

National Lung Cancer Audit

Past, Present and Future

Dr Paul Beckett

Outline

- The past
- The present
- The future

Past

Measuring Outcomes and Quality

“In God we trust. All others bring data.”

W. E. Deming



“We can only be sure to improve what we can actually measure.”

Lord Darzi, High Quality Care for All, June 2008



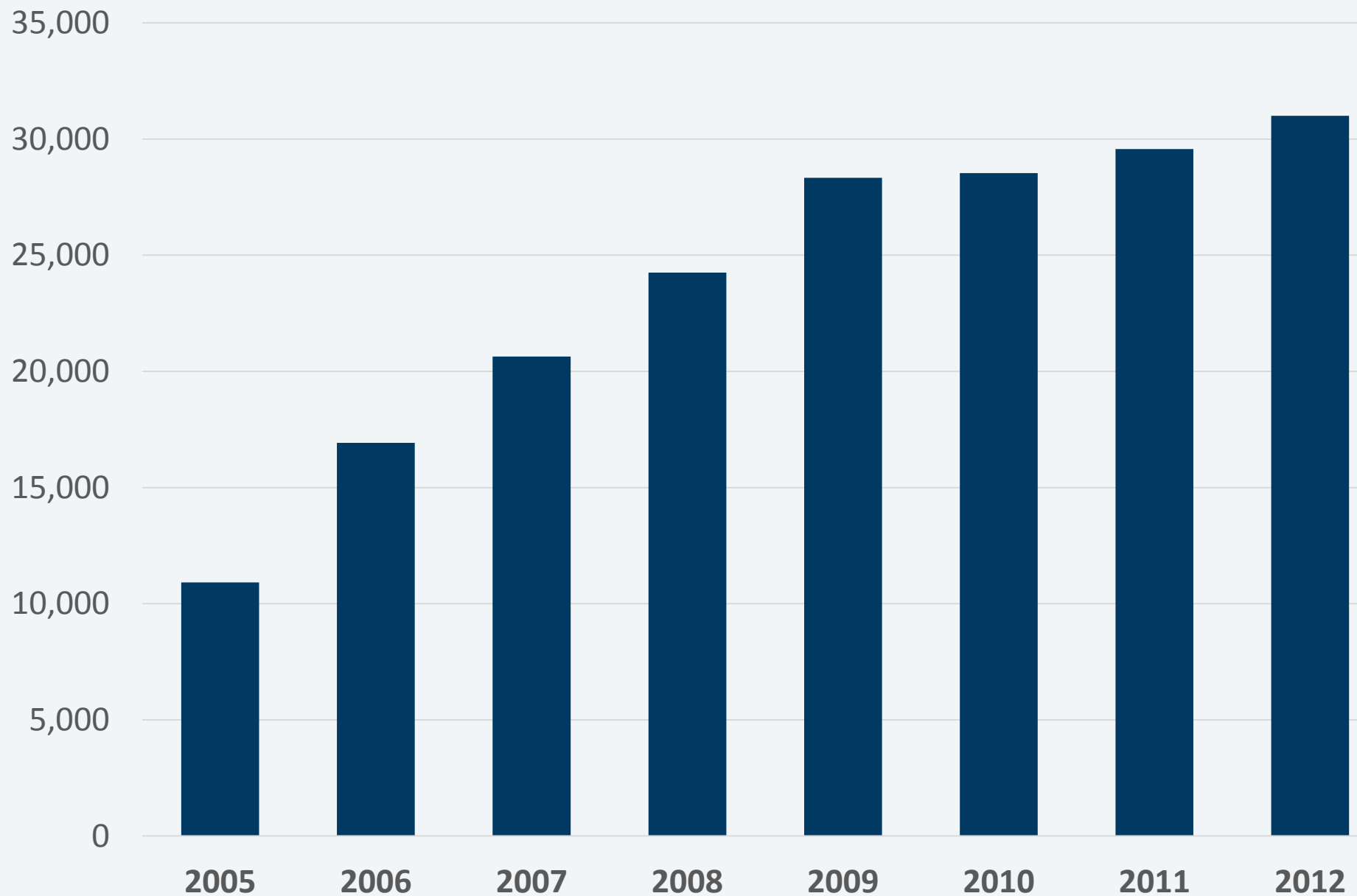
