

A Network's Experience in Improving 1-Year Survival Rates in Lung Cancer

Introduction

Mount Vernon Cancer Network (MVCN) has a population of 1.4m residents and encompasses NHS Hertfordshire, NHS Luton and the southern part of NHS Bedfordshire. An earlier data analysis in 2010 indicated that the MVCN was in the 4th (lowest) quartile for lung cancer survival rates and explanations were sought in information on diagnoses, staging and active treatment rates. The Network Site Specific Group (NSSG) jointly worked with their local cancer registry, the Eastern Cancer Registration and Information Centre (ECRIC), the NCIN and Roche to validate survival rates and causal factors. The review included levels of MDT data completion, as well as a benchmarking process and clinical measures such as the Peer Review Clinical Lines of Enquiry for lung cancer.

KEY MESSAGE:

Mount Vernon Cancer Network provides a case study where regular and systematic reviews of information about process / clinical measures and survival rates by clinicians to understand and benchmark their lung cancer clinical pathways have yielded improvements. The Network has recently measured a 25% increase in the 1-year survival for lung cancer rates between 2006 and 2009. This means that while previously 1 in 4 patients lived for a year post diagnosis, it is now 1 in 3 patients.

Review of process and clinical measures

The Network Site Specific Group's work programme in 2009/10 included regular reviews of both the National Lung Cancer Audit and locally held information through collaboration with ECRIC. This iterative process was aimed at improving patient outcomes through evaluation of the Clinical Lines of Enquiry. Data for 2010 indicate improvements in all parameters. This time period was chosen because the Group's focus on the use of data had also improved collection and reporting.

According to reported data:

- MVCN has increased staging percentage by 40%
- MVCN has increased known histology percentage by 11%
- MVCN has increased active treatment (surgery, radiotherapy and chemotherapy) by 10%

Recent changes in survival rates in the Mount Vernon Cancer Network

Changes in 1-year survival rates for MVCN have been reviewed between 2006 and 2009 to identify trends over time (Fig. 1). In 2006 the Network was ranked in the bottom 25% of English cancer networks (Fig. 2) while the survival rate projected for 2009 would place the Network into the second quartile. The increase in MVCN's survival rates is a considerable achievement, set against a background of little overall change (year on year) throughout the rest of England. Data are now being collected to assess 1-year survival rates in 2010.

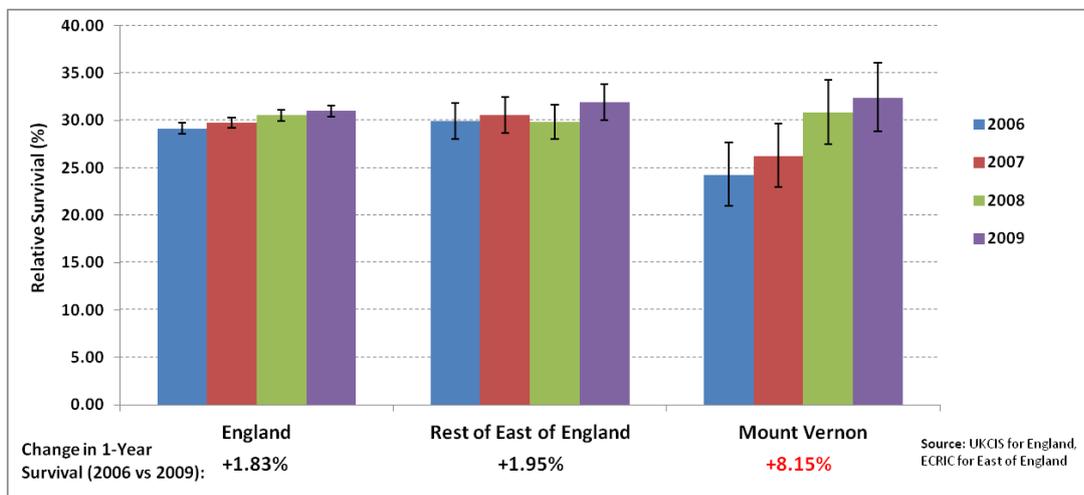


Figure 1. One year relative survival for lung cancers (ICD10 sites C33-34) in the East of England.

