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Value of cancer data in London

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Why is cancer data important?

- Understand how many people are affected by cancer
- Provides evidence to support development of patient pathways
- Identifies variations and inequalities
- Allows us to monitor improvements
- Risk-stratified patient care
- Cancer control and epidemiological research
- Public health program planning
- Provide evidence for commissioners
- Track trends over time

And many more...



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We can only be sure to improve what we can actually measure

Lord Ara Darzi

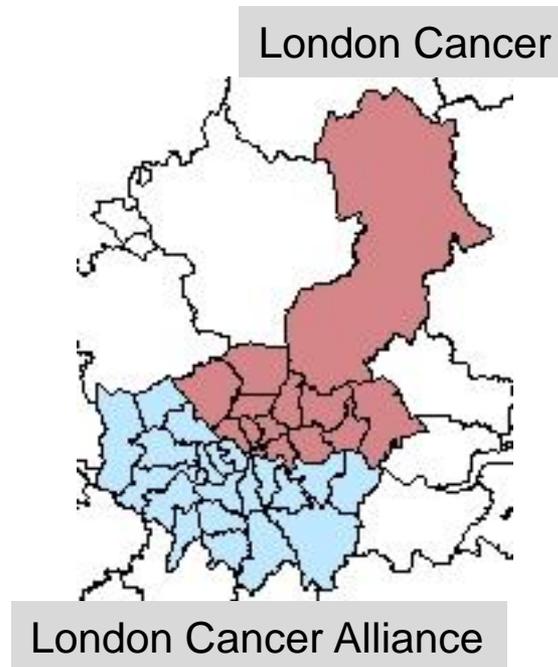
High Quality Care For All

June 2008



Integrated Cancer Systems

LCA : “Our vision is to provide equitable, world-class cancer care, health outcomes and patient experience for Londoners, delivered through comprehensive and seamless pathways, based upon national and international standards, research, and evidence.”



LC: “Our aim is to ensure that all patients with cancer in the region have access to the full spectrum of treatment and therapy options of a world class cancer system – no matter where they live or where they are first treated.”

Main stakeholders in London

Very interested in the use of data to support and lead the work that they do



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Value of data for London Cancer Alliance



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West and South **LCA**

Example 1: Minimally Invasive Surgery Rates



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Priority identified by LCA Gynaecology Pathway Group that all patients undergoing major surgery for **endometrial cancer** should be offered access to minimally invasive surgery (either laparoscopic approach or robotic)

Benefits of minimally invasive surgery:

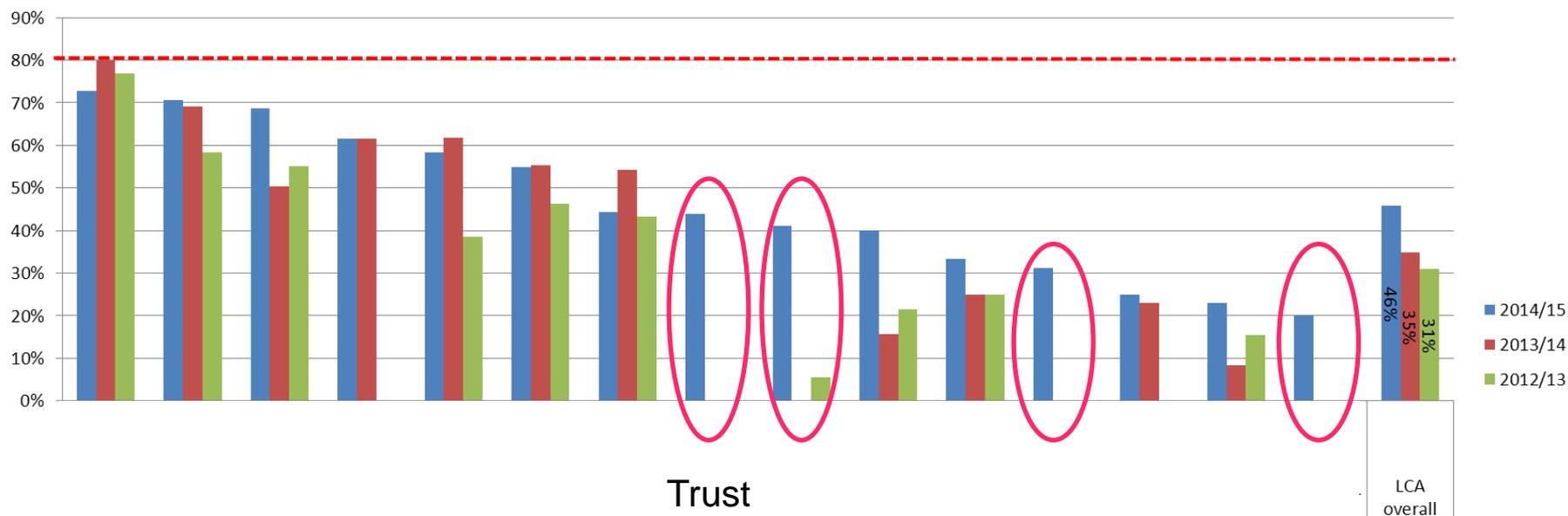
- Less time in hospital
- Faster recovery time
- Increased safety as less trauma to the body
- Decreased scarring