224,120

case records
on the NLCA database
from England alone

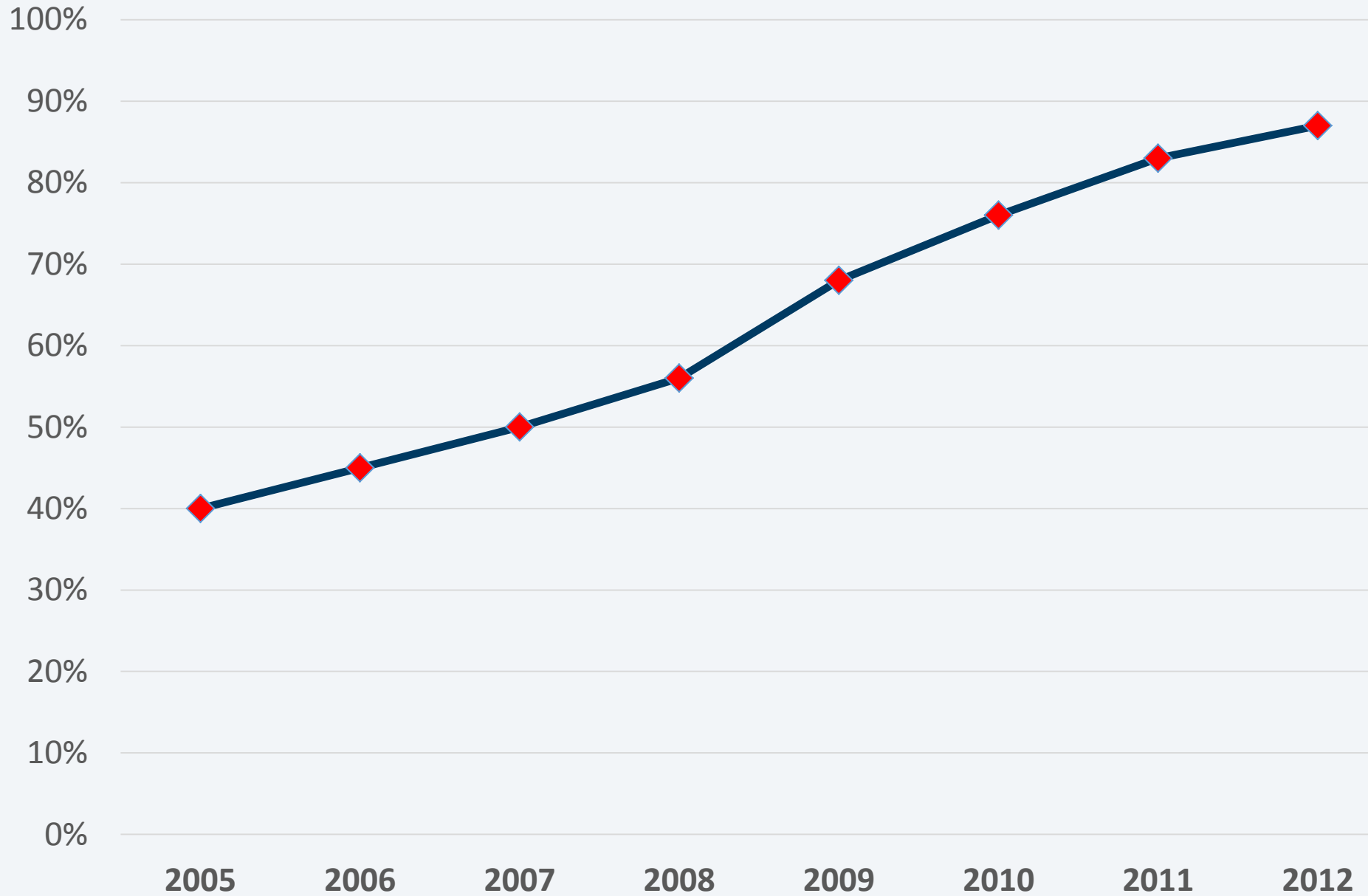
100%

of secondary care
trusts in England,
Scotland and Wales

Lung Cancer - Cases from 2005-2012



Recording of Stage and PS



Radiotherapy



2008	2012
25%	30%

↑ 5%

Surgery



2008	2012
10%	15%

↑ 5%

Chemotherapy



2008	2012
27%	32%

↑ 5%

12