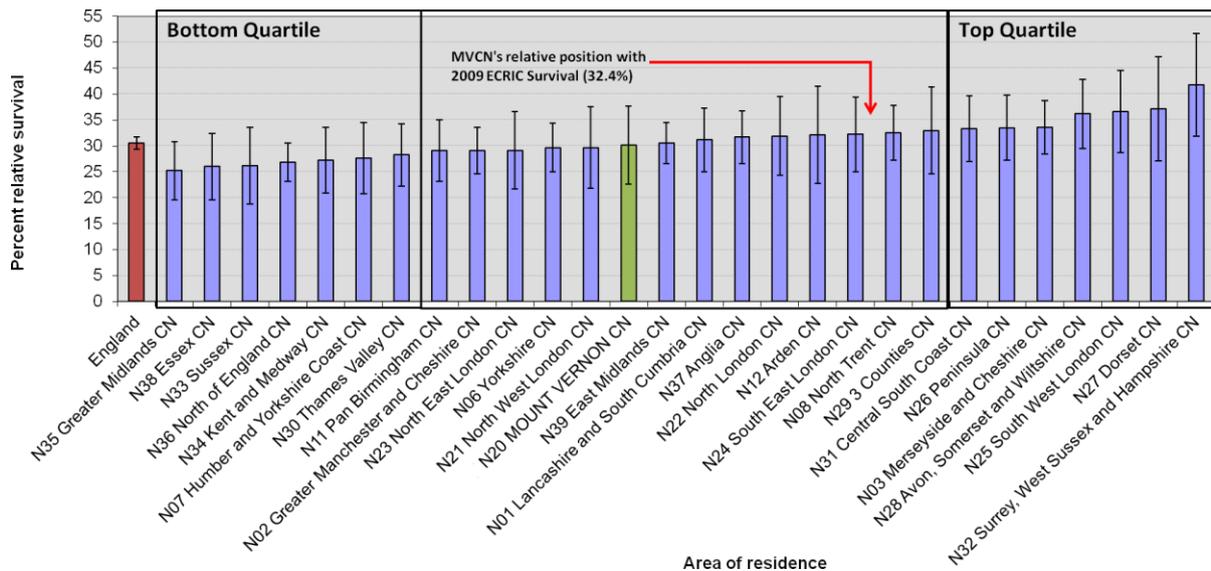


Figure 2. One year relative survival for lung cancer (ICD10 sites C33-34) diagnosed in 2008 by area of residence.

Is the increase in survival rates mainly caused by better data collection and reporting?

The scale of change in 1-year survival rates in MVCN compared with that in England over the time period 2006 to 2009 indicates that data collection is not the main or only reason for improvements in clinical outcomes. Data collection and methodologies of analyses have also not changed over this period of time.

Conclusions

The collaborative review of information about clinical care pathways and outcomes increases clinical engagement and thus the value of such information. This requires information experts, such as registries, to work with clinicians through their site specific groups and for relevant metrics to be regularly reviewed by these groups. In this example MVCN, the NSSG and ECRIC collaboratively reviewed locally held information and the National Lung Cancer Audit. The Network intends to compare process and clinical measures between the constituent MDTs at frequent intervals during the coming year. MVCN have also developed a Lung 'Cancer Quilt' which reveals performance across geographical patches (Trust/Locality) and along pathway stages. The clear traffic light presentation of this 'dashboard' view means that problem areas are visible at a glance.

FIND OUT MORE:

[Eastern Cancer Registration and Information Centre \(ECRIC\)](#)

ECRIC is the regional cancer registry for Mount Vernon Cancer Network. www.ecric.nhs.uk/.

[Mount Vernon Cancer Network \(MVCN\)](#)

MVCN works in partnership to ensure continual excellence in cancer care for the benefit of all in Hertfordshire, Luton and South Bedfordshire. <http://www.mountvernoncancernetwork.nhs.uk/>.

This project has been conducted under a joint working agreement between NCIN, MVCN and Roche Products Limited.

The National Cancer Intelligence Network is a UK-wide initiative, working to drive improvements in standards of cancer care and clinical outcomes by improving and using the information collected about cancer patients for analysis, publication and research. Sitting within the National Cancer Research Institute (NCRI), the NCIN works closely with cancer services in England, Scotland, Wales and Northern Ireland. In England, the NCIN is part of the National Cancer Programme.