Notes on Divergence in the Lung Cancer Surgery Consultant Outcomes Publication (LCCOP) 2018 (2016)

(1) Summary

This document explains how outlier units at “alert” and “alarm” levels in the LCCOP will be notified, summarises the Society’s advice to Units, Trusts and Surgeons on how to respond to such alerts, and highlights the sources of support within SCTS and elsewhere available to individuals and organisations involved.

(2) Background

The [Lung Cancer Surgery Consultant Outcomes Publication](http://interactive.surgicaloutcomesdata.co.uk/_userfiles/upd429/pages/files/LCCOP_MainReport.pdf) (LCCOP) is an HQIP commissioned national audit of outcomes following the surgical resection of lung cancer in the English NHS. It is produced by the National Lung Cancer Audit Team at the Royal College of Physicians of London, in partnership with the SCTS.

LCCOP reports several outcomes at unit level. The three survival outcomes are analysed for outliers. These are unit level survival at 30, 90 and 365 days after resection of primary lung cancer. Survival outcomes are adjusted for demographic variables available in the Cancer Outcomes and Services Dataset (COSD) and Hospital Episode Statistics (HES) databases. This three-outcome design means that outlying (both positive and negative) occurs more frequently than would be expected with a single-outcome design.

Median length of stay and readmission rates are also reported, but are not analysed for outliers. Similarly, individual surgeon activity volumes are reported, but no minimum, maximum or target activity levels are set and no outlier analysis is performed.

HQIP sets out expectations for national clinical audits within the Clinical Outcomes Publication (COP) project in its Clinical Outcomes Publication Technical Manual(1) The LCCOP outlier management and support process set out here has been developed with reference to this manual.

Identification of outliers is undertaken by the NLCA and their analytical team at the University of Nottingham. Notification of and liaison with outliers is performed by the SCTS on behalf of the NLCA, as the specialty association for cardiothoracic surgery and partners in the LCCOP project.

This document contains information on how the SCTS, with the NLCA, will inform any units identified as outlying in any of the three survival measures reported. It contains the Society’s advice on how best Trusts, Units, Medical Directors, MDT Clinical Leads and individual clinicians should respond to an “alert” or “alarm” notification, and outlines the support available from SCTS and other bodies to individuals involved in this process.

(3) Units that do not validate their data within LCCOP

The NLCA team collects data from the Cancer Outcomes and Services Dataset (COSD, previously known as LUCADA) on lung cancer surgical activity in English NHS hospitals. This data is sent to local SCTS audit leads for case validation. This process has is important in improving the quality of the data reported in LCCOP, and both the NLCA and the SCTS encourage all units to validate their data. Updating the SCTS thoracic audit lead with the current email contacts for your unit SCTS audit lead, data manager and Clinical Lead or Clinical Director helps ensure that your data is sent to the correct personnel.

Units which do not validate this data may have this fact recorded on the SCTS.org website, on the NHS Choices website and in published audit reports. The NLCA team or the Society may contact the Medical Directors of non-validating units to highlight this fact.

(4) Notification procedure for outlying units

4.1 Definitions and procedures used

The SCTS has championed robust surgical audit in the UK and Ireland for many years. The Society aims to use its experience to support outlying Trusts and surgeons in investigating the findings thoroughly, and to improve services and protect patients where appropriate, while supporting surgical teams involved in the process.

The survival outcome measure used is the adjusted odds ratio (OR) for survival, compared to the national data for that year. Further details on the methodology used is available in previous LCCOP main reports and in the LCCOP methodology reports(2).

When a unit is identified as an outlier at either “alert” (adjusted odds ratio outside 95% confidence intervals for the national mean) or “alarm” (adjusted odds ratio outside 99.8% confidence intervals for the national mean) in one of the three outcomes reported (30 day, 90 day and one year survival), a letter will be sent to the Clinical Lead of that unit and to the SCTS Audit Lead\*. This letter will usually be jointly authored by the NLCA and the SCTS. It will identify which outcome or outcomes are at alert or alarm levels, and which are within the expected range.

**Any alert or alarm notification letter will be copied to the Medical Director of the Trust involved.**

At all times, the Board of the Trust, through it’s Chief Executive and Medical Director, retain responsibility for patient safety and the quality of care within their Trust.

Units can be identified as both negative outliers, with a lower than expected survival, or as positive or “good practice” outliers, where survival is better than expected. The notification process for positive and negative outliers is identical, but positive outlier units are not obliged to perform any internal review.

(4.2) Contents of the Letter and Advice to Unit Leads / Trust Medical Directors

The SCTS recognises that Trust responses to Alert or Alarm letters within cardiac surgery have been at times inconsistent, and Trusts have lacked a mechanism to respond robust and fairly. Future Alert/Alarm letters will therefore include recommendations for Unit Leads, Trust and individual surgeons on how best to respond.

