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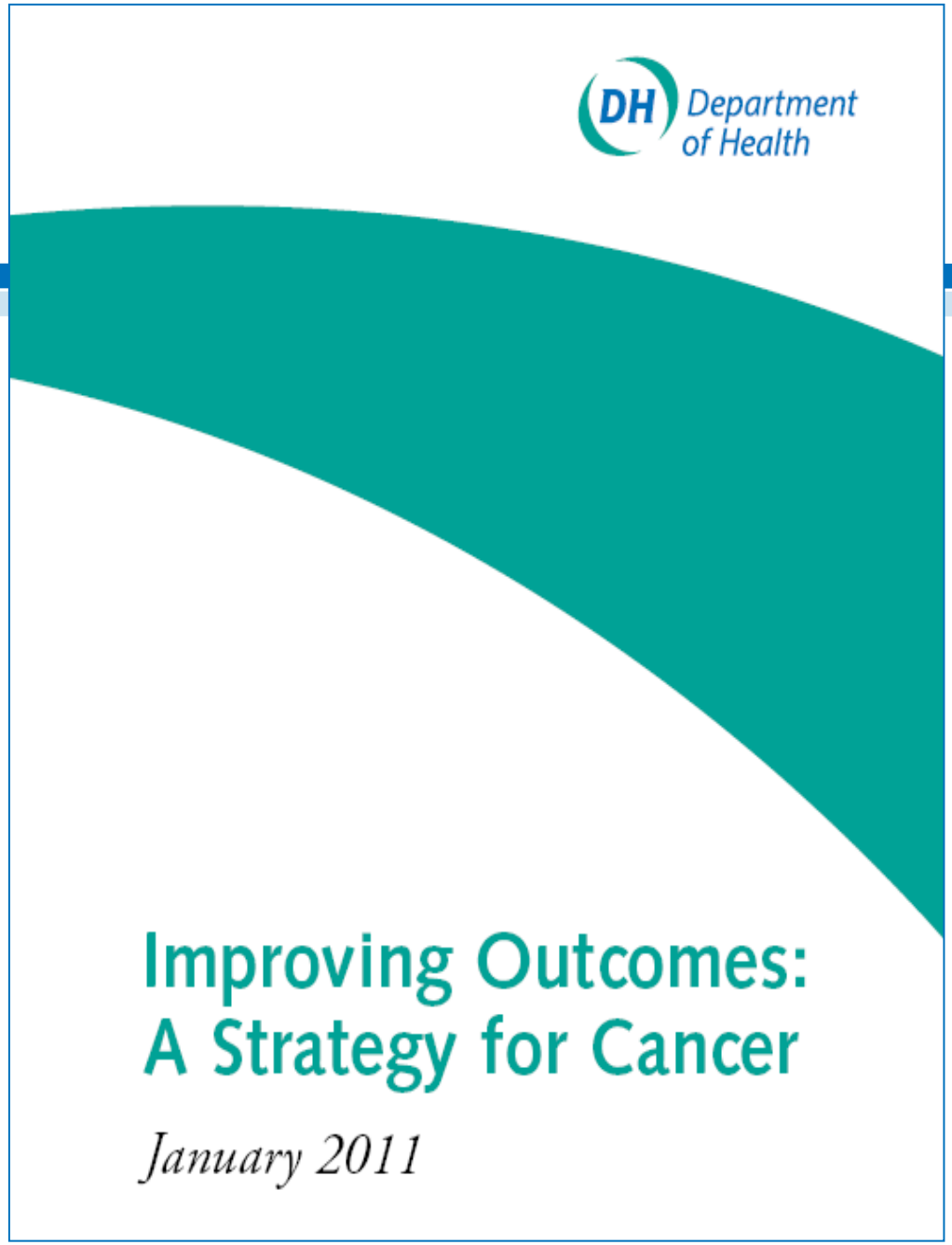
Using information to improve quality & choice

Cancer and Data in the 'New NHS' May 2011

Di Riley, Director
Clinical Outcomes

NCRI National Cancer Research Institute



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Alignment with NHS reforms

- ‘Improving outcomes: A strategy for cancer’ sets out how the future direction for cancer will be aligned with:
- Equity and Excellence: Liberating the NHS
- Healthy Lives; Healthy people
- The new emphasis on:
  - Patient information and choice
  - Outcomes not process targets
  - Stronger commissioning
  - New arrangements for public health and local democratic legitimacy

