National Lung Cancer Audit toolkit

Improving lung cancer care

Staff working in lung cancer teams want to deliver the best care possible for their patients, but the National Lung Cancer Audit (NLCA) analysis shows marked variation in standards of care across different organisations, indicating that this may not always be the case. In the 2016 annual report, we make 13 recommendations to improve care, and here we provide a toolkit to help organisations achieve them.

Data quality
Pathology
Specialist nursing

Treatment
Surgery
Chemotherapy

The NLCA team are always happy to discuss your results, and to offer advice on data collection and service improvement. We may be able to facilitate peer-to-peer assistance in some cases. Visit www.rcplondon.ac.uk/nlca

The full NCLA annual report is available at www.rcplondon.ac.uk/nlca2016
01 Data quality

Appoint a clinical data lead to take responsibility for understanding the dataset and the data collection process.

Raise the profile of performance data across the wider MDT at governance meetings or by sharing data.

Use CancerStats website to review data quality in real time.

Integrate data collection into MDT meetings.

Integrate clinical validation into the Cancer Outcomes and Services Dataset (COSD) submission process.

Check that key fields are completed prior to COSD submission.

Work with National Cancer Registration and Analysis Service (NCRAS) data improvement leads to understand cases missed by COSD.

Improve the quality of data submitted to the NLCA.

PS and stage should be recorded in at least 90% of cases.

Complete the FEV1 and FEV1% fields in relevant patients.

Ensure that the COSD ‘place first seen’ is completed in all submissions.
At least 80% of cases should be confirmed using pathological methods.

Non-small-cell lung cancer (NSCLC) not otherwise specified (NOS) rates of more than 15% should be reviewed.

02 Pathology

This result should be interpreted in conjunction with the casemix-adjusted odds ratio, which might better reflect whether the organisation is an outlier.

Ensure that all pathological diagnoses are submitted to the audit, including those confirmed only by resection. Liaise with the pathology department to identify cases.

Review clinical diagnoses and diagnostics protocols if pathological confirmation rate is below optimum.

Ensure that the pathologist is an integral part of the lung MDT and understands the importance of tumour subtyping.

Ensure that RCPath guidelines are being followed for the reporting of lung cancer samples, including the use of a limited panel of immunohistochemical markers for subtyping where necessary.
03 Nursing

Ensure that the LCNS establishment is appropriate to the lung cancer workload.

Ensure that all nursing posts are staffed.

Review the activities of the nursing team and reduce administrative burden.

Involve nurses in the validation of data submissions, including checking that all activity is captured prior to submission.

Ensure that clear pathways exist for referral for LCNS input (especially important for inpatients).
MDTs with low active anticancer treatment rates and low radical treatment rates should perform detailed case-note review to determine the reasons why patients with good performance status did not receive the most effective treatment option.

Ensure that data on all treatments are submitted to the audit.

Review treatment policies for small-cell lung cancer patients.

Review pathway from diagnosis to treatment to ensure that it is as expeditious as possible.

Ensure that good pathways exist for access to modern radiotherapy treatments.

Take part in the planned spotlight audit of curative treatment in 2017.
05 Surgery

Ensure that all surgical resections are submitted to the audit.

If data are complete, then review treatment policies for early-stage lung cancer in patients with good performance status.

Ensure that the thoracic surgeon attends MDT meetings.

Provide a mechanism for access to a second surgical opinion.

Take part in the planned spotlight audit of curative treatment in 2017.

MDTs with low resection rates for NSCLC should perform detailed case-note review to determine why each resectable patient did not receive an operation, including whether a second opinion was offered to borderline-fit patients.
MDTs with low chemotherapy rates for NSCLC or SCLC should perform detailed case-note review to determine the reasons why each patient did not receive systemic anticancer treatment.

Patients with small-cell lung cancer should receive chemotherapy within 2 weeks of pathological diagnosis.

06 Chemotherapy

Ensure that data on all treatments are submitted to the audit.

Review treatment policies for patients.

Submit data on patients who do not have chemotherapy to ‘significant event audit’ to explore themes.

Review pathway from diagnosis to treatment to ensure that patients with SCLC can access treatment within 2 weeks.

Review information/messages given to patients and carers on the benefits of chemotherapy.

Ensure that tumours are subjected to appropriate molecular testing to ensure that all treatment options can be considered.
Recommendations

We make a number of specific recommendations for the next round of audit:

### DATA COMPLETENESS

<table>
<thead>
<tr>
<th>Case ascertainment</th>
<th>95%</th>
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<tbody>
<tr>
<td>Valid performance status (PS) and stage</td>
<td>≥90%</td>
</tr>
<tr>
<td>Patients with stage I–II and PS 0–1, completeness for FEV1 and FEV1%</td>
<td>&gt;75%</td>
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### PROCESS

<table>
<thead>
<tr>
<th>Proportion of patients seen by lung CNS</th>
<th>≥90%</th>
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</thead>
<tbody>
<tr>
<td>Proportion of patients where lung CNS present for diagnosis</td>
<td>≥80%</td>
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<tr>
<td>Proportion of patients with pathological confirmation of lung cancer</td>
<td>≥80%</td>
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<tr>
<td>Proportion of patients where the pathology code is NSCLC NOS</td>
<td>&lt;15%</td>
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<tr>
<td>Proportion of patients receiving PET-CT scan before surgery or radical radiotherapy</td>
<td>≥90%</td>
</tr>
<tr>
<td>Proportion of patients receiving chemotherapy for SCLC starting treatment within 2 weeks of pathological diagnosis</td>
<td>≥80%</td>
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### TREATMENT AND OUTCOME

The casemix-adjusted odds ratio will be used to determine outlier status, but organisations can use the 2015 mean results (shown below) as a guide to performance

<table>
<thead>
<tr>
<th>2015 mean</th>
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<tbody>
<tr>
<td>Active anticancer treatment rates for patients</td>
</tr>
<tr>
<td>Surgical resection rates for NSCLC patients</td>
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<tr>
<td>Radical treatment rates for patients with stage I/II NSCLC</td>
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<tr>
<td>Chemotherapy rates for SCLC</td>
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<tr>
<td>Systemic anticancer treatment rates for PS (0–1) stage IIIB/IV NSCLC</td>
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<tr>
<td>1-year survival</td>
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In 2017, the NLCA will be building on QI initiatives and support for lung cancer teams. An online portal is under development, which will enable the collection of additional data items to better understand and address variation in surgical treatment and curative treatment rates across England. Alongside this, the NLCA team will be delivering regional workshops on quality improvement in England and Wales and will be inviting teams to attend and develop ongoing QI initiatives.

**National Lung Cancer Audit**

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