**Peer-reviewed
publications**

Using NLCA data

50

**National/International
abstracts**

Presented by the project team

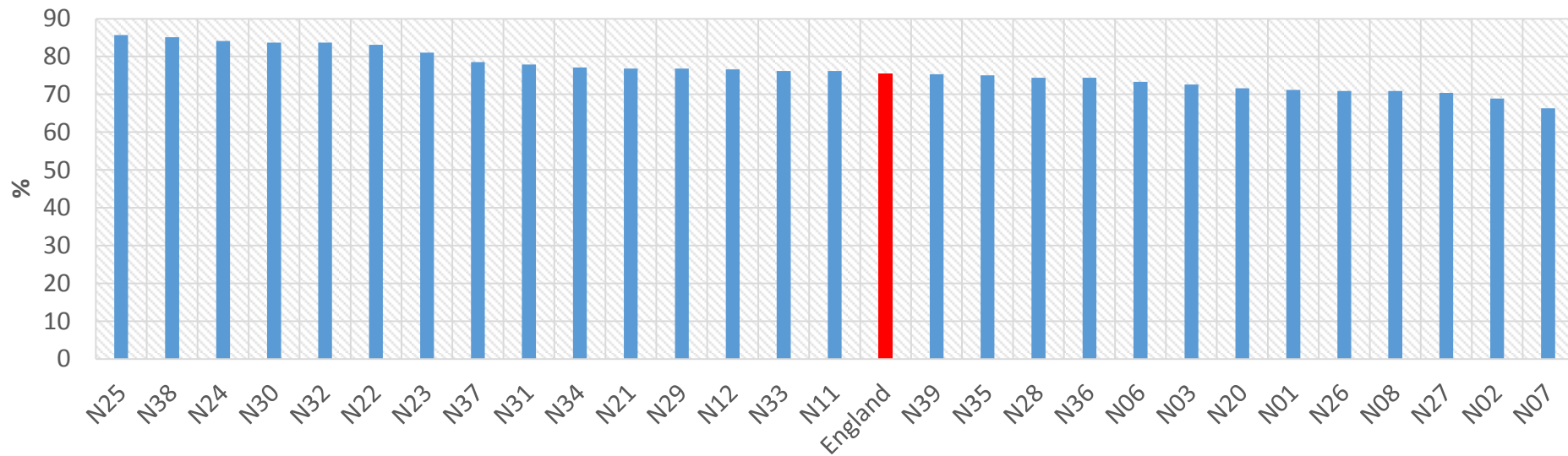
100_s

**Service improvement
projects**

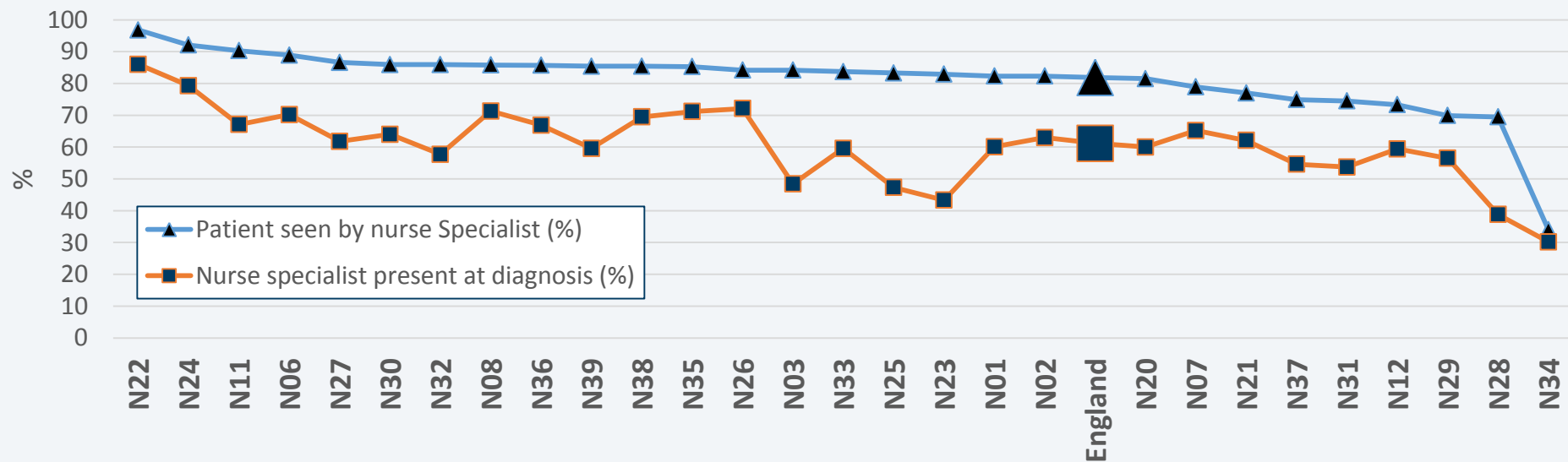
Based on NLCA results

Present

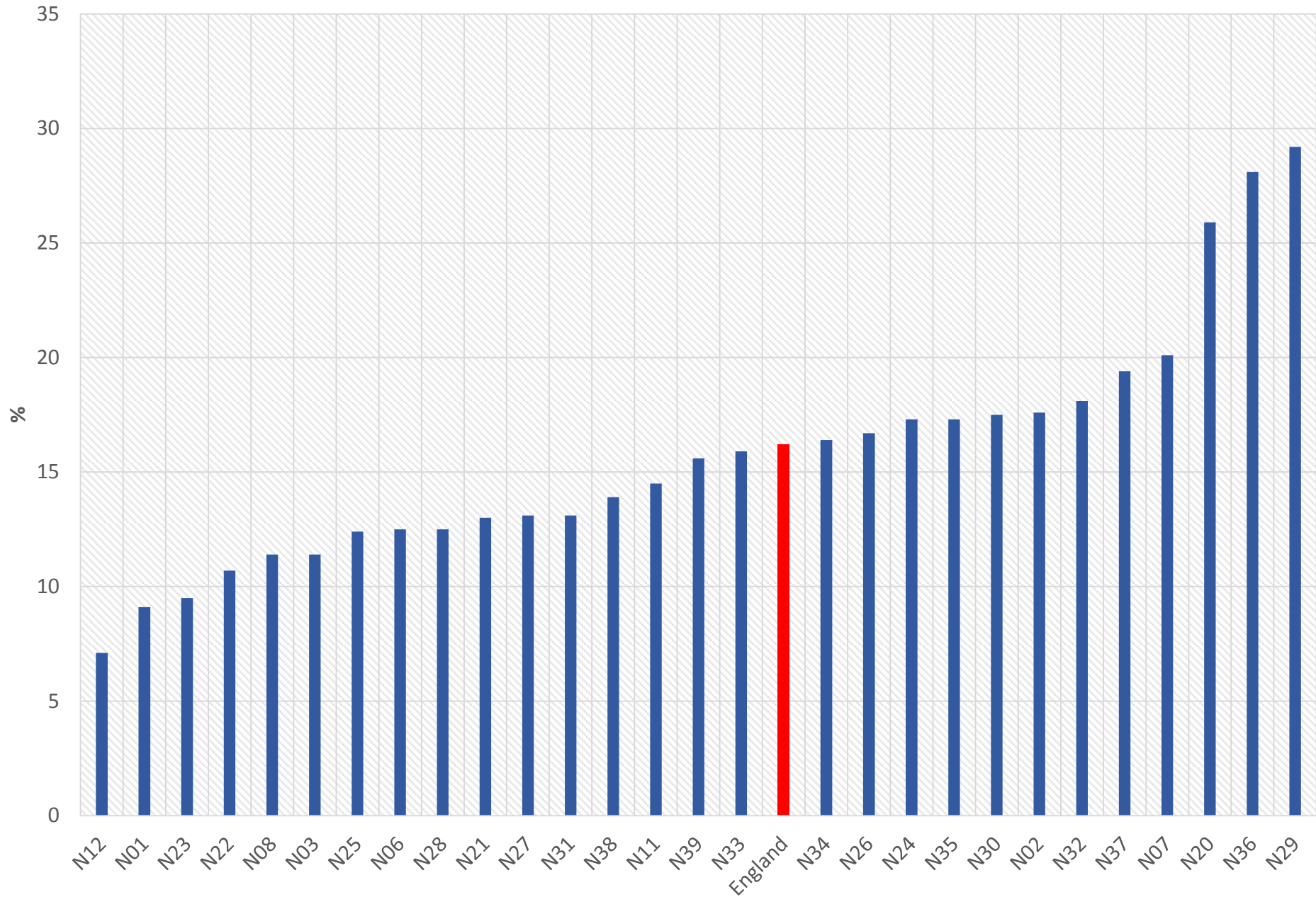
Histo-cytological Confirmation Rate by Network (2012)



