB)
PS0-1 NSCLC Stage IA, IB, IIA or IIB	Number of NSCLC cases with Performance Status 0 or 1 and TNM Stage IA, IB, IIA or IIB
% PS0-1 Stage IA, IB, IIA or IIB NSCLC having FEV1 absolute and % predicted	Complete when both FEV1 Percentage and FEV1 Absolute Amount are present (denominator = NSCLC cases with Performance Status 0 or 1 and TNM Stage IA, IB, IIA or IIB)
Number of PS0-1 NSCLC Stage IIIB or IV	Number of NSCLC cases with Performance Status 0 or 1 and TNM Stage IIIB or IV
% PS0-1 Stage IIIB or IV NSCLC having chemotherapy	Complete when Chemotherapy Start Date is present (denominator = NSCLC cases with Performance Status 0 or 1 and TNM Stage IIIB or IV)
Number of histologically confirmed NSCLC	Number of histologically confirmed NSCLC cases
% histologically confirmed NSCLC having surgery	Complete when Surgery Procedure Date is present (denominator = histologically confirmed NSCLC cases)
Number of pre-treatment NSCLC	Number of pre-treatment NSCLC cases
% pre-treatment NSCLC histology NOS	Percentage of pre-treatment NSCLC cases with histology NOS (M8046/3) (denominator = pre-treatment NSCLC cases)
Number of patients small cell lung cancer	Number of SCLC cases
% small cell receiving chemotherapy	Complete when Chemotherapy Start Date is present (denominator = SCLC cases)

Appendices

Appendix 1: Trust and Health Board identification for England and Wales

N01	Lancashire and South Cumbria
RTX	University Hospitals of Morecambe Bay NHS Foundation Trust
RXL	Blackpool Teaching Hospitals NHS Foundation Trust
RXN	Lancashire Teaching Hospitals NHS Foundation Trust
RXR	East Lancashire Hospitals NHS Trust

N02	Greater Manchester and Cheshire
RBT	Mid Cheshire Hospitals NHS Foundation Trust
RBV	The Christie NHS Foundation Trust
RJN	East Cheshire NHS Trust
RM2	University Hospital of South Manchester NHS Foundation Trust
RM3	Salford Royal NHS Foundation Trust
RM4	Trafford Healthcare NHS Trust
RMC	Bolton NHS Foundation Trust
RMP	Tameside Hospital NHS Foundation Trust
RRF	Wrightington, Wigan and Leigh NHS Foundation Trust
RW3	Central Manchester University Hospitals NHS Foundation Trust
RW6	Pennine Acute Hospitals NHS Trust
RWJ	Stockport NHS Foundation Trust

N03	Merseyside and Cheshire
LLCU*	Liverpool Lung Cancer Unit
RBL	Wirral University Teaching Hospital NHS Foundation Trust
RBN	St Helens and Knowsley Hospitals NHS Trust
REM	Aintree University Hospitals NHS Foundation Trust
REN	The Clatterbridge Cancer Centre NHS Foundation Trust
RJR	Countess of Chester Hospital NHS Foundation Trust
RVY	Southport and Ormskirk Hospital NHS Trust
RWW	Warrington and Halton Hospitals NHS Foundation Trust

N06	Yorkshire Cancer Network
RAE	Bradford Teaching Hospitals NHS Foundation Trust
RCB	York Teaching Hospital NHS Foundation Trust
RCD	Harrogate and District NHS Foundation Trust
RCF	Airedale NHS Foundation 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
RCC	Scarborough and North East Yorkshire Health care NHS Trust
RJL	Northern Lincolnshire and Goole Hospitals NHS Foundation Trust
RWA	Hull and East Yorkshire Hospitals NHS Trust

N08	North Trent
RFF	Barnsley Hospital NHS Foundation Trust
RFR	The Rotherham 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