Aim: to ensure all patients treated for endometrial cancer have access to the least invasive treatment possible



Example 1: Minimally Invasive Surgery Rates

Patients with Endometrial Cancer Diagnosis in diagnosis fields (any positions) , and procedure code Q07/Q08 with or without Laparoscopic Approach or Robotic Surgery - Y75 in op code fields (any position) , by Trust, 2014/15



2014/15	73%	71%	69%	62%	58%	55%	44%	44%	41%	40%	33%	31%	25%	23%	20%	46%
2013/14	80%	69%	50%	62%	62%	55%	54%	0%	0%	16%	25%	0%	23%	8%	0%	35%
2012/13	77%	58%	55%	0%	38%	46%	43%	0%	6%	21%	25%	0%	0%	16%	0%	31%



Example 1: Minimally Invasive Surgery Rates

The use of data **raised awareness** to the variation in practice, and **drove improvements**

Improvements from 2012/13 to 2014/15:

- Overall improvement from **31% to 46%** (2012/13 to 2014/15)
- **72 extra patients had minimal access surgery** in 2014/15 than expected if the rates from 2012/13 continued
- 5 hospital sites have started offering minimal access surgery

This data has been discussed at a number of clinical events across the LCA and where trusts had particularly low rates or did not offer surgery these concerns were flagged to these trusts



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Example 2: Chemotherapy Closer to Home



Example 2: Chemotherapy Closer to Home

- Chemotherapy closer to home project (CCTH) ongoing within LCA funded by AHSN (Academic Health Science Network) and Macmillan Cancer Support
- Focused on 3 pilots:-
 - oral chemotherapy prescribed via community pharmacies,
 - prescribing/delivery of subcutaneous Herceptin in community for example at GP practice
 - extend the opening of chemotherapy units during weekends

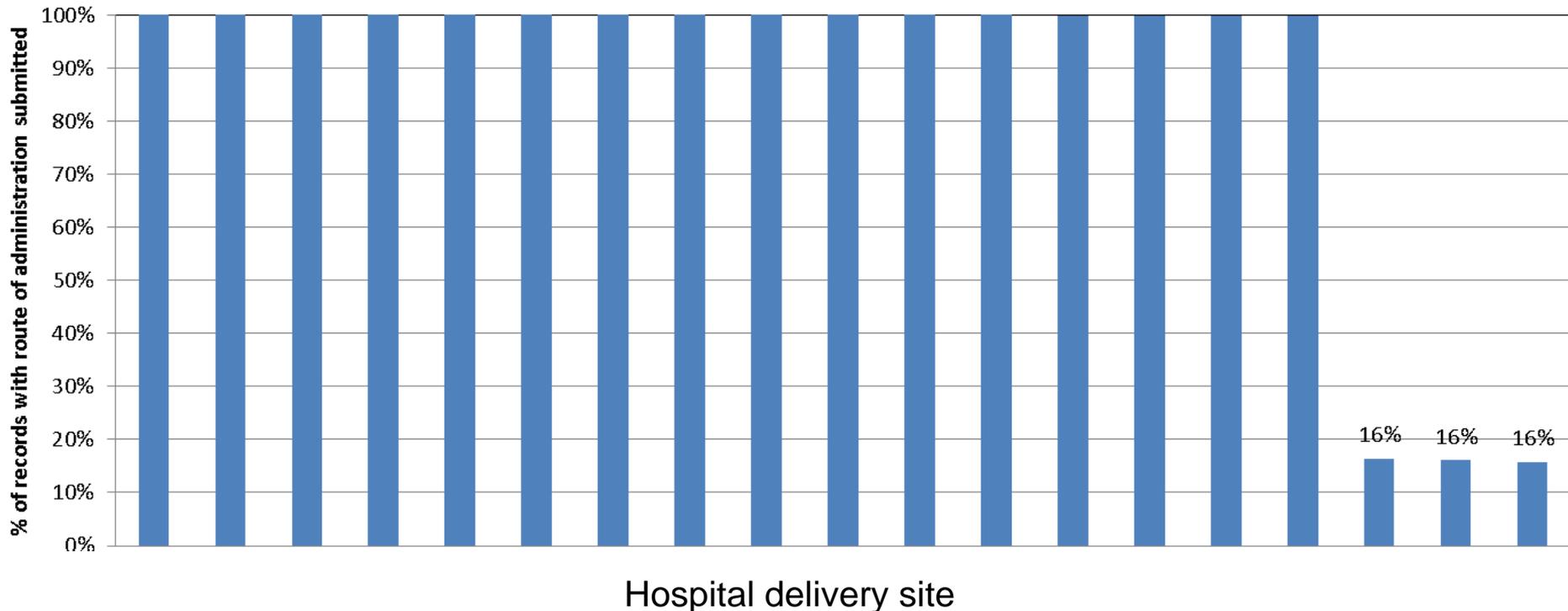
Aim: make access to chemotherapy as convenient as possible for the patient