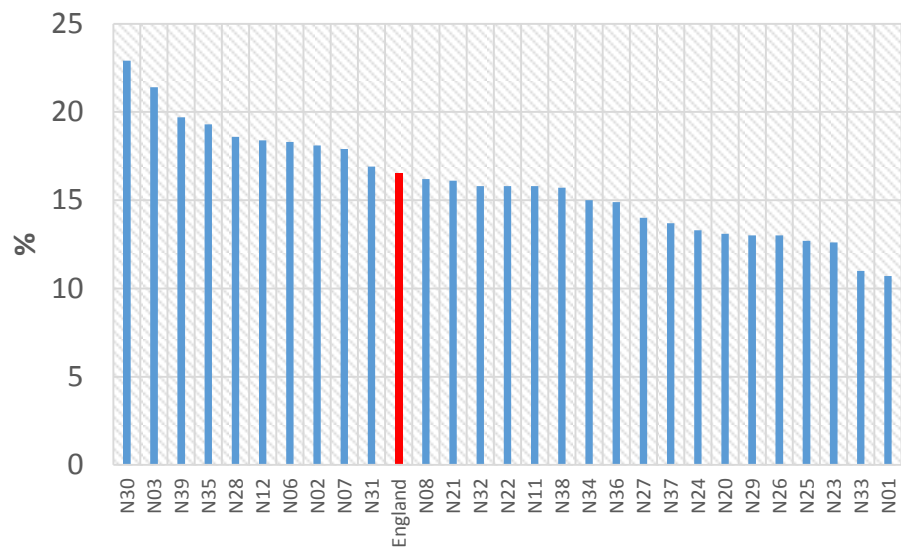
Lung Cancer Specialist Nurse Input by Network (2012)



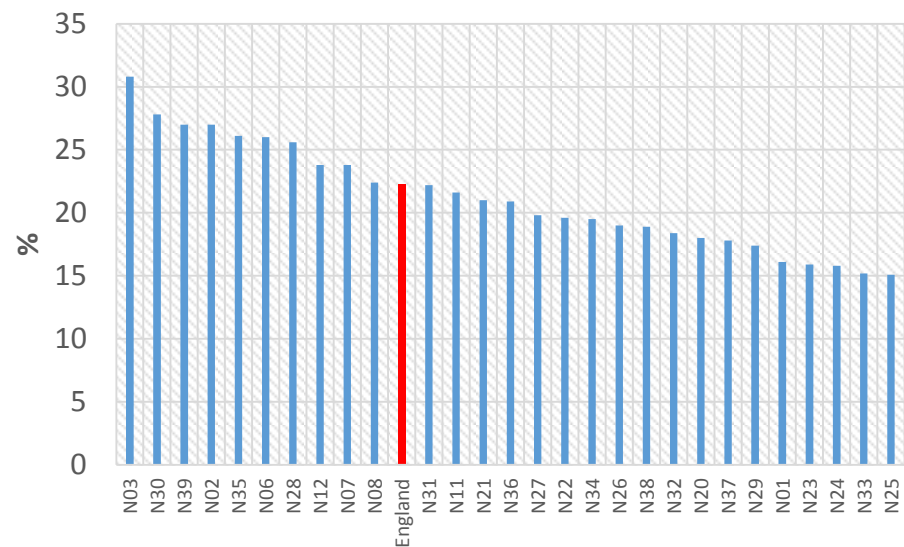
NSCLC 'NOS' Rate by Network (2012)



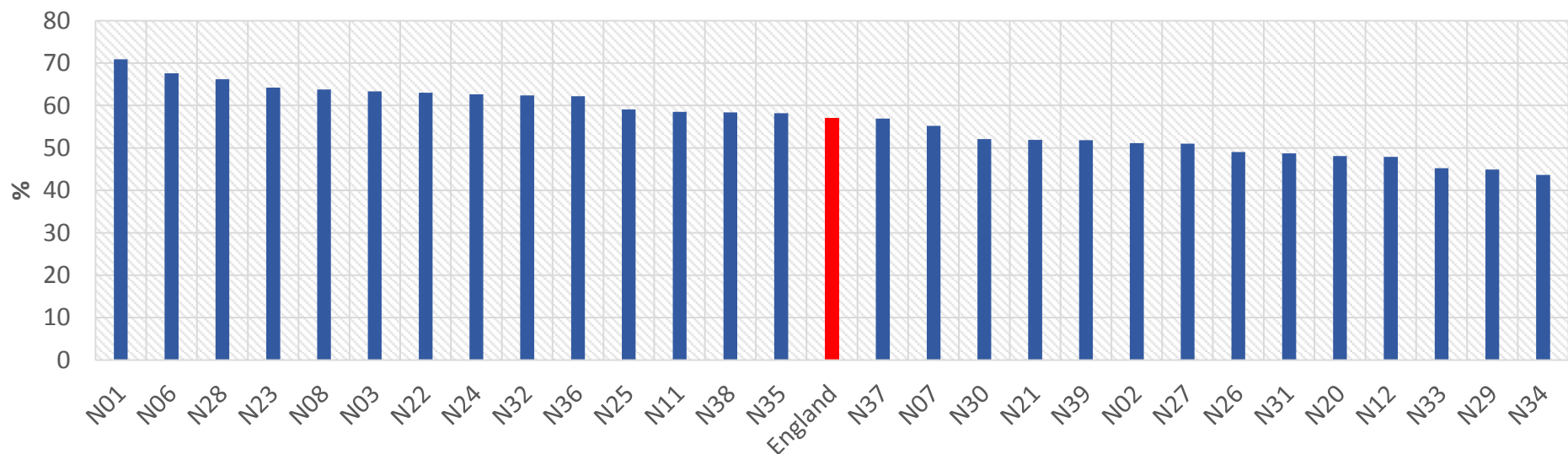
NSCLC Having Surgery by Network (2012)