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

Darzi, High Quality Care for All, June 2008

Information and choice

Information will be central to the drive for better outcomes

- Increased patient choice – informed by reliable information on services and on outcomes
- Information Prescriptions partnership
- National Cancer Intelligence Network (NCIN)
  - data collection (e.g. stage; chemotherapy; date of recurrence)
  - making information available in appropriate formats for patients, clinicians and commissioners

Improving outcomes: level of ambition

"Our aspiration is that England should achieve cancer outcomes which are comparable with the best in the world"

"We believe that by 2014/15, **5000 additional lives can be saved each year**. It is now for the NHS, working with PHE to deliver this ambition"

Note: The "additional 5000 lives" will require England to match the European average. Approximately 10,000 additional lives would be saved if England was to match survival achieved in Sweden (and Australia and Canada)

Avoidable deaths pa if survival in England = best in World

Breast	~ 2000	Myeloma	250
Colorectal	~1700	Endometrial	250
Lung	~1300	Leukaemia	240
Oesophagogastric	~ 950	Brain	225
Kidney	~ 700	Melanoma	190
Ovary	~ 500	Cervix	180
NHL/HD	370	Oral/Larynx	170
Bladder	290	Pancreas	75

[NB Prostate has been excluded as survival 'gap' is likely to be due to differences in PSA testing rates.]

Data derived from Abdel-Rahman et al, BJC Supplement December 2009

Improving outcomes: Key Messages - 1

- Information & choice
- NAEDI
  - Public & GPs awareness campaigns
  - 1 year survival – indicator of progress
    - Proportion of cancers diagnosed at stages 1 and 2
    - Proportion of cancers diagnosed through emergency routes
    - GP usage of diagnostic tests
- Inpatient/emergency admissions
  - Reduced LOS (save >£200m pa)
  - Enhanced recovery
  - 23hr breast models
- Better treatments
  - Chemotherapy/radiotherapy

Improving outcomes: Key Messages - 2

- Outcomes not Targets
  - GFoCW
  - recurrence/metastatic information
- Quality Services
  - Peer Review – reduce burden by 40% (CQC)
  - MDTs
  - National Audits
  - Advanced comms. & Holistic needs assessments
- NCIN role to focus on:
  - Information for knowledge (outputs)
  - Data for information (inputs)

Improving outcomes: Commissioning

- Cancer commissioning complex
  - NHS Commissioning Board (specialised services)
  - GP consortia and local health and well-being boards
- Stronger commissioning supported by NICE quality standards
  - lung starting soon!
- NCAT/NCIN will work with networks and GP consortia (pathfinders)
  - to develop commissioning support packs
- Cancer networks to be funded during the transition

GP Practice Profiles for Cancer

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Cancer Indicators in (X48332) Dr Smith's Surgery, Another PCT (5XX)

These profiles provide comparative information for benchmarking and reviewing variations at a General Practice level. They are intended to help primary care think about clinical practice and service delivery in cancer and, in particular, early detection and diagnosis. They are not for the purpose of performance management and there are no 'right or wrong' answers.

Practice population (2008/09): 10,121

PCT population (all practices): 168,807

- Practice is significantly different from PCT mean
- Practice is not significantly different than PCT mean
- Statistical significance can not be assessed

England mean

Lowest in PCT | PCT 25th Percentile | PCT mean | PCT 75th Percentile | Highest in PCT