- **Use of data:** quantify impact of pilots and understand the current chemotherapy delivery landscape



Example 2: Chemotherapy Closer to Home

Data quality assessment: Percent of records with SACT route of administration submitted in 2014

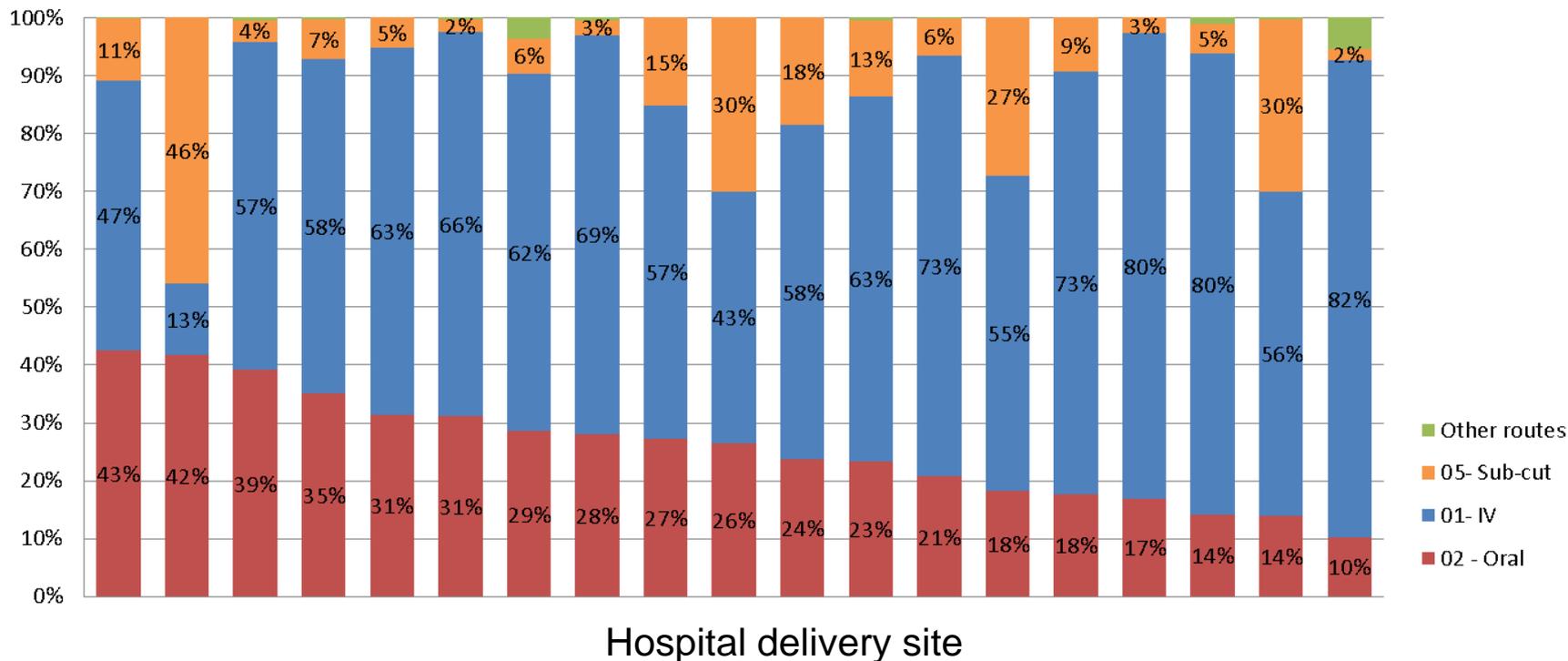


Data on the route of administration in the 3 sites with only 16% are poor



Example 2: Chemotherapy Closer to Home

Data quality assessment: SACT route of administration in 2014



Variation exists by provider of chemotherapy delivered orally suggesting either significant **variation in practice** or difference in **data completeness** of oral chemotherapy.