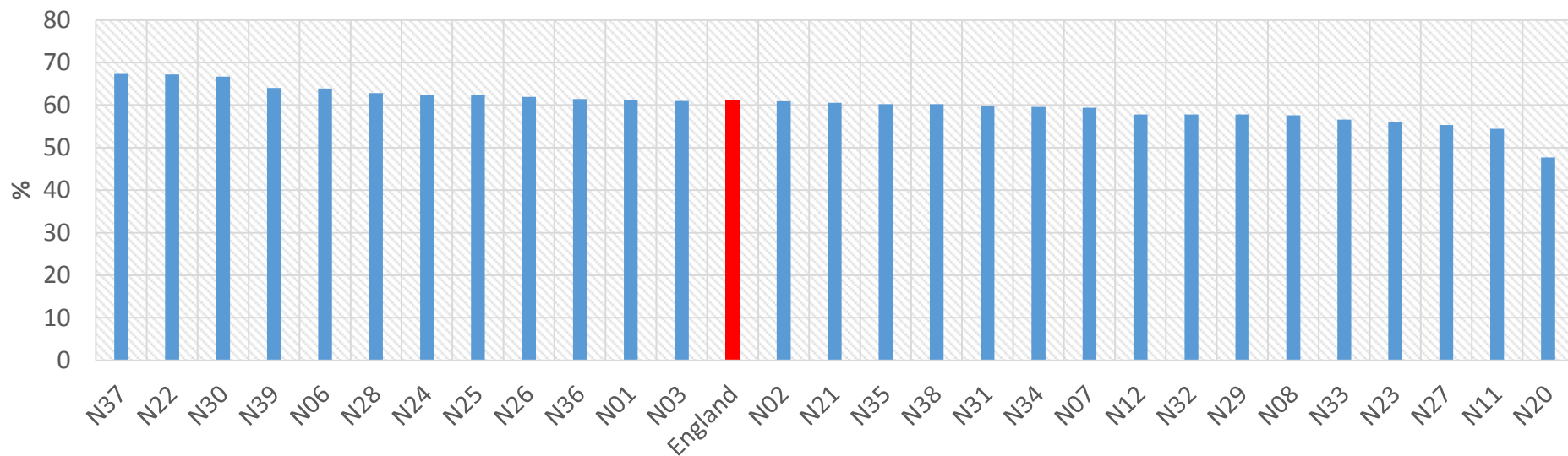
Confirmed NSCLC Having Surgery by Network (2012)



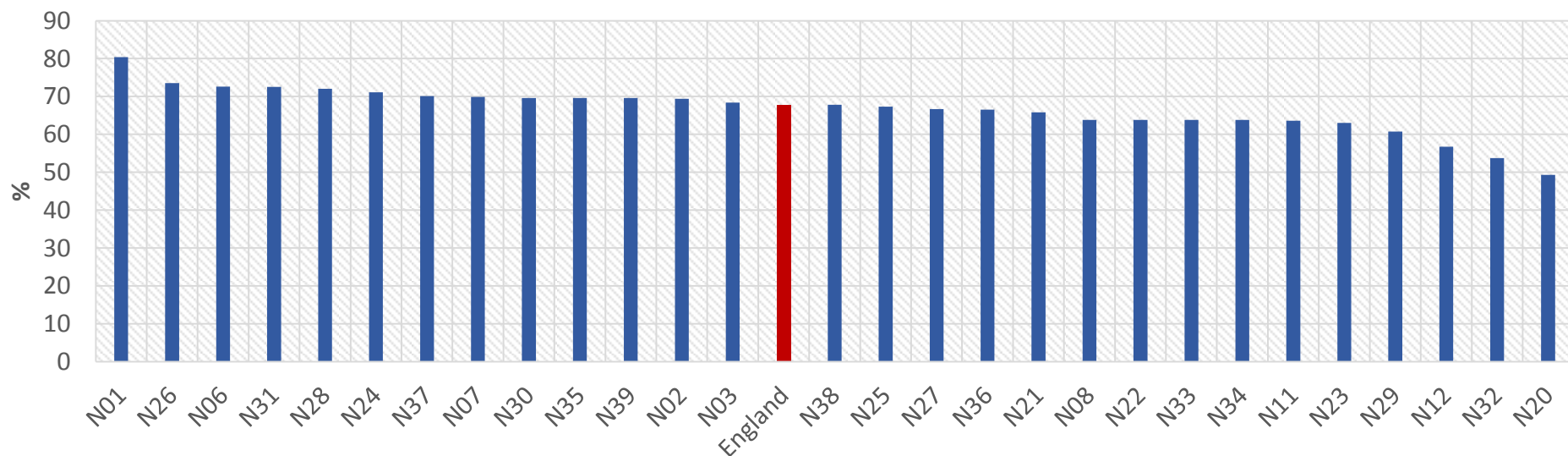
Use of Chemotherapy in IIIB/IV PS 0-1 NSCLC by Network (2012)



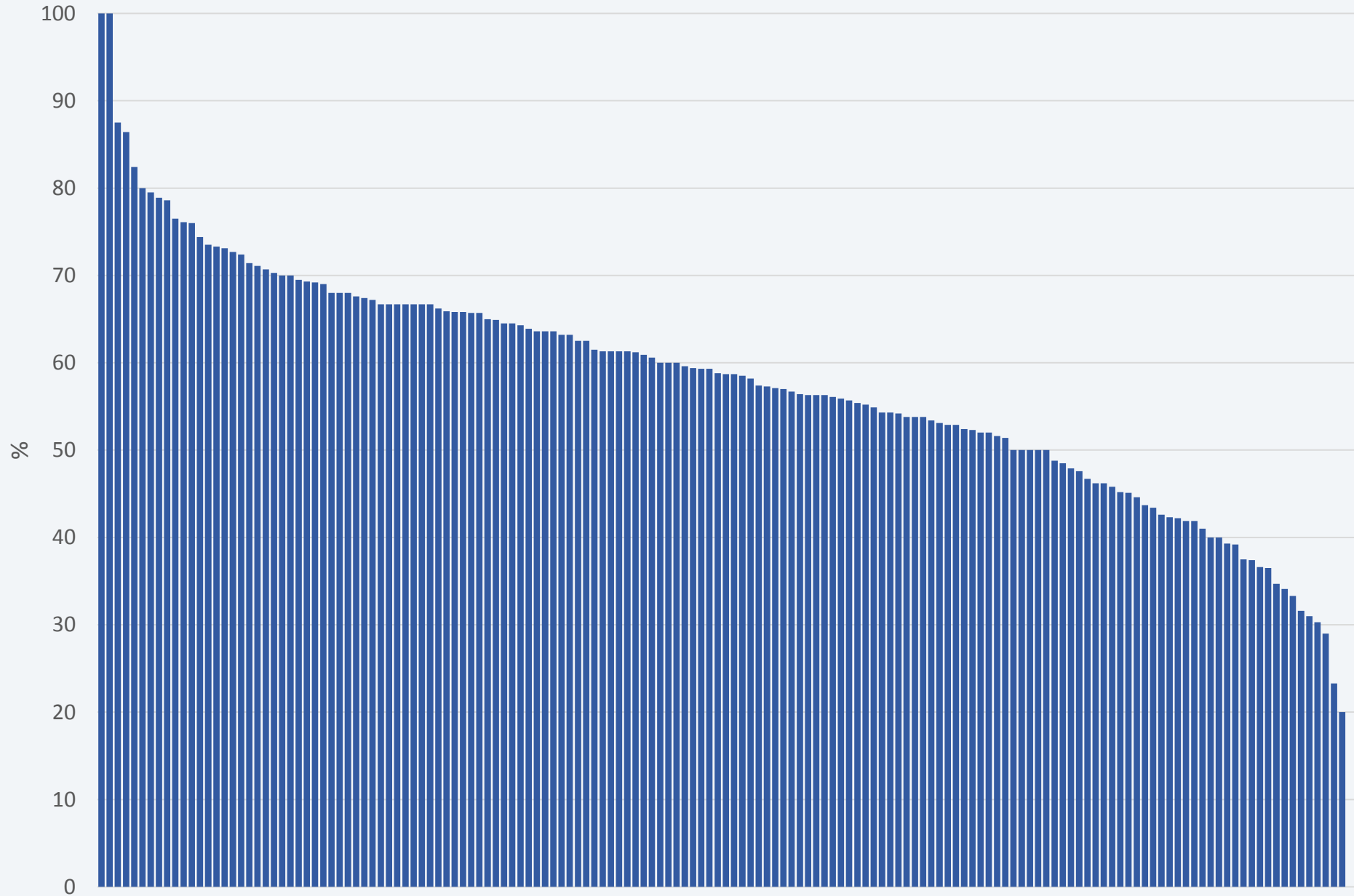
NSCLC Having Anti-Cancer Treatment by Network (2012)