N11	Pan Birmingham
RBK	Walsall Healthcare NHS Trust
RR1	Heart of England NHS Foundation Trust
RRK	University Hospitals Birmingham NHS Foundation Trust
RXK	Sandwell and West Birmingham Hospitals NHS Trust

N12	Arden
RJC	South Warwickshire NHS Foundation Trust
RKB	University Hospitals Coventry and Warwickshire NHS Trust
RLT	George Eliot Hospital NHS Trust
RWP00	Worcestershire Acute Hospitals NHS Trust

N20	Mount Vernon Cancer Network
RC9	Luton and Dunstable Hospital NHS Foundation Trust
RWG	West Hertfordshire Hospitals NHS Trust
RWH	East and North Hertfordshire NHS Trust

N21	West London Cancer Network
RAS	The Hillingdon Hospitals NHS Foundation Trust
RC3	Ealing Hospital NHS Trust
RFW	West Middlesex University Hospital NHS Trust
RQM	Chelsea and Westminster Hospital NHS Foundation Trust
RT3	Royal Brompton and Harefield NHS Foundation Trust
RV8	North West London Hospitals NHS Trust
RYJ	Imperial College Healthcare NHS Trust

N22	North London
RAL	Royal Free London NHS foundation Trust
RAP	North Middlesex University Hospital NHS Trust
RKE	The Whittington Hospital NHS Trust
RQW	The 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 University 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
RJ1	Guy's and St Thomas' NHS Foundation Trust
RJ2	Lewisham Healthcare NHS Trust
RJZ	King's College Hospital NHS Foundation Trust
RYQ	South London Healthcare NHS Trust

N25	South West London
RAX	Kingston Hospital NHS Trust
RJ6	Croydon Health Services NHS Trust
RJ7	St George's Healthcare NHS Trust
RPY	The Royal Marsden NHS Foundation Trust
RVR	Epsom and St Helier University Hospitals NHS Trust

N26	Peninsula
RA9	South Devon Healthcare NHS Foundation Trust
RBZ	Northern Devon Healthcare 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 Foundation Trust
RDZ	The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust

N28	Avon Somerset and Wiltshire
RA3	Weston Area Health NHS Trust
RA4	Yeovil District Hospital NHS Foundation Trust
RA7	University Hospitals Bristol NHS Foundation Trust
RBA	Taunton and Somerset NHS Foundation Trust
RD1	Royal United Hospital Bath NHS Trust
RVJ	North Bristol NHS Trust

N29	3 Counties Cancer Network
RLQ	Wye Valley NHS Trust
RTE	Gloucestershire Hospitals NHS Foundation Trust
RWP50	Worcestershire Acute Hospitals NHS Trust

N30	Thames Valley
RD7	Heatherwood and Wexham Park Hospitals NHS Foundation Trust
RD8	Milton Keynes Hospital NHS Foundation Trust
RHW	Royal Berkshire NHS Foundation Trust
RN3	Great Western Hospitals NHS Foundation Trust
RTH	Oxford University Hospitals NHS Trust
RXQ	Buckinghamshire Healthcare NHS Trust

N31	Central South Coast
RHM	University Hospital Southampton NHS Trust
RHU	Portsmouth Hospitals NHS Trust
RN1	Winchester and Eastleigh Healthcare NHS Trust
RN5	Hampshire Hospitals NHS Foundation Trust
RNZ	Salisbury NHS Foundation Trust
RYR16	Western Sussex Hospitals NHS Trust
RR2/5QT	Isle of Wight NHS PCT

N32	Surrey, West Sussex and Hampshire
RA2	Royal Surrey County Hospital NHS Foundation Trust
RDU	Frimley Park Hospital NHS Foundation Trust
RTK	Ashford and St Peter's Hospitals NHS Foundation Trust
RTP	Surrey and Sussex Healthcare NHS Trust

N33	Sussex
RXH	Brighton and Sussex University Hospitals NHS Trust
RXC	East Sussex Healthcare NHS Trust
RYR18	Western Sussex Hospitals NHS Trust