Example 2: Chemotherapy Closer to Home

Outputs from the project:

- Numbers of chemotherapy drugs received in LCA by the following administration routes
 - Oral chemotherapy
 - Subcutaneous Herceptin
- An overview of cancer centre activity by tumour type. This will include analysis of **travel time**
- Methodology report detailing the data quality issues. This can be used in future national reports, potentially resulting in **improved data quality** through **feedback to trusts**



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Value of data for London Cancer



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Example 1: Lung cancer survival



Example 1: Lung cancer survival



It is known that survival from lung cancer in the UK is substantially lower than other European countries (source: International Cancer Benchmarking Partnership)

The National Lung Cancer Audit was mandated in England in 2009

Aim: use the NLCA data to understand lung cancer survival in London Cancer, to help develop initiatives to address the variation



Example 1: Lung cancer survival



The LC board focused on:

- Pathway specification
- Early diagnosis
- Other immediate work

Aim to increase expertise at key decision points in the pathway, thereby reducing variation in practice. This will be done by:

- Creating larger MDTs to increase the clinical expertise present for the review of every patients' case
- Diagnosis and staging MDTs to ensure all patients are offered the most appropriate investigations
- Decision to Treat MDTs



Example 1: Lung cancer survival



The **NEW ENGLAND**
JOURNAL *of* **MEDICINE**

ESTABLISHED IN 1812 AUGUST 4, 2011 VOL. 365 NO. 5

Reduced Lung-Cancer Mortality with Low-Dose Computed Tomographic Screening

The National Lung Screening Trial Research Team*

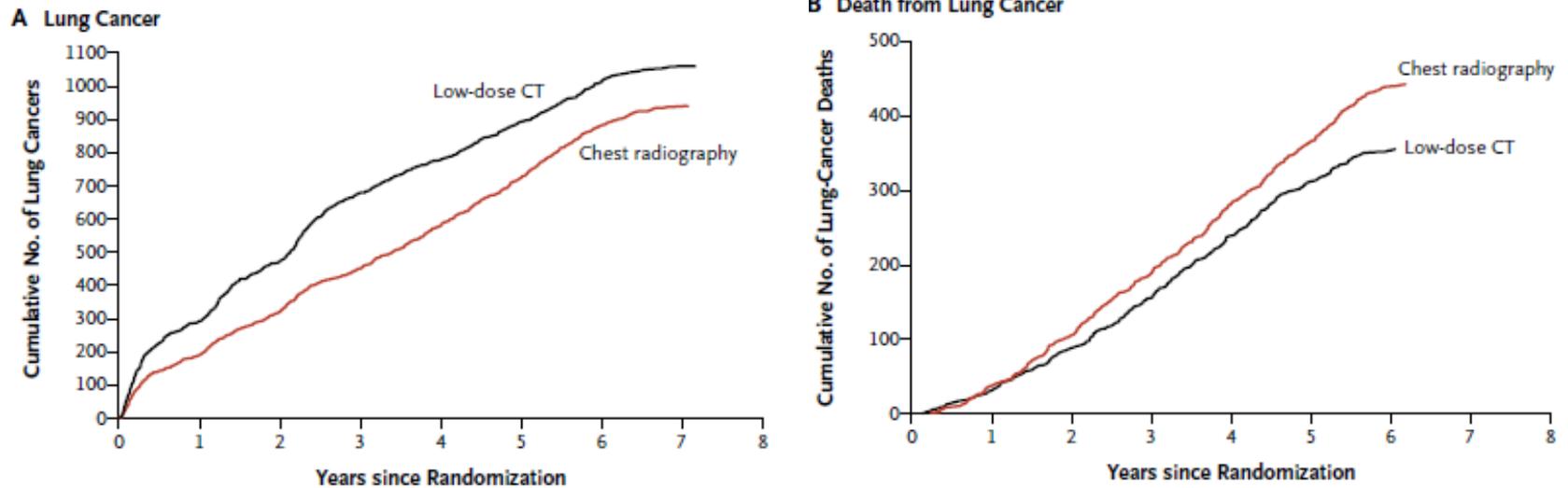


Figure 1. Cumulative Numbers of Lung Cancers and of Deaths from Lung Cancer.
The number of lung cancers (Panel A) includes lung cancers that were diagnosed from the date of randomization through December 31, 2009. The number of deaths from lung cancer (Panel B) includes deaths that occurred from the date of randomization through January 15, 2009.