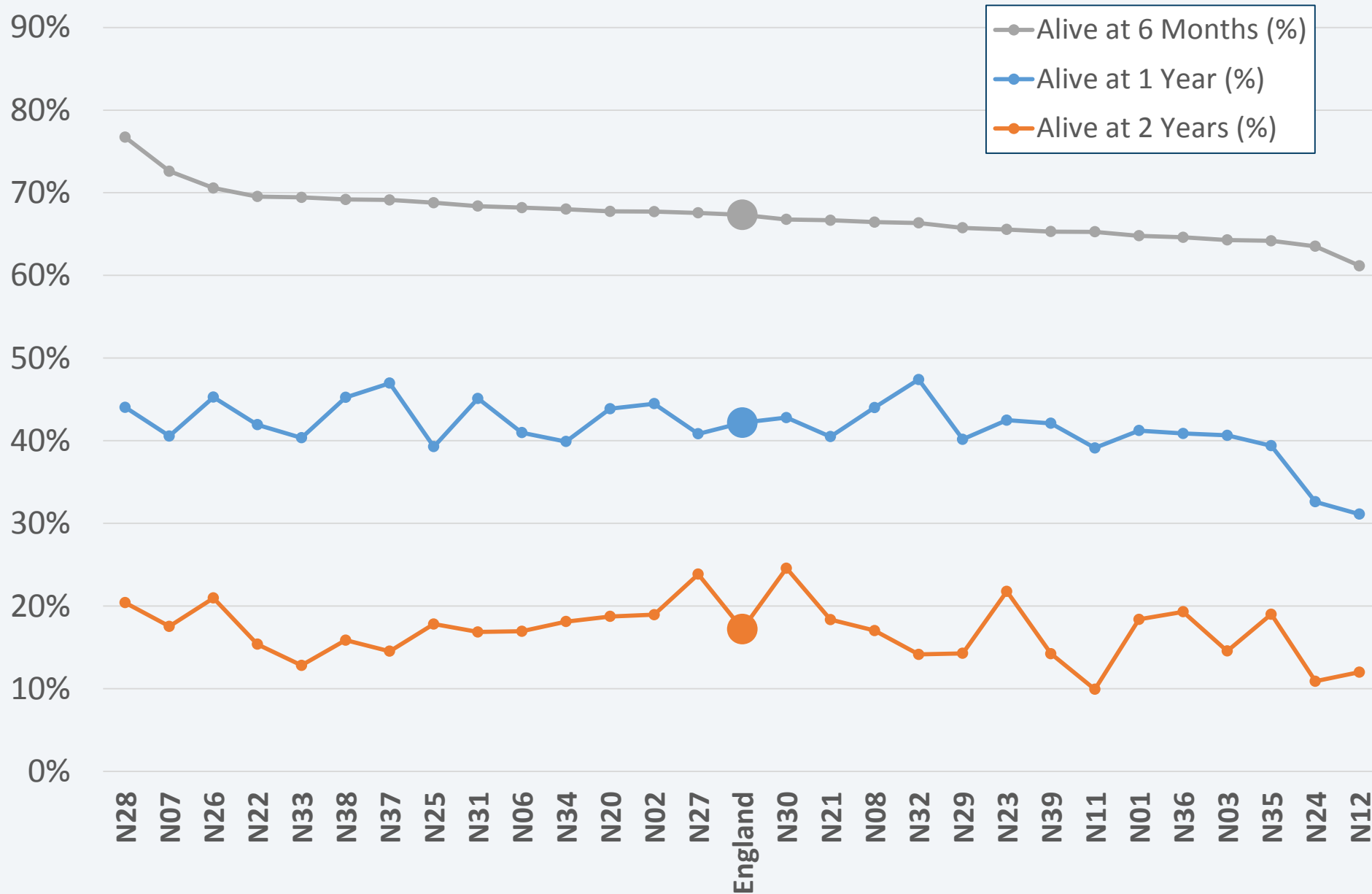
Use of Chemotherapy in SCLC by Network (2012)