N34	Kent and Medway
RN7	Dartford and Gravesham NHS Trust
RPA	Medway NHS Foundation Trust
RVV	East Kent Hospitals University NHS Foundation Trust
RWF	Maidstone and Tunbridge Wells NHS Trust

N35	Greater Midlands
RJD	Mid Staffordshire NHS Foundation Trust
RJE	University Hospital of North Staffordshire NHS Trust
RL4	The Royal Wolverhampton Hospitals NHS Trust
RNA	The Dudley Group NHS Foundation Trust
RWP31	Worcestershire Acute Hospitals NHS Trust
RXW	Shrewsbury and Telford Hospital NHS Trust

N36	North of England Cancer Network
RE9	South Tyneside NHS Foundation Trust
RLN	City Hospitals Sunderland NHS Foundation Trust
RNL	North Cumbria University Hospitals NHS Trust
RR7	Gateshead Health NHS Foundation Trust
RTD	The Newcastle Upon Tyne Hospitals NHS Foundation Trust
RTF	Northumbria Healthcare NHS Foundation Trust
RTR	South Tees Hospitals NHS Foundation Trust
RVW	North Tees and Hartlepool NHS Foundation Trust
RXP	County Durham and Darlington NHS Foundation Trust
N37	**Anglia Cancer Network**
RC1	Bedford Hospital NHS Trust
RCX	The Queen Elizabeth Hospital King's Lynn NHS Foundation Trust
RGM	Papworth Hospital NHS Foundation Trust
RGN	Peterborough and Stamford Hospitals NHS Foundation Trust
RGP	James Paget University Hospitals 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 Hospitals NHS Foundation Trust
RQQ	Hinchingbrooke Health Care NHS Trust

N38	Essex Cancer Network
RAJ	Southend University Hospital NHS Foundation Trust
RDD	Basildon and Thurrock University Hospitals NHS Foundation Trust
RDE	Colchester Hospital University NHS Foundation Trust
RQ8	Mid Essex Hospital Services NHS Trust

N39	East Midland Cancer Network
RK5	Sherwood Forest Hospitals NHS Foundation Trust
RWD	United Lincolnshire Hospitals NHS Trust
RX1	Nottingham University Hospitals NHS Trust
RJF	Burton Hospitals NHS Foundation Trust
RTG	Derby Hospitals NHS Foundation Trust
RNQ	Kettering General Hospital NHS Foundation Trust
RNS	Northampton General Hospital NHS Trust
RWE	University Hospitals of Leicester NHS Trust

	Welsh Cancer Network
7A2AJ	Bronglais General Hospital
7A1A1	Ysbyty Glan Clwyd
7A4C1	University Hospital Llandough
7A3C7	Morriston Hospital
7A3CJ	Neath Port Talbot Hospital
7A6AM	Nevill Hall Hospital
7A5B3	Prince Charles Hospital
7A2AL	Prince Philip Hospital Site
7A3B7	Princess Of Wales Hospital
7A5B1	The Royal Glamorgan Hospital
7A6AR	Royal Gwent Hospital
7A3C4	Singleton Hospital
7A4BV	University Hospital Of Wales
7A2AG	West Wales General Hospital
7A2BL	Withybush General Hospital
7A1AU	Ysbyty Gwynedd
7A1A4	Ysbyty Maelor Wrexham

* LLCU is a partnership between Liverpool Heart and Chest NHS Foundation Trust and Liverpool and Broad Green University Hospital NHS Trust for management of lung cancer.

