



National Lung Cancer Audit pleural mesothelioma report 2016

(for the audit period 2014) Executive summary



Executive summary

The purpose of this document, the second mesothelioma report of the National Lung Cancer Audit (NLCA), is to summarise the key findings of the audit for patients in England who were diagnosed with malignant pleural mesothelioma (MPM) in 2014.

MPM is a type of cancer that develops over a long period of time, but once clinically apparent is often rapidly progressive. The cancer originates in mesothelial cells found in the thin membrane (pleura) that line the lungs and the inside of the chest wall. Approximately 90% of cases of MPM are linked to asbestos exposure. With the 20–50 year lag between exposure to asbestos and the development of MPM, estimates of the likely burden of disease suggest that numbers of cases in the UK are likely to peak between 2020 and 2025. 1,2

In late 2014, the contract for the NLCA was awarded to the Royal College of Physicians by the Healthcare Quality Improvement Partnership for 3 to 5 years. The contract did not include an audit for mesothelioma, and this audit is now being independently funded by Mesothelioma UK.

Overview of the results

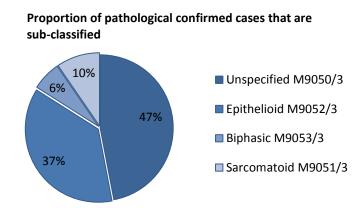
The audit collected data on 2,179 patients who were diagnosed with MPM in England in 2014, with a median of 13 cases per year for secondary care hospital trusts. This is the first national cancer audit to use Cancer Outcomes and Services Data (COSD) and cancer registry data directly to identify patients, which has enabled all cases of pleural MPM diagnosed in 2014 to be included in the audit.

2,179 cases in England in 2014

The cancer registry data was supplemented with some data submitted using the bespoke lung cancer dataset known as LUCADA. In view of the fact that a minority of hospital trusts submitted data solely via COSD and are thus not directly comparable, this 1-year interim report summarises results at national and strategic clinical network (SCN) level only.

Recording of key audit data is good, but variation exists in the data completeness of stage, performance status, multidisciplinary team (MDT) discussion and access to lung cancer nurse specialists across networks.

Although the overall pathological confirmation (following analysis of a tissue or fluid sample) of MPM is excellent (100% of cases), nearly half of MPM patients still receive an unspecified MPM diagnosis with no pathological subtyping. It is important that hospital trusts seek to improve this, since pathological subtype influences prognosis, and may affect eligibility or stratification for entry into clinical trials and response to systemic treatment.



In general, anti-cancer treatment and use of

palliative chemotherapy has increased since the previous audit with 36.5% of all patients receiving it compared with 34% in the first report. In particular, for patients with good general health (performance status 0–1), chemotherapy delivery has increased to 53.5% cases compared with 41% previously. However, there is marked network variation ranging from 42.2% to 77.4%, which should be addressed.

Use of radiotherapy for MPM appears to have reduced since the last audit and was received by 16.5% of patients compared with 29% in the 2014 report.

Although the use of radical surgical treatment is extremely low in England, debulking surgical procedures (surgical removal of as much of a tumour as possible) in general do appear to have increased since the previous audit from 2.3% to 5.2%.

Overall, survival rates for patients with MPM are also gradually improving over time but still remain poor with 43% surviving 1 year compared with 40% in 2008–2012. Variation by network ranged from 37.5% to 55.6% 1 year overall survival.

Although the low number of cases means that data must be interpreted with caution, there appears to be significant variation in the approach to diagnosis and treatment and survival between networks. This should form the basis for service improvement.

A full mesothelioma-specific audit report of cases from 2014, 2015 and 2016 is planned for publication in 2018. It is intended to include hospital-level data and a special focus on the rare peritoneal mesothelioma (cases that arise in the abdomen).

All the results in this report and detailed analyses are available at: www.rcplondon.ac.uk/Meso2016.

Key recommendations

This report makes specific recommendations against which we will audit, analyse and report in the next full mesothelioma report of 2014, 2015 and 2016 data due to be published in 2018. Our recommendations require change, as is true for all clinical quality improvement (QI). The NLCA can give support to organisations to develop, implement and evaluate QI strategies for MPM using this audit data.