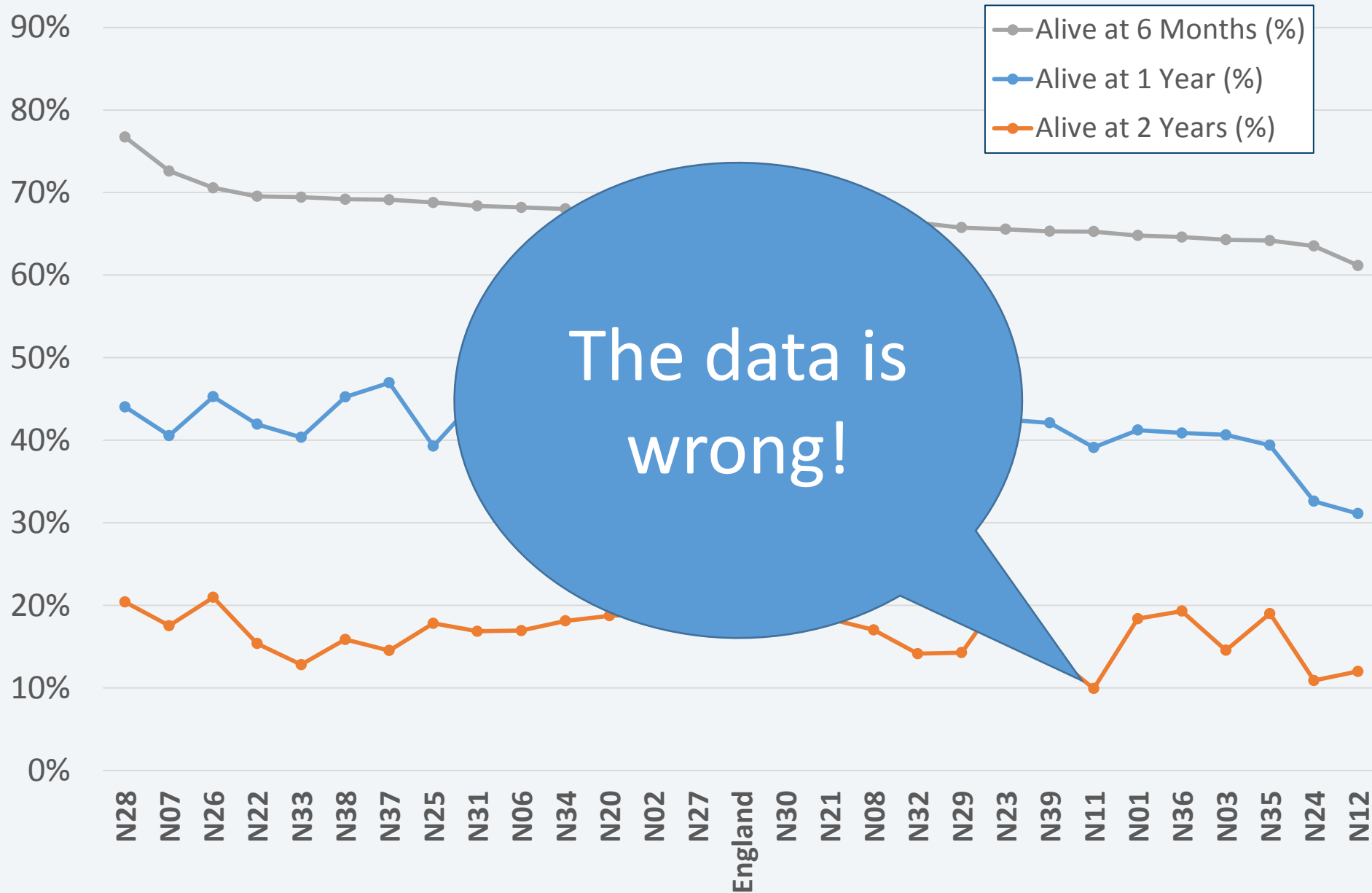
Use of Chemotherapy in IIIB/IV PS 0-1 NSCLC by Trust (2012)



Mesothelioma Survival 2008-2012



Mesothelioma Survival 2008-2012

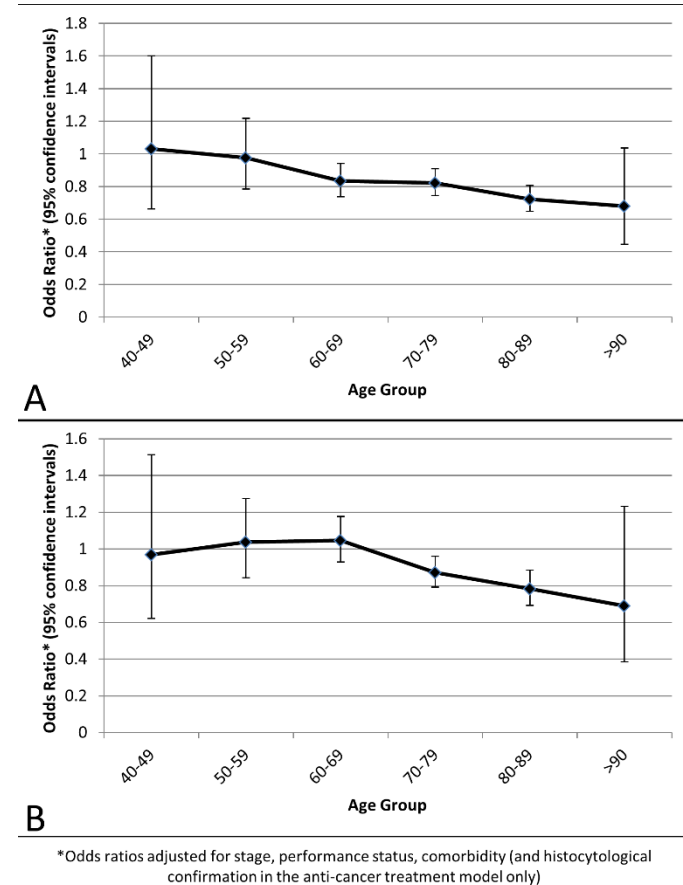


Service Improvement

- Histo-cytological Diagnosis
 - Locally-available modalities
 - Pathological expertise
 - Speed of pathway
- Chemotherapy
 - Age bias
 - Speed of pathway
 - Communication of benefits
- Surgery
 - Age bias
 - Access to specialist thoracic surgeons
 - Work-up and assessment of co-morbidities

Clinical management of older people with NSCLC in England

- Data for 25,261 patients with NSCLC.
- Multivariate logistic regression showed the odds of having histo-cytological confirmation and anticancer treatment decreased progressively with age, and was also lower in women.
- It is likely that these results have a multifactorial explanation, and further research into the attitudes of patients, carers and healthcare professionals, and clinical trials of treatment in older populations, are necessary.