Appendix 2: Local Action Plan

Recommendation	Achieved Y/N/P/NK	Planned Action	Suggested Actions	Suggested Responsibility	Date plan actioned	Date issue resolved
Data Completeness and Quality						
The organisation participates in this national audit			Contact local Cancer Network for audit Advice. Contact CASU Lung Cancer Audit Project Manager (roz.stanley@ic.nhs.uk) Visit http://www.ic.nhs.uk/lung 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 quality assure data prior to submission. Ensure 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		
Key data fields including stage and performance status should be completed in at least 85 per cent and in at least 95 per cent with respect to the MDT field			Refer to the documentation on the National Lung Cancer Audit Website and ensure that key fields are completed for all relevant cases. MDT chair assists co-ordinator by 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		
FEV1 absolute and FEV1% predicted for stage I and II NSCLC patients with PS 0 or 1 should be recorded in at least 85 per cent			Record data in real time at MDT where possible; foster links with physiology departments to obtain data on relevant patients; quality assure data prior to submission.			
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 should be at least 75 per cent To be reviewed in light of case mix adjusted odds ratio			This result should be interpreted in conjunction with the case-mix adjusted odds ratio, which might better reflect whether the organisation is an outlier. Ensure all histological diagnoses are submitted to the audit, including those confirmed only by resection. Liaise with pathology department to identify cases. Review clinical diagnoses and diagnostics protocols if HCR is below optimum	MDT chair, Lung cancer clinical lead		
The proportion of patients receiving CT prior to bronchoscopy should exceed 95 per cent			Ensure that all CT / bronchoscopy data is submitted to the audit. Review patient pathway and individual clinician practices.	MDT chair, Lung cancer clinical lead, Radiologists		

Recommendation	Achieved Y/N/P/NK	Planned Action	Suggested Actions	Suggested Responsibility	Date plan actioned	Date issue resolves
Process of Care (continued)						
Over 80 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 80 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		
Co-morbidity that prevents a patient receiving treatment of choice should be recorded for all relevant cases			Ensure that all relevant co-morbidity data is discussed at MDT, and ensure that cases where co-morbidity prevents treatment of choice are submitted to the audit. It is important that the collected data adheres to the definitions in the LUCADA data manual.	MDT chair, Lung cancer clinical lead, specialist nurse		
PET Scan dates should be recorded for all relevant cases			Ensure that all PET data is captured at MDT submitted to the audit	MDT chair, Lung cancer clinical lead, specialist nurse		
NSCLC NOS rate of more than 20 per cent should be reviewed to ensure that best practice histological diagnostic techniques including immunohistochemistry are being followed, in order that patients receive appropriate chemotherapy regimens.			Ensure that pathologist is an integral part of the lung MDT and understands the importance of tumour subtyping. Ensure that a locally-approved panel of immunohistochemical markers are being used for subtyping and that locally-approved appropriate mutation-testing is being applied.	MDT chair, pathologist, lung cancer clinical lead, specialist nurse, MDT co-ordinator		
Clinical Outcomes						
Surgical resection rates below 14 per cent for all patients excluding small cell lung cancer or mesothelioma must be reviewed To be reviewed in light of case mix adjusted odds ratio			This result should be interpreted in conjunction with the case-mix adjusted odds ratio, which might better reflect whether the organisation is an outlier. 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. Consider offering a second opinion in borderline cases.	MDT chair, Lung cancer clinical lead, thoracic surgeons		
Surgical resection rates for patients for all patients excluding small cell lung cancer or mesothelioma with stage I or II disease below 52 per cent must be reviewed			This result should be interpreted in conjunction with the case-mix adjusted odds ratio, which might better reflect whether the organisation is an outlier. 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. Consider offering a second opinion in borderline cases.	MDT chair, Lung cancer clinical lead, thoracic surgeons		
Active anti-cancer treatment rates below 60 per cent should be reviewed To be reviewed in light of case mix adjusted odds ratio			This result should be interpreted in conjunction with the case-mix adjusted odds ratio, which might better reflect whether the organisation is an outlier. Ensure that all treatments are submitted to the audit. Review treatment policies for small cell lung cancer patients. Review pathway from diagnosis to treatment to ensure it is as expeditious as possible.	MDT chair, Lung cancer clinical lead. MDT members		