Domain		Indicator (Rate or Proportion in brackets)	Practice indicator value	Practice indicator rate or proportion	Lower 95% confidence limit	Upper 95% confidence limit	PCT mean	England mean	Practice rates or proportion in PCT: Lowest practice	Range	Highest practice
Demographics	1	Practice Population aged 65+ (% of population in this practice aged 65+)	1493	14.8%	14.1%	15.5%	17.0%	15.6%	10.1%		24.7%
	2	Socio-economic deprivation, "Quintile 1" = affluent (% of population income deprived)	Quintile 4	19.6%	18.8%	20.4%	19.7%	15.9%	10.2%		32.8%
	3	New cancer cases (Crude incidence rate: new cases per 100,000 population)	51	504	375	663	504	412	235		973
	4	Cancer deaths (Crude mortality rate: deaths per 100,000 population)	26	257	168	376	278	236	66		503
	5	Prevalent cancer cases (% of practice population on practice cancer register)	158	1.6%	1.3%	1.8%	1.1%	1.3%	0.3%		2.1%
Cancer screening	6	Females, 50-70, screened for breast cancer in last 36 months (3 year coverage, %)	837	70.1%	67.4%	72.6%	71.5%	71.8%	49.7%		79.6%
	7	Females, 50-70, screened for breast cancer within 6 months of invitation (Uptake, %)	13	28.9%	17.7%	43.4%	65.5%	74.3%	0.0%		77.4%
	8	Females, 25-64, attending cervical screening within target period (3.5 or 5.5 year coverage, %)	1964	80.2%	78.6%	81.8%	79.3%	75.4%	65.0%		88.5%
	9	Persons, 60-69, screened for bowel cancer in last 30 months (2.5 year coverage, %)	541	54.8%	51.7%	57.9%	51.6%	40.2%	35.3%		59.0%
	10	Persons, 60-69, screened for bowel cancer within 6 months of invitation (Uptake, %)	292	60.2%	55.8%	64.5%	56.8%	55.1%	40.4%		64.8%
Cancer Waiting Times	11	Two-week wait referrals (Number per 100,000 population)	162	1601	1364	1867	1417	1610	157		2599
	12	Two-week wait referrals (Number per 100,000 population, Age standardised)	162	100.9%	85.9%	117.7%	n/a	100.0%	10.5%		158.6%
	13	Two-week referrals with cancer (Conversion rate: % of all TWW referrals with cancer)	24	14.8%	10.2%	21.1%	14.5%	11.2%	5.7%		50.0%
	14	Number of new cancer cases treated (% of which are TWW referrals)	48	50.0%	36.4%	63.6%	44.5%	42.9%	12.5%		85.7%
	15	Two-week wait referrals with suspected breast cancer (Number per 100,000 population)	47	464	341	618	359	329	0		702
	16	Two-week wait referrals with suspected lower GI cancer (Number per 100,000 population)	38	375	266	515	270	251	0		771
	17	Two-week wait referrals with suspected lung cancer (Number per 100,000 population)	7	69	28	143	70	66	0		209
	18	Two-week wait referrals with suspected skin cancer (Number per 100,000 population)	10	99	47	182	146	280	0		566
Presentation & diagnostics	19	In-patient or day-case colonoscopy procedures (Number per 100,000 population)	103	1018	831	1234	877	513	302		1419
	20	In-patient or day-case sigmoidoscopy procedures (Number per 100,000 population)	40	395	282	538	324	380	55		682
	21	In-patient or day-case upper GI endoscopy procedures (Number per 100,000 population)	134	1324	1109	1568	1374	999	729		2385
	22	Number of emergency admissions with cancer (Number per 100,000 population)	48	474	350	629	583	691	239		1122
	23	Number of emergency presentations (% of presentations)	4	14.3%	5.7%	31.5%	33.7%	23.7%	12.5%		100.0%
	24	Number of managed referral presentations (% of presentations)	18	64.3%	45.8%	79.3%	46.8%	48.6%	0.0%		87.5%
	25	Number of other presentations (% of presentations)	6	21.4%	10.2%	39.5%	19.4%	27.7%	0.0%		50.0%

NCIN | NHS National Cancer Action Team | APE

Improving outcomes: Quality of life and patient experience

- Strategy builds on existing initiatives including:
  - The Advanced Communication Skills Training Programme (Connected)
  - The information prescriptions partnership
  - The National Cancer Survivorship Initiative
  - The Cancer Patient Experience Survey
  - New modeling on costs/benefits of one-to-one support
- Results of the cancer patient experience survey can be used to incentivise improvements
  - An aggregate score will be derived for each Trust
- Patient Related Outcome Measure (PROMs) will be piloted for cancer survivors
- New tariffs will be developed to incentivise better ‘aftercare’ for cancer patients

National support for implementation

- National Cancer Director post to remain
- Implementation Advisory Group established
- NCAT, NHS Improvement and NCIN will
  - support the implementation of strategy phase 1
  - future arrangements remain to be determined.
- Annual reports on progress will be published

Funding the new strategy

- An economic impact assessment published
- Government committed >£750m over the Spending Review period to achieve the strategy outcomes set out
- The main areas requiring increased expenditure will be:
  - Public awareness campaigns
  - Increased access to diagnostics for GPs
  - Flexible sigmoidoscopy screening
  - Increased use of surgery as more patients present with operable disease
  - Radiotherapy (including proton beam therapy)
- Most of increased expenditure offset by savings on I/P care
- The £750m does not include the £200m for the Cancer Drugs Fund

Alignment to the ‘5 Domains’

- Preventing Mortality
  - NAEDI
- Long Term Conditions
  - Survivorship (inc rehab workforce)
- Recovery from Ill-health
  - Transforming I/P care
- Patient Experience
  - Advanced comms. & Holistic needs assessments
  - MDTs
- Safety
  - RT, chemo, acute oncology
  - Peer Review, IOG implementation

So finally.....