Pathological confirmation rate of lung cancer in England using the NLCA

- Assessed the independent influence of patient factors on the likelihood of having histology or cytology, and the overall effect on survival on 136,993 individuals.
- Age and PS were the strongest predictors of pathological confirmation: age ≥ 85 odds ratio (OR) 0.20 (95% confidence interval (CI) 0.19-0.22) compared with age <55; PS 4 OR 0.11 (95%CI 0.10-0.12) compared with PS 0.
- Pathological confirmation of diagnosis was associated with a small early survival advantage for younger patients with good PS, even after adjusting for other patient features: hazard ratio (HR) 0.93 & 0.89 respectively.
- Much of the survival advantage was accounted for by adjusting for the use of chemotherapy.
- Stratifying patients by age and performance status is useful and appropriate when benchmarking standards for pathological confirmation of the diagnosis of lung cancer.

Early mortality after surgical resection for lung cancer

- 10,991 patients operated on between 2004 and 2010.
- 3% died within 30 days & 5.9% within 90 days.
- Age was strongly associated with early postoperative death (adjusted OR within 90 days for 80-84 years vs 70-74 years: 1.46, 95% CI 1.07 to 1.98)
- Significant associations were also observed with PS, lung function, stage and procedure type.
- Developed a predictive score.

Future

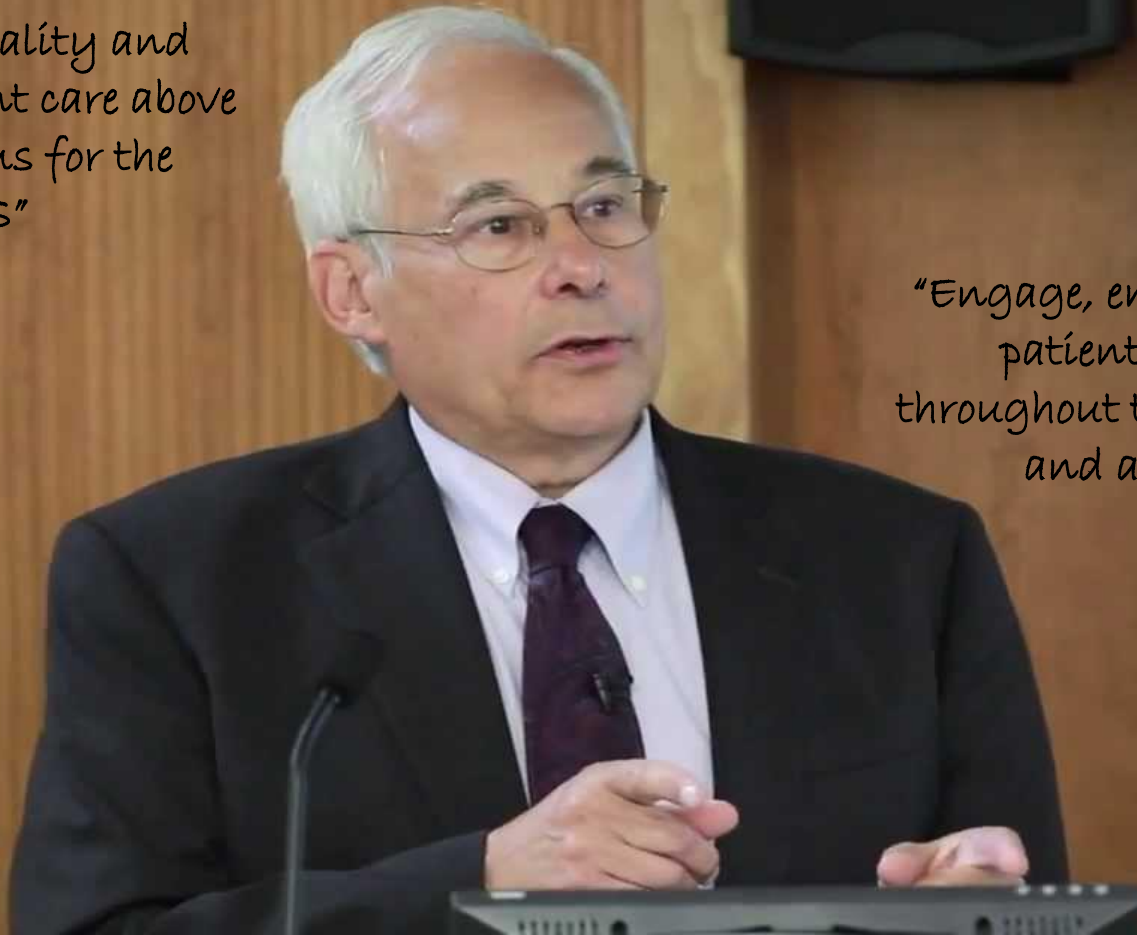
Future Directions and Challenges

- Mesothelioma report
- Dataset changes
- Organisational Audit
- Co-morbidity
- Outlier Policy
- COSD, CAT, ENCORE
- Linkage
- Networks and clinical engagement

The Wider NHS

"Place the quality and safety of patient care above all other aims for the NHS"

"Engage, empower, and hear patients and carers throughout the entire system, and at all times"



Conclusions

- A project that the whole UK lung cancer community should be proud of.
- Significant challenges....huge opportunities

Acknowledgements

- **Roz Stanley**
- Mick Peake
- Ian Woolhouse
- Arthur Yelland
- Claire Middleton
- All lung cancer teams