20% reduction in lung cancer specific deaths in CT arm (6.4% reduction all cause mortality)



Example 1: Lung cancer survival



Following the previous NEJM paper, LC implemented a research project, and will approach around 2,000 individuals (expecting ~600 scans)

Research project title

Developing and testing targeted invitation materials to increase uptake of lung cancer screening in communities at high risk of lung cancer

Name of Applicant

Jane Wardle

Host Institution

University College London

Wave 1 has been successful so far, and they are about to start wave 2 with a second centre

Source = Professor Sam Janes, LC



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Example 2: A & E audit



Example 2: A & E audit



In 2013, London Cancer conducted an audit of the A&E hospital departments
Identified 963 people diagnosed following an admission to A&E

Key findings:

- Many had advanced-stage cancer
- 36% of the patients were alive a year after the initial audit
- 1 in 4 patients died within 2 months
- Lung, colorectal, liver, pancreas and gallbladder were the most common cancers
- Audit identified **55%** of colorectal cancer diagnosed under 60 years of age, below the current bowel screening criteria, presented to A&E first.



How are the findings being used?

2 projects under the national ACE Programme banner

QuiCeSTT (Quality improvement Collaborative for Straight To Test)

Established a learning collaborative, bringing together the trust teams who have tested and delivered a straight to test or direct access service for suspected colorectal cancer patients, to share their learning and insights with those trusts wishing to improve access to diagnostics for their patients.

Multidisciplinary Diagnostic Centre

Piloting rapid diagnostic pathway for patients with non-specific but concerning abdominal symptoms where there is no established pathway, as well as those too unwell to wait for 2 weeks for a diagnosis, or who cannot readily access the service (prevent A&E presentation) e.g. painless jaundice

The first 2 MDCs are in operation at UCLH and Queen's Hospital Romford.



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Routes to Diagnosis of Cancer in London



Routes to Diagnosis in London

Categorisation of the pathway the patient follows to the point of diagnosis of cancer.

For example, if a breast cancer is identified through a screening programme, their route to diagnosis is screening.

The first iteration of the national study was conducted in the summer of 2010 and covered patients diagnosed in 2007.

National viewpoint was extended to 2013 and published in September 2015. London viewpoint was published in January 2016.

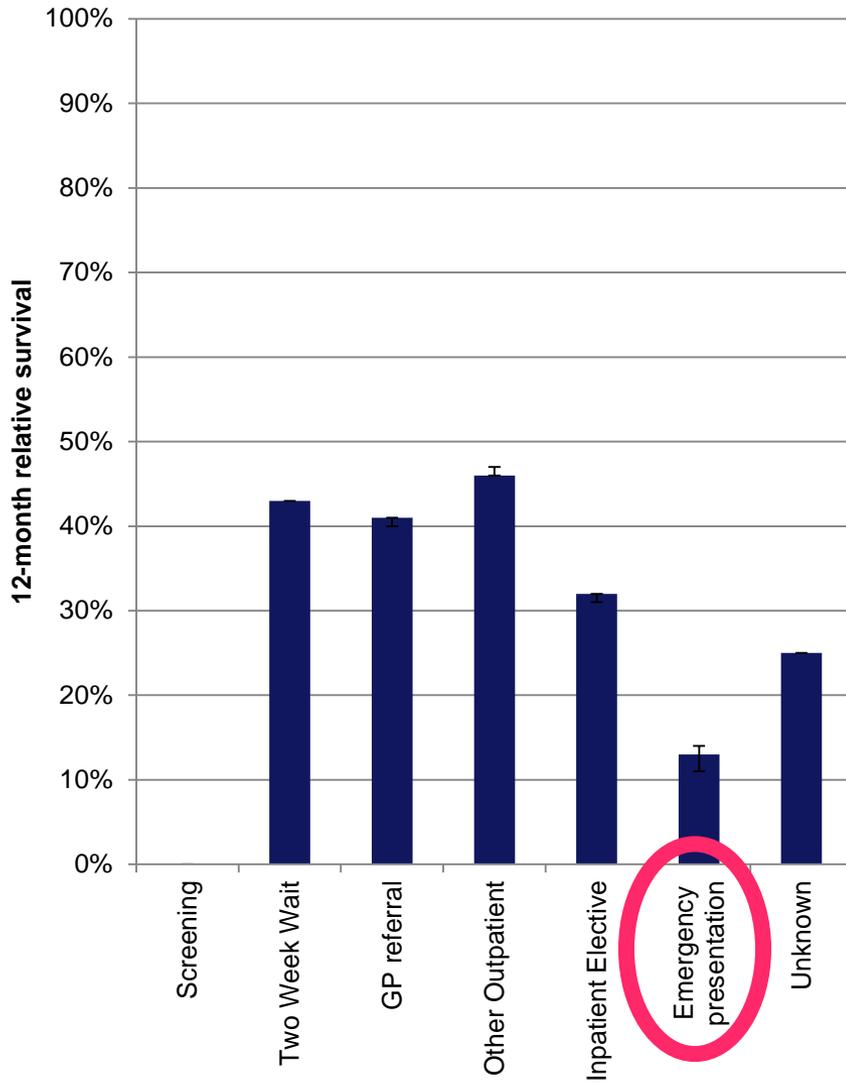
Aim: examine demographic, organisational and service for delayed diagnosis