Focus for us all:

- New NHS/PHE infrastructure
- New commissioning arrangements
- Improving Outcomes: A Strategy for Cancer
  - Outcomes agenda – new analyses
  - Standard datasets
  - Improved timeliness of data & reporting
  - Shared ‘data’ ownership

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Thank you

Any Questions

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National Cancer Data Repository
May 2011

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NCIN Core Objectives

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1. Promoting efficient and effective data collection throughout the cancer journey
2. Providing a common national repository for cancer datasets
3. Producing expert analyses, based on robust methodologies, to monitor patterns of cancer care
4. Exploiting information to drive improvements in standards of cancer care and clinical outcomes
5. Enabling use of cancer information to support audit and research programmes

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National Cancer Data Repository

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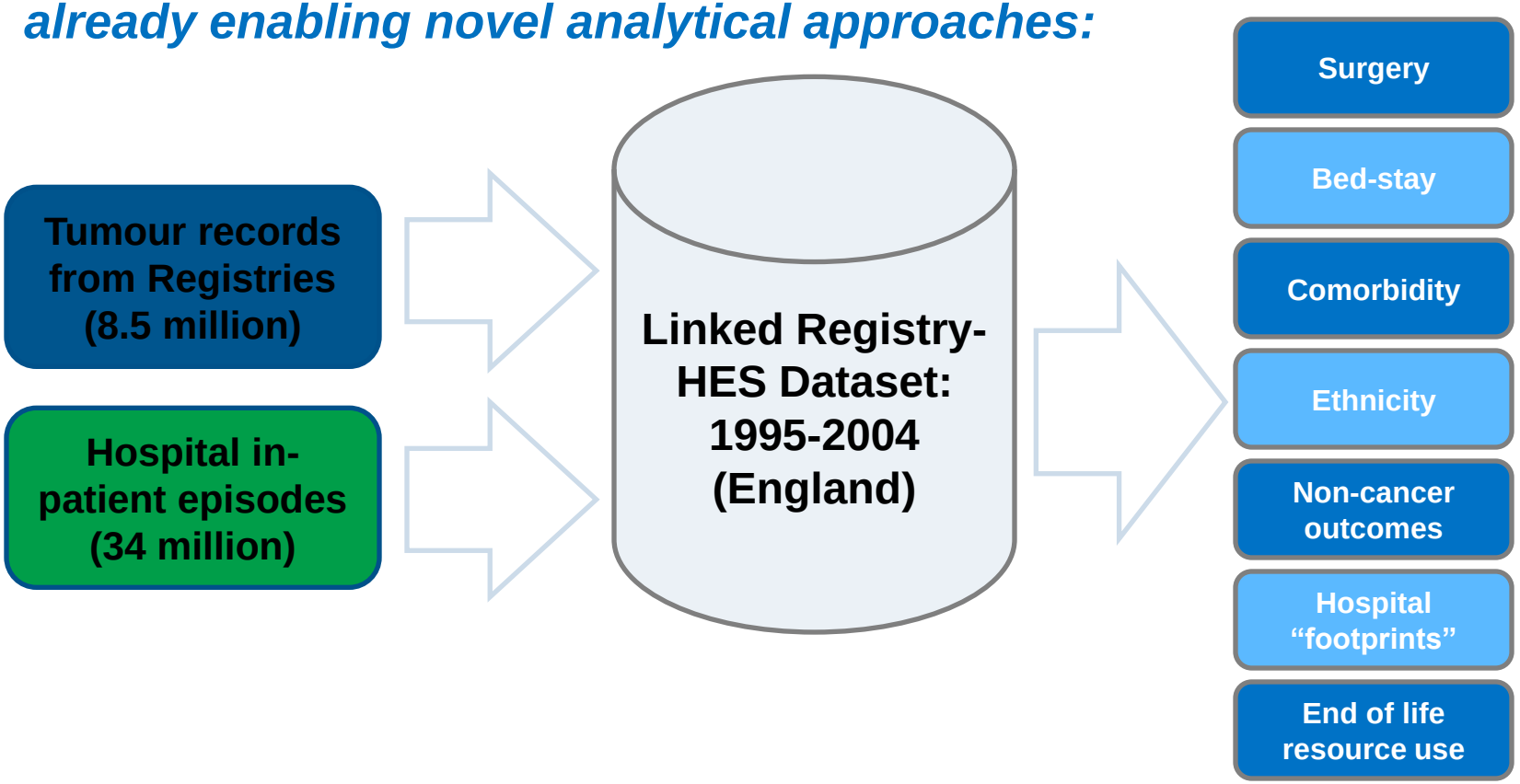
The linked national cancer data repository is already enabling novel analytical approaches:



National Cancer Data Repository

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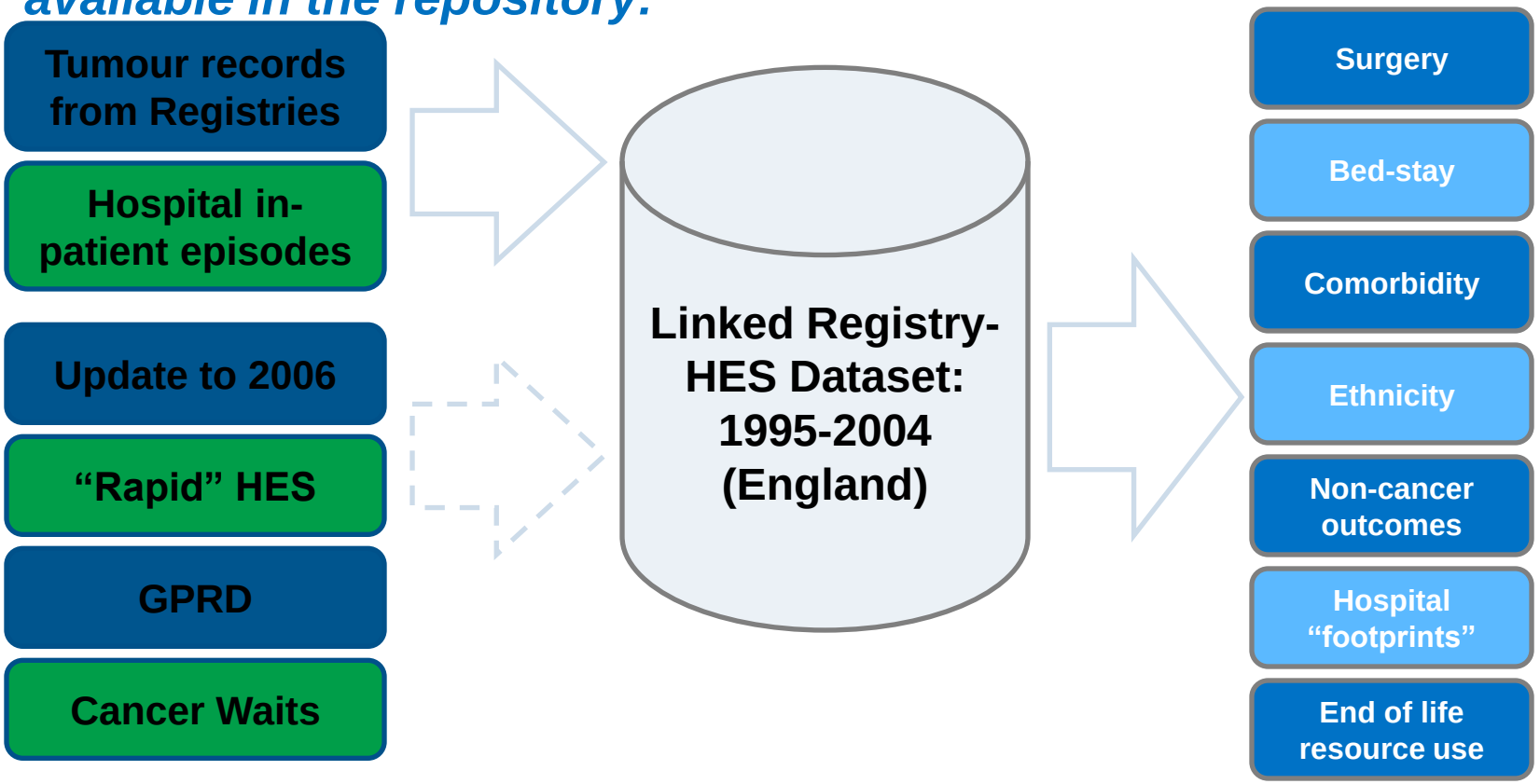
We are working to extend the range of data available in the repository:

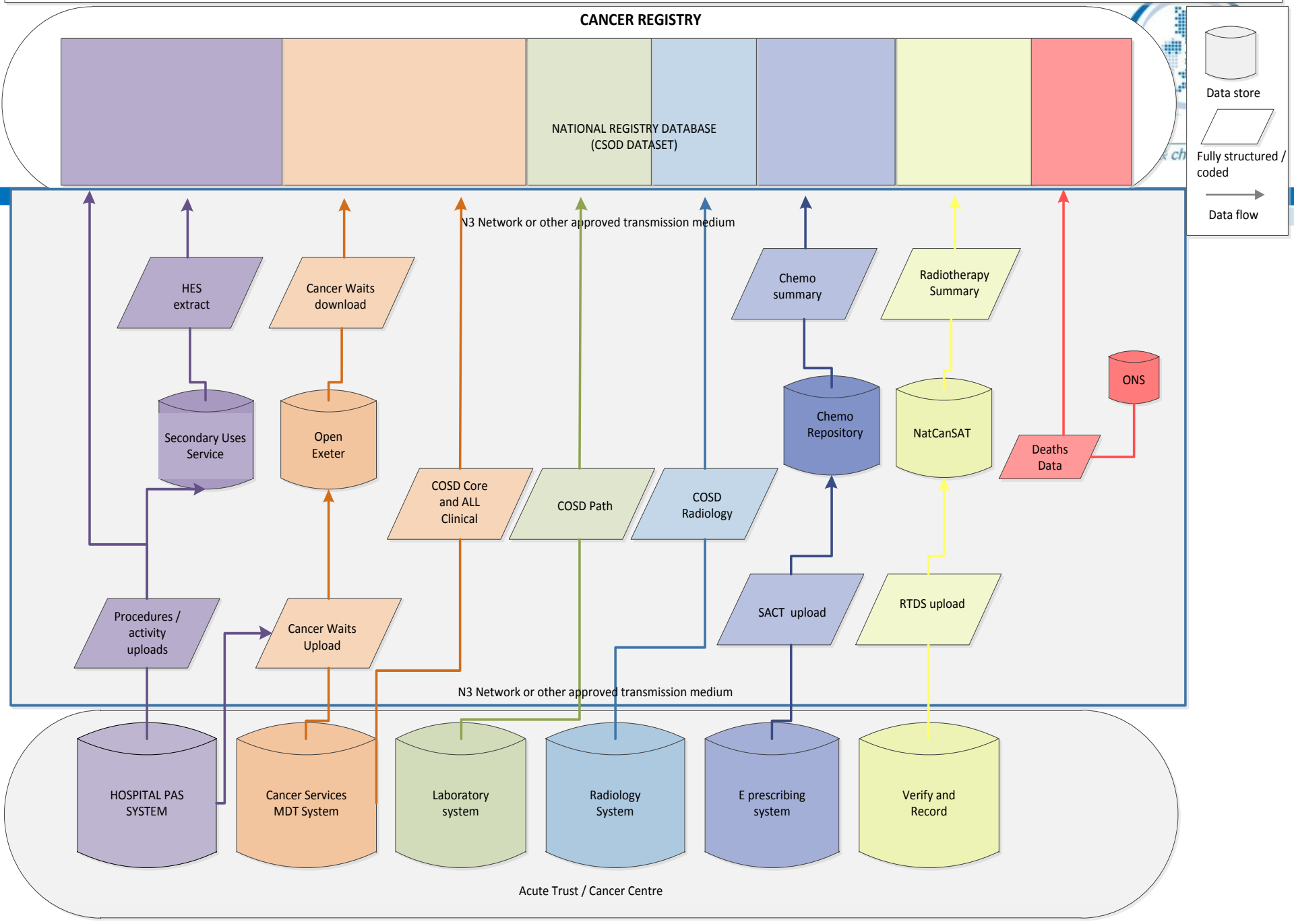


Cancer Registration - Vision

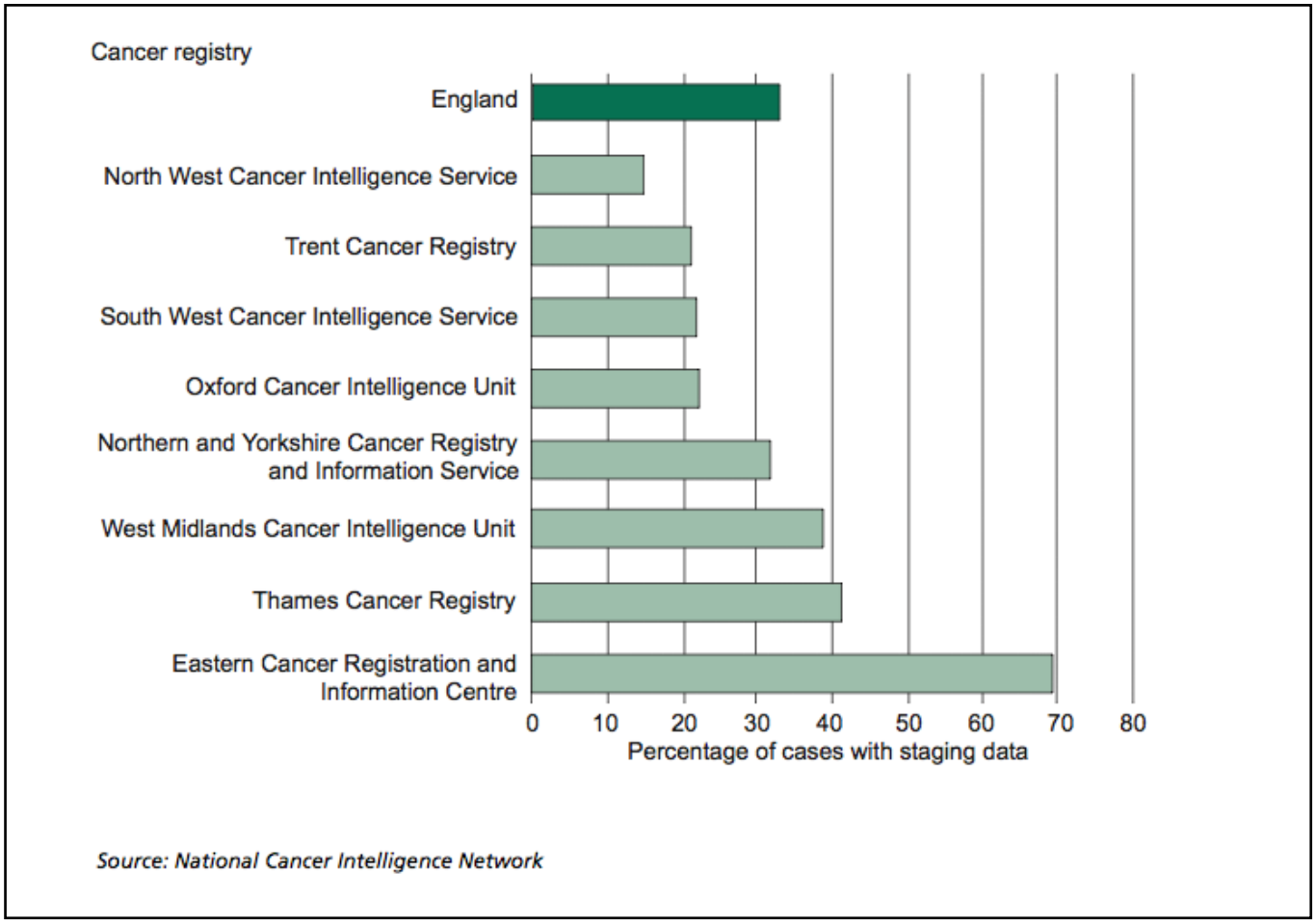
- To provide ‘timely’ comprehensive
  - data collection and quality assurance
  - over the **entire** cancer care pathway
  - all patients treated in England (& UK)
- Resource for
  - patient care, treatment variations
  - quality, safety and performance management
  - audit, research and outcome analyses
- Increased focus on:
  - Stage, radiology, standard datasets, timeliness

Modernisation of Cancer Registration

- By 2013 all 8 English Cancer Registries to be using one single database system:
  - Reduce duplication
  - Data along patient pathway (inc rec/mets)
  - Using national data feeds e.g. GFoCW, HES, RTDS
  - Local data supplements e.g. MDTs, pathology
  - Increased timeliness
  - Regular ‘progress’ reports to MDTs/trusts


CANCER REGISTRY
NATIONAL REGISTRY DATABASE
(CSOD DATASET)
Data store
Fully structured / coded
Data flow
N3 Network or other approved transmission medium
HES extract
Cancer Waits download
Chemo summary
Radiotherapy Summary
Secondary Uses Service
Open Exeter
Chemo Repository
NatCanSAT
ONS
Deaths Data
COSD Core and ALL Clinical
COSD Path
COSD Radiology
Procedures / activity uploads
Cancer Waits Upload
SACT upload
RTDS upload
N3 Network or other approved transmission medium
HOSPITAL PAS SYSTEM
Cancer Services MDT System
Laboratory system
Radiology System
E prescribing system
Verify and Record
Acute Trust / Cancer Centre