Recommendation	Achieved Y/N/P/NK	Planned Action	Suggested Actions	Suggested Responsibility	Date plan actioned	Date issue resolves
Clinical Outcomes (continued)						
Chemotherapy rates for small cell lung cancer below 65 per cent should be reviewed To be reviewed in light of case mix adjusted odds ratio			This result should be interpreted in conjunction with the case-mix adjusted odds ratio, which might better reflect whether the organisation is an outlier. 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		
Chemotherapy rates for patients of PS 0-1 with advanced stage NSCLC IIIB/IV below 55 per cent should be reviewed To be reviewed in light of case mix adjusted odds ratio			This result should be interpreted in conjunction with the case-mix adjusted odds ratio, which might better reflect whether the organisation is an outlier. Ensure that all treatments are submitted to the audit. Review treatment policies for non small cell lung cancer patients with advanced stage	MDT chair, Lung cancer clinical lead. MDT members		
Low median survival, as demonstrated by a case-mix adjusted hazard ratio significantly below the baseline, should be investigated.			Ensure that all relevant data has been submitted to the audit, Identify areas where audit standards have not been met or where CMA demonstrates the trust to be an outlier and review	MDT chair, Lung cancer clinical lead. MDT members		

Appendix 3: Glossary

Adenocarcinoma
A type of cancer arising from glandular tissue

Anti-cancer treatment (active treatment)
A term used to define treatments for lung cancer that have an effect on the tumour itself, not just on symptoms. In lung cancer patients these are most often surgery, chemotherapy, radiotherapy or a combination

Benchmarking
A method of comparing processes and outcomes against standards

Biopsy
Removal and examination of tissue, usually microscopic, to establish a precise **(histological)** diagnosis

Bronchoscopy
A procedure for examining the airways by inserting an instrument (bronchoscope) into the trachea and lungs, normally via the nose. Enables a **bronchial biopsy** to be taken

Bronchial biopsy
Removal of a small piece of lung tissue during a bronchoscopy in order to make a **histological** diagnosis

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

Cancer Registry/ies
Organisations who systematically collect high level data about all cases of cancer in the UK. Cancer registries are unique in being able to provide historical trend and population-based data to monitor changes in cancer incidence or survival over long periods of time

Case ascertainment
The number of cases of lung cancer actually recorded by an organisation as a proportion of the number expected. Gives assurance that organisations are submitting data on all relevant cases

Case-mix
Refers to the different characteristics of patients seenin different hospitals (for example age, sex, disease stage, social deprivation and general health). Knowledge of differing case-mix enables a more accurate method of comparing quality of care **(case-mix adjustment)**

Case-mix adjustment
A statistical method of comparing quality of care between organisations that takes into account important and measurable patient characteristics

Chemotherapy
Medicines used in the treatment of cancer that can be given by mouth or by injection

Common denominator (in a non-mathematical context)
Factors that link objects (e.g. hospitals) together

Co-morbidity
Medical conditions or disease processes that are additional to the disease under investigation (in this case lung cancer). In the NLCA this is recorded when a co-morbidity restricts the type of treatment that can be given for lung cancer

CT scan
The abbreviated term for computed or computerised axial tomography. These are tests that produces detailed images of the body using X-rays images that are enhanced by a computer

Cytological
Refers to a pathological examination of cells outside the architecture of the actual tissue or organ they are taken from (as opposed to **histological**)

Data completeness
A measure of the standard of data submitted to the audit, both in terms of the numbers of cases submitted as well as the data on each individual case

Diagnosis
Confirming the presence of the disease

Health Board
An organisation providing healthcare services in Scotland and Wales. A health board may manage one or several hospitals within a region

Histological
Refers to a pathological examination of cells within the architecture of a tissue or organ rather than just the cells themselves (as opposed to **cytological**)

Hospital Trust
An organisation providing secondary healthcare services in England. A hospital trust may be made up of one or several hospitals within a region

Improving Outcomes in Lung Cancer project (ILCOP)
A project sponsored by the Health Foundation and managed by the Royal College of Physicians to look at ways to improve care offered to people diagnosed with lung cancer

