Society for Cardiothoracic Surgery
in Great Britain and Ireland

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

(1) Summary

The Lung Cancer Surgery Consultant Outcomes Publication (LCCOP) publishes data on resection rates and survival after lung resection for primary lung cancer in England. The LCCOP defines units 2 standard deviations from the mean as at "alert" level, and units three standard deviations from the mean as at "alarm" level.

This document explains how outlier units at "alert" and "alarm" levels in the LCCOP will be notified, and summarises the Society's advice to Units, Trusts and Surgeons on how to respond to such alerts. It highlights the sources of support within SCTS and other organisations to those involved.

(2) Background

The Lung Cancer Surgery Consultant Outcomes Publication (LCCOP) is the HQIP national audit relevant to thoracic surgeons. It is produced jointly by the National Lung Cancer Audit and by the SCTS.

There are important differences with the national (NICOR) audits in cardiac surgery, which units and individual surgeons should be aware of. These include;

-LCCOP outcomes are not risk adjusted
-Postoperative mortality outcomes at 30 and 90 days post-procedure are reported at unit, not individual clinician level.
-Resection rates at MDT level (but linked to named surgeons) are also reported.

The SCTS has been at the forefront of developing 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. Where necessary, it will support units to improve their services, and to protect their patients. Simultaneously it has an important role to support individuals who are involved in the process.

It is acknowledged that there are several reasons why a unit might be identified as an outlier within LCCOP. It might occur by chance, it might relate to systematic differences in the patients that a unit operated on (for example, a unit that treats unusually complex cases, or which serves a population with high levels of ill health), or it might reflect a service in need of improvement. The LCCOP report on its own cannot determine the cause of a unit being identified as an outlier. In this document therefore we emphasise the importance of outlying units robustly reviewing and analysing their practice, to understand the causes of divergence.

This document contains information on how the SCTS, with the NLCA, proposes to inform units that have been identified as outlying in any of the three outcome 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 the form that we suggest internal reviews and recovery plans should take following and alert or alarm notification. It outlines the support available from SCTS and other bodies to individuals involved in this process.

(3) Notification procedure for outlying units

When a unit is identified as an outlier at either "alert" (two standard deviations from the mean) or "alarm" level (three standard deviations from the mean) in one of the three outcomes reported, **a notification letter will be sent to the Clinical Lead of that unit and to the unit's SCTS Audit Lead**[*]. This letter will be co-authored by the NLCA and the SCTS.

Any alert or alarm letter will be copied to the Medical Director of the Trust involved. "Alarm" letters will be copied to the CQC and to HQIP.

For alerts or alarms related to resection rates (which are reported by individual MDT and named attached surgeons), the letter will be copied to the Clinical Lead of the MDT involved, to the Medical Director of the Trust hosting that MDT and to the named surgeons (since LCCOP reports MDT resection rates linked to the surgeons who cover that MDT).

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

The SCTS recognises that in the past 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 to individuals and the investigation of outlying results are separate
- Divergence is a cause for looking at the data in more detail, and is not sufficient reason in itself for restricting a surgeon's practice unless there are clear concerns about the safety of patients
- The mechanism is reasonable and proportionate
- Divergence is classified according to its level and frequency
- Explanation proceeds in four stages

    - Analysis of the data for accuracy
    - Analysis of the caseload. This is particularly important in the LCCOP, which reports unadjusted data
    - Analysis of institutional factors that may contribute to the divergence in clinical outcomes
    - Analysis of individual surgeon's performance within a unit

(4) Alert and Alarm Letters Related to 30- and 90-day mortality in LCCOP: suggested actions

(4.1) 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) Initially, units should locally review their data, to identify any inaccuracies. Units and Trusts must satisfy themselves that their arrangements for data collection and submission are robust and adequately resourced. This is particularly important if data inaccuracy is identified as the cause of outlying.
(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 in local protocols and practice should be part of this review.

(4) Since the LCPOP data is not risk adjusted, ***we strongly suggest that a validated risk adjustment tool is used prospectively by Units in their internal data collection and audit***. The logistic Thoracoscore is suggested in the current NICE guidance (CG 121 section 1.4.5) and the 2011 BTS/SCTS guidance. Evidence of this should be sought during any internal review.

(5) Internal review should analyse performance and outcome at both unit and individual clinician level. Local arrangements for data collection, risk stratification (see 4), audit and clinical review (for example, the conduct of regular morbidity and mortality meetings) should be addressed.

(6) Other data sources should be used in the 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.

(7) At the end of the internal review process, a recovery plan we be produced 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.

(8) 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.

(9) 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.

<u>(4.2) At alert or alarm levels, individual surgeons should take the following actions;</u>

(1) Work with their Trust to complete an effective internal review as outlined above (section 4.1).

(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.

(4.3) 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.
At alarm levels, Trusts should be particularly mindful of their responsibility to maintain patient safety throughout the review process.

Further sources of support from the SCTS and other bodies are detailed below.

(4.4) Alert and Alarm Letters Related to resection rate: suggested actions

These alerts and alarms will differ in two important respects from 30- and 90-day mortality alerts/alarms. Firstly, they will involve a named surgeon or surgeons (by virtue of their link to the MDTs they serve), and secondly they will relate to a specific MDT, which will often not be within the employing Trust of the surgeon involved.

For this reason, alert and alarm letters in this circumstance will be copied to the MDT Lead, and to the medical director of the Trust hosting the MDT.

An internal review should take place, along similar lines to the review suggested for 30- and 90-day outliers outlined above (section 4.1). However, the processes, structure and membership of the outlying MDT should also be included in the remit of the internal review. The clinical lead for the MDT should be involved. If the MDT is hosted in a different Trust, that Trust should be involved in internal review, and agree the recovery plan.

(5) 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. Particularly in the LCCOP, where published data is not risk-adjusted and data is reported for whole units, safe and competent clinicians will often be involved in this process. It is vital that the actions

of the SCTS, NLCA, Trusts, Medical Directors and others support these clinicians during an inevitably 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. Their contact details are available on our website, SCTS.org. 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 College, other possible sources of support are outlined in table (1).

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

Personal Support through SCTS	Confidential Listening Advice confined to area of expertise
Other sources of support	IRM RSPA British Medical Association Defence organisation NCAS

	Occupational Health Department General Practitioner

* The terminology “alert” and “alarm” has been applied by HQIP across surgical audits within the COP. The 2SD and 3SD levels derive from the NLCA.