Data completeness

- 1. Data completeness for the performance status field should exceed 90%.
- 2. In anticipation of a validated International Mesothelioma Interest Group (IMIG) staging system planned for publication in 2017, clinical teams are encouraged to record the current non-validated IMIG tumour-nodes-metastasis (TNM) staging system at multidisciplinary team meetings for MPM patients. Once a validated staging system is available, hospital trusts should aim for an overall recording of stage in at least 90% of cases.
- 3. At least 95% of patients submitted to the audit should be discussed at a multidisciplinary team (MDT) meeting, a mesothelioma MDT where possible.
- 4. All MDTs should appoint a 'clinical data lead' with protected time to allow promotion of data quality, governance and quality improvement.

Process of care

- 5. Pathological confirmation in life should be over 95%, as there are no specific clinico-radiological features for diagnosing mesothelioma. In view of its prognostic value, every effort should be made to pathologically subtype the MPM, and where the proportion of cases of unspecified MPM is above 10%, review of diagnostic procedures and pathological processing is recommended.
- 6. At least 90% of patients should be seen by a lung cancer nurse specialist (LCNS); at least 80% of patients should have an LNCS present at the time of diagnosis.

Treatment and outcomes

- 7. Patients with adequate performance status should be offered active treatment, including palliative chemotherapy. MDTs with lower than expected chemotherapy rates (below 60%) or with low riskadjusted odds ratio (statistical adjustment to reflect different patient characteristics) should perform detailed case note review to ascertain why. High-quality patient information should be available to guide treatment decisions.
- 8. For patients undergoing surgical treatment, every effort should be made to accurately record the OPCS-4 code of the procedure undertaken.
- 9. All patients should be offered access to relevant clinical trials even if this requires referral outside of their network.
- 10. Survival: Where risk-adjusted odds ratios are low, an in-depth local audit is recommended, including analysis of active treatment rates and length of the diagnostic pathway.

References

1 Riaz SP, Coupland VH, Lüchtenborg M, Peake MD, Møller H. Mesothelioma incidence projections in South East England. *Eur Respir J*. 2012 Oct;40(4):965–8.

2 Hodgson JT, McElvenny DM , Darnton AJ, Price MJ and Peto J. The expected burden of mesothelioma mortality in Great Britain from 2002 to 2050. *Br J Cancer* 2005;92:587–593.



The Royal College of Physicians

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 over 30 medical specialties with education, training and support throughout their careers. As an independent charity representing more than 30,000 fellows and members worldwide, we advise and work with government, patients, allied healthcare professionals and the public to improve health and healthcare.

The Clinical Effectiveness and Evaluation Unit (CEEU) of the RCP delivers projects that aim to improve healthcare in line with the best evidence for clinical practice: guideline development, national comparative clinical audit, the measurement of clinical and patient outcomes, and change management. All of our work is carried out in collaboration with relevant specialist societies, patient groups and NHS bodies.

Mesothelioma UK

Mesothelioma UK is a national specialist resource centre, specifically for the asbestos-related cancer, mesothelioma. The charity is dedicated to providing specialist mesothelioma information, support and education, and to improving care and treatment for all UK mesothelioma patients and their carers.

The charity integrates into NHS front-line services to ensure specialist mesothelioma nursing is available at the point of need. This is achieved through a growing network of specialist mesothelioma nurses, regionally based in NHS hospitals but funded by Mesothelioma UK.

Mesothelioma UK is based at the University Hospitals of Leicester NHS Trust Glenfield site. The charity relies entirely on donations, legacies, fundraising and sponsorship to ensure all services provided free of charge across the UK.

Citation for this document: Royal College of Physicians. *National Lung Cancer Audit: Pleural mesothelioma report 2016 (for the audit period 2014).* London: Royal College of Physicians, 2016.

Copyright

All rights reserved. No part of this publication may be reproduced in any form (including photocopying or storing it in any medium by electronic means and whether or not transiently or incidentally to some other use of this publication) without the written permission of the copyright owner. Applications for the copyright owner's written permission to reproduce any part of this publication should be addressed to the publisher.

Copyright © Royal College of Physicians 2016 Registered Charity No 210508

ISBN 978-1-86016-626-6 | eISBN 978-1-86016-627-3

Royal College of Physicians 11 St Andrews Place Regent's Park London NW1 4LE

National Lung Cancer Audit Clinical Effectiveness and Evaluation Unit

Email: nlca@rcplondon.ac.uk www.rcplondon.ac.uk/Meso2016

www.mesothelioma.uk.com

0800 169 2409 (freephone helpline) Email: mesothelioma.uk@uhl-tr.nhs.uk

twitter.com/MesoUK facebook.com/therealmeso.uk