Interquartile range
The range of a particular variable excluding the highest quarter and lowest quarter of the values recorded. Can be useful to give a sense of the spread of a set of data without being affected by very high or very low results

Lung Cancer Nurse Specialist
A nurse specialising in care of people diagnosed with lung cancer or mesothelioma

Lobectomy
An operation to remove a whole section (lobe) of lung tissue – see also wedge resection. There are three lobes in the right lung and two lobes in the left lung

Lead Clinician
Healthcare professional in a hospital taking overall responsibility for the services provided for a specific disease area

Lymph nodes
Small, oval-shaped organs of the immune system, whose main job is to fight infection. Distributed widely throughout the body (including the neck, armpit, abdomen and thorax) they are a common place for cancers to spread

MDT
Multi-disciplinary team, a group of healthcare professionals working in a co-ordinated manner for patient care

Mediastinum/Mediastinal
Refers to an area within the center of the thorax (chest) between the two lungs, where the heart, blood vessels and lymph nodes are found

Mediastinotomy/oscopy
An operation that enables visualization and biopsy of the mediastinal lymph nodes. These procedures are often used to determine whether a cancer has spread to the lymph nodes, which affects the stage of the disease

Mesothelioma
Cancer of the lining of the lung caused by exposure to asbestos

Metastasis
Cancer that has spread from the place where it was formed to grow in another part of the body

Network
See 'Cancer Network'

NLCA
National Lung Cancer Audit

Nodule (lung nodule)
A small abnormality on the lung often found on chest X-rays or CT scans. Most lung nodules are non-cancerous (benign). However, some lung nodules may be cancerous - either early-stage lung cancer or metastatic cancer that has spread to the lungs from another site in the body

Non-small cell carcinoma
A group of types of lung cancer sharing certain characteristics, that makes up 85-90 per cent of all lung cancers. Includes squamous carcinoma and adenocarcinoma. See also **small cell carcinoma**

NOS
Not otherwise specified. In the case of **NSCLC** histology, this implies that the histological diagnosis has not been sub-classified to a particular cell type e.g. squamous carcinoma, adenocarcinoma etc

NSCLC
Non-small cell lung cancer

Operability
In the consideration of surgical treatment of a lung cancer, refers to the patients' ability to cope with both the operation and the subsequent reduction of lung volume and function. **See also resectability**

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

PET Scan
An abbreviation for positron emission tomography. This is a computerised diagnostic technique that uses radioactive substances to examine structures of the body. Nowadays usually combined with a **CT scan** (PET-CT scan). It produces a three-dimensional image that reflects the metabolic and chemical activity of the body

Radiologist
A doctor specialising in the use of imaging technologies, including radiation, to diagnose and treat disease

Radiotherapy
The treatment of cancer using radiation, which is most often delivered by X-ray beams (external beam radiotherapy) but can be given internally (brachytherapy)

Resectability
In the consideration of surgical treatment of a lung cancer, refers to the ability of the surgeon to remove the tumour taking into account its location and stage. See also **operability**

RCP
Abbreviation for The Royal College of Physicians, the professional body of doctors practicing general medicine and its subspecialties

SCLC
Small cell carcinoma

Secondary care
Care provided by a hospital as opposed to that provided in the community by a general practitioner and allied staff (primary care)

Small cell lung cancer
A type of lung cancer making up around 10-15 per cent of all lung cancers. See also **non-small cell carcinoma**

Squamous Carcinoma
A type of cancer arising from cells which line body cavities

Staging/stage
The anatomical extent of a cancer

Surgical resection
An operation to remove abnormal tissues or organs

Tertiary Centres
Hospitals that specialise in diagnosis and treatment of specific conditions, often handling very complex cases. Other hospitals may refer patients to these centres for specialist treatment

Thoracic surgeon
Specialist surgeon who operates on the chest and lungs

Wedge resection
An operation to remove a section of lung tissue smaller than a lobe – see also **lobectomy**

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