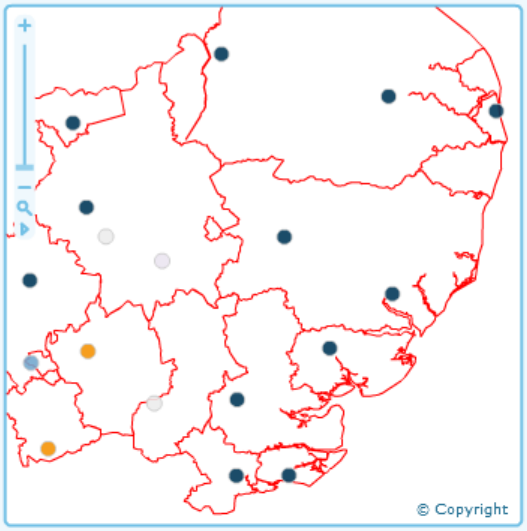
Registry Staging completeness - 2007



MDT Performance – Data completeness

Filter

Help



This report shows the completeness of certain key data items received each month by a Trust as discussed at MDT. By clicking on your Trust from the map above all the relevant data will appear on the performance chart to the right. You can compare your Trust to another by holding the Ctrl button and selecting another Trust. You can scroll the data down on the right hand side by hovering over the data and using the mouse wheel or holding the scroll bar (far right) and moving down/up. A full user guide is available by clicking the link on the introduction page; this will give you detailed instructions on how to use this report effectively.

Indicator	Hospital	Total Pts	Current Month %	Last Month %	Trend	Data Completeness
Date of Diagnosis: Aug-10	E+N Herts	16	100	94.40	↑	0 100
Date of Diagnosis: Aug-10	West Herts	8	100	100.00	–	0 100
Pre-Treatment TNM: Aug-10	E+N Herts	16	0	0.00	–	0 100
Pre-Treatment TNM: Aug-10	West Herts	8	0	0.00	–	0 100
Stage - Dukes: Aug-10	E+N Herts	16	50	44.40	↑	0 100
Stage - Dukes: Aug-10	West Herts	8	0	0.00	–	0 100
Final Treatment TNM: Aug-10	E+N Herts	16	0	27.80	↓	0 100
Final Treatment TNM: Aug-10	West Herts	8	12.5	28.60	↓	0 100
▼ Lung Cancer						
Date of Diagnosis: Aug-10	E+N Herts	13	92.3	93.80	–	0 100
Date of Diagnosis: Aug-10	West Herts	12	100	100.00	–	0 100
Tumour Laterality: Aug-10	E+N Herts	13	92.3	68.80	↑	0 100
Tumour Laterality: Aug-10	West Herts	12	75	90.90	↓	0 100
Pre-Treatment TNM: Aug-10	E+N Herts	13	0	18.80	↓	0 100
Pre-Treatment TNM: Aug-10	West Herts	12	25	72.70	↓	0 100
▼ Skin - C43						
Date of Diagnosis: Aug-10	E+N Herts	17	100	86.70	↑	0 100
Date of Diagnosis: Aug-10	West Herts	9	100	100.00	–	0 100
Breslow Thickness: Aug-10	E+N Herts	17	0	0.00	–	0 100
Breslow Thickness: Aug-10	West Herts	9	0	0.00	–	0 100
Final TNM: Aug-10	E+N Herts	17	0	0.00	–	
Final TNM: Aug-10	West Herts	9	0	0.00	–	
▼ Upper GI						
Date of Diagnosis: Aug-10	E+N Herts	5	80	85.70	↓	0 100
Date of Diagnosis: Aug-10	West Herts	4	100	100.00	–	0 100
Pre-Treatment TNM: Aug-10	E+N Herts	5	0	0.00	–	0 100
Pre-Treatment TNM: Aug-10	West Herts	4	0	0.00	–	0 100
▼ Pancreatic Cancer						
Date of Diagnosis: Aug-10	E+N Herts	1	100	100.00	–	0 100
Date of Diagnosis: Aug-10	West Herts	0	n/a	n/a	–	0 100
Pre-Treatment TNM: Aug-10	E+N Herts	1	0	0.00	–	0 100

<-5% Decrease ↓ -2% to -5% Decrease ↓ 1% to -1% No change – 2% to 5% Increase ↑ <5% Increase ↑ A ● B ● C ●

Regional Average %

Poor Medium Good

– +

Confirmed Pathology Reports