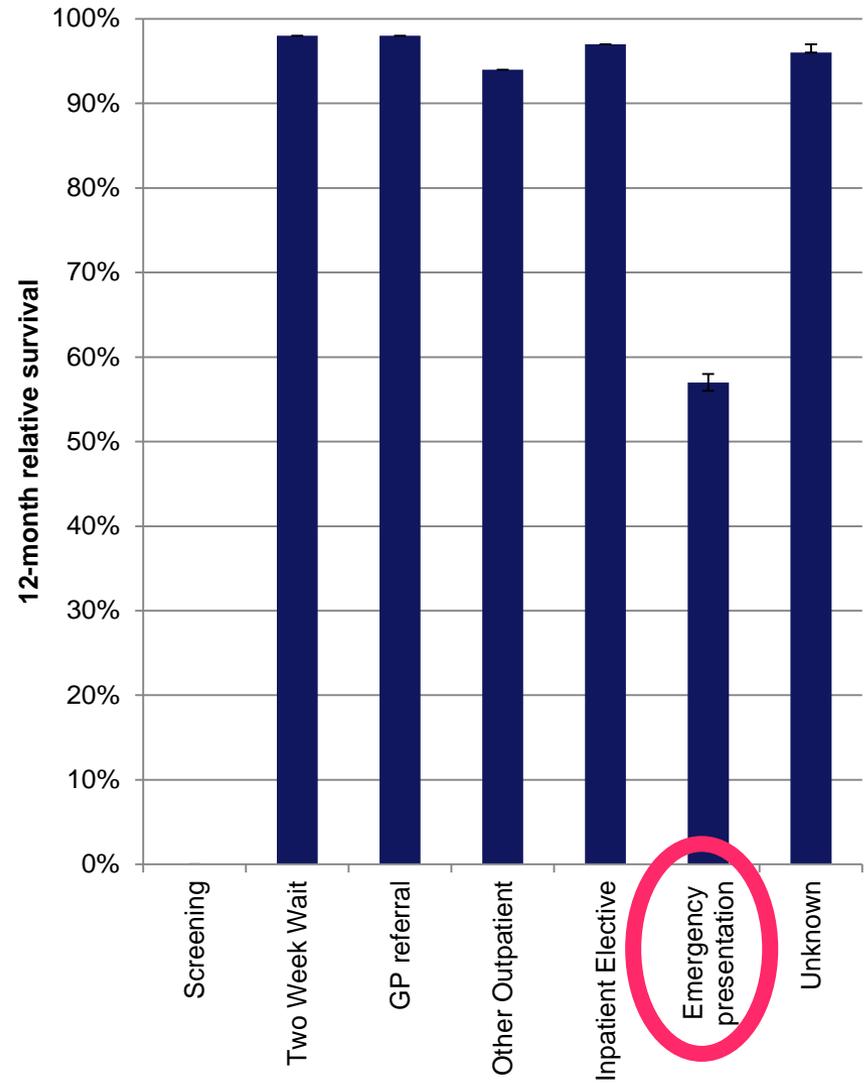
Description of each route

<u>Route</u>	<u>Description</u>
Screen Detected	Detected via the breast, cervical or bowel screening programmes
Two Week Wait	Urgent GP referral with a suspicion of cancer
GP Referral	Routine and urgent referrals where the patient was not referred under the Two Week Wait referral route
Other Outpatient	An elective route starting with an outpatient appointment : either self-referral, consultant to consultant, other referral
Inpatient Elective	Where no earlier admission can be found prior to admission from a waiting list, booked or planned
Emergency Presentation	An emergency route via A&E, emergency GP referral, emergency transfer, emergency consultant outpatient referral, emergency admission or attendance
Death Certificate Only	No data available from Inpatient or Outpatient HES, CWT or Screening and with a death certificate only diagnosis flagged by the registry in the NCDR
Unknown	No data available from Inpatient or Outpatient HES, CWT or Screening within set time parameters or unknown referral