In its advice to Trusts, the Society has established five principles;

* The mechanisms for support and explanation are separate
* Outlying is a cause for looking at the data in more detail. It is not sufficient reason in itself for restricting a surgeon or surgeons practices unless there are clear concerns about the safety of patients
* The mechanism is reasonable and proportionate
* Explanation proceeds in four stages
	+ Analysis of the data for accuracy
	+ Analysis of the case-mix being treated in the unit.
	+ Analysis of institutional factors that may contribute to the clinical outcomes seen
	+ Analysis of individual clinician’s performance

(5) Alert and Alarm Letters Related to 30, 90 and 365 day survival in LCCOP: suggested actions

(5.1) At alert or alarm levels, units should take the following actions;

1. Inform all consultant surgeons in the unit of the alert/alarm, and involve them in the local review that follows.
2. An internal review Initially, units should locally review their data, to identify any inaccuracies. Units and Trusts must satisfy themselves that local arrangements for data collection and submission are both robust and adequately resourced. This is particularly important if data inaccuracy is identified as the cause of outlying. Units should bear in mind that some of the data used or adjustment in LCCOP is derived from a Trust’s Hospital Episode Statistics (HES) data, and assessing the accuracy of this data may be part of a Trust’s internal review.
3. If concerns remain, an internal review of the unit’s practice should take place. This should include an assessment of caseload, working practices and resources within the unit. Unit and individual clinical practice should take account of relevant national guidance (particularly NICE guidance and the BTS/SCTS guidance). Evidence that national guidance has been considered should be part of the review.
4. Internal review should analyse performance and outcome at both unit and individual clinician level, using recognised risk adjustment models as specified above.
5. Other data sources should be used to gain an assessment of unit performance. These may include, amongst others, reports from the National Cancer Peer Review Programme (at <http://www.mycancertreatment.nhs.uk>), but also internal audit and evidence from consultant appraisal, multisource feedback and revalidation.
6. At the end of the internal review process, a recovery plan should be agreed by the Unit and copies circulated to stakeholders. The National Cancer Peer Review team should be informed, and the recovery plan included as part of the Trust’s submission at its next Lung Cancer Peer Review visit.
7. Based on previous experience, SCTS advises units at alert or alarm levels to make contact with their Trust’s communications department early, to provide support in case of media interest.
8. At all times during the process, the Trust concerned remains responsible for the safety of the services it provides. Individual clinicians have a professional responsibility to ensure the safety of their patients, following the principles outlined in [Good Medical Practice](http://www.gmc-uk.org/guidance/good_medical_practice.asp).

(5.2) At alert or alarm levels, individual surgeons should take the following actions;

1. Work with their Trust to complete an effective internal review as outlined above (points 2-3).
2. Record the fact of their units’ alert or alarm in their next appraisal, together with a copy of the agreed recovery plan (point 7 section 4.1 above), with a personal reflection.
3. Cooperate with Trusts to implement the agreed recovery plan after internal review.

(5.3) Alarm Letters: additional points

When an alarm letter is issued, it will include a strong recommendation to the Unit to engage the services of the Invited Review Mechanism of the Royal College of Surgeons of England. In alert letters, the use of this service will be suggested to Trusts. Further sources of support from the SCTS and other bodies are detailed below.

(5.4) Resection Rates

Resection rates for individual Trusts which host lung cancer MDTs are calculated and reported by the main NLCA report. This data is replicated in the LCCOP report to provide background to the surgical outcomes being reported. The identification and management of MDT-hosting Trusts who are identified as outliers is undertaken by the NLCA team directly with the Trusts involved, and is not part of the LCCOP project. Although the SCTS believes that resection rates are an important part of surgical quality, outlier analysis of resection rates is not performed for surgical units.

(5.5) Publication of Unit Results

The results of the LCCOP audit are published in an annual report, available for download on both the Royal College of Physicians NLCA website and SCTS.org, and available in searchable form on both SCTS.org and NHS Choices.

Units at alarm level are identified as such in the annual report and on SCTS.org and NHS Choices. Alert level outliers are not identified specifically in the report or online. Units have “right of reply”, and are allowed to submit a short narrative responding to their status for publication alongside their results. This may include the findings of any internal investigation, or details of any mitigating actions taken.

(6) Support for Surgeons and Units Receiving Alert or Alarm Notifications

The SCTS is keen to highlight the support available for individual surgeons and units reported as outliers within the LCCOP project. In LCCOP, where outlier assessment takes place at unit level, safe and competent clinicians will sometimes be involved in this process. It is vital that the actions of the SCTS, NLCA, Trusts, Medical Directors and others support these clinicians during a stressful process.

The SCTS offers a mentoring and support service to any consultant surgeon involved in an alert or alarm review within LCCOP, and encourages members to utilise this facility.

Individual members can request support from the Society by contacting the President or Honorary Secretary directly. The process is outlined below.

* The member will be contacted by the President of SCTS or a nominated deputy
* This contact will take the form of a phone call and letter
* This initial contact will:
	+ Explain the nature of the process
	+ Offer a choice of senior officers of SCTS to act as a friend
* The friend will:
	+ Offer personal support throughout the process
	+ Provide advice about other sources of support
	+ If necessary provide advice on the gathering of other sources of evidence to support good practice

In addition to support from the Society, other possible sources of support are outlined in table 1.

Table 1: support available to individual consultants involved in LCCOP outlier reviews

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| --- | --- |
| Personal Support through SCTS | ConfidentialListeningAdvice confined to area of expertise  |
| Other sources of support | IRMRSPABMADefence organisationNCASOccupational Health DepartmentGeneral Practitioner |

\* The terminology “alert” and “alarm” has been applied by HQIP across surgical audits within the COP.

References

1. <https://www.hqip.org.uk/resources/clinical-outcomes-publication-technical-manual/>
2. https://scts.org/lccop/