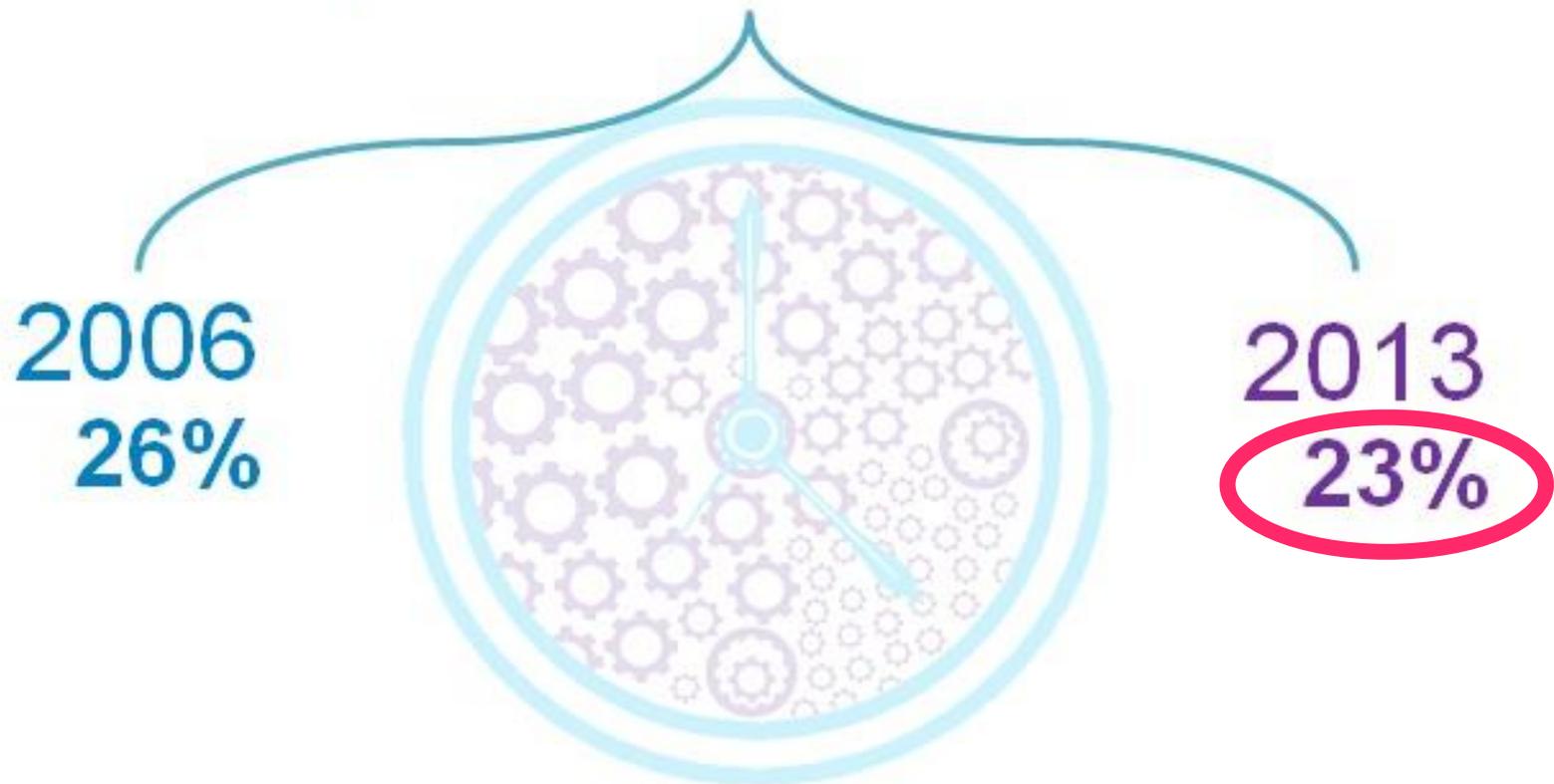
Lung Cancer Relative Survival



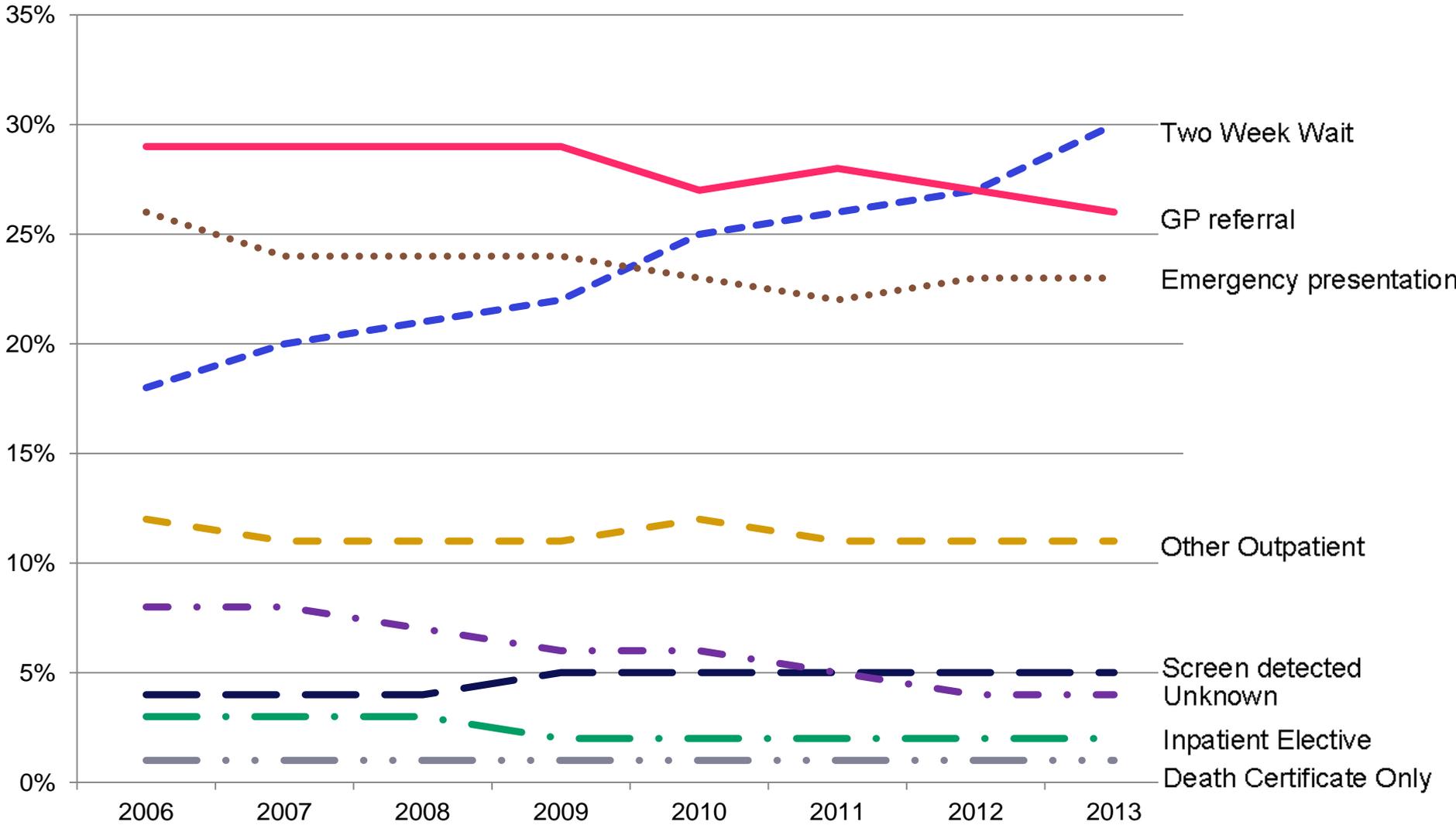
Prostate Cancer Relative Survival



Cancers diagnosed as an Emergency presentation in London



Routes to diagnosis for all malignant neoplasms (excl. NMSC) by year, persons, London





How is this data used by London stakeholders?

- Provides information on variations in presentation, to help **identify areas** which need addressing (e.g. demographics)
- Confirmation to commissioners that **two week wait** programme is more regularly used – so if survival is best for TWW, should the programme be rolled out further?
- Understanding reasons for delayed diagnosis will improve treatment or early diagnosis of future patients
- Key outcome = awareness of poor survival from emergency presentation has driven the **development of initiatives to improve early diagnosis**
- London Cancer's audit of GP records on patients diagnosed with cancer to understand how patients describe their symptoms – aiming to reduce time to cancer diagnosis



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Acknowledgements

Donna Chung (London Cancer)

Stephen Scott (London Cancer Alliance)

Thank you!

Any questions?

<http://www.ncin.org.uk/home>

What cancer stats are available? <http://www.ncin.org.uk/view?rid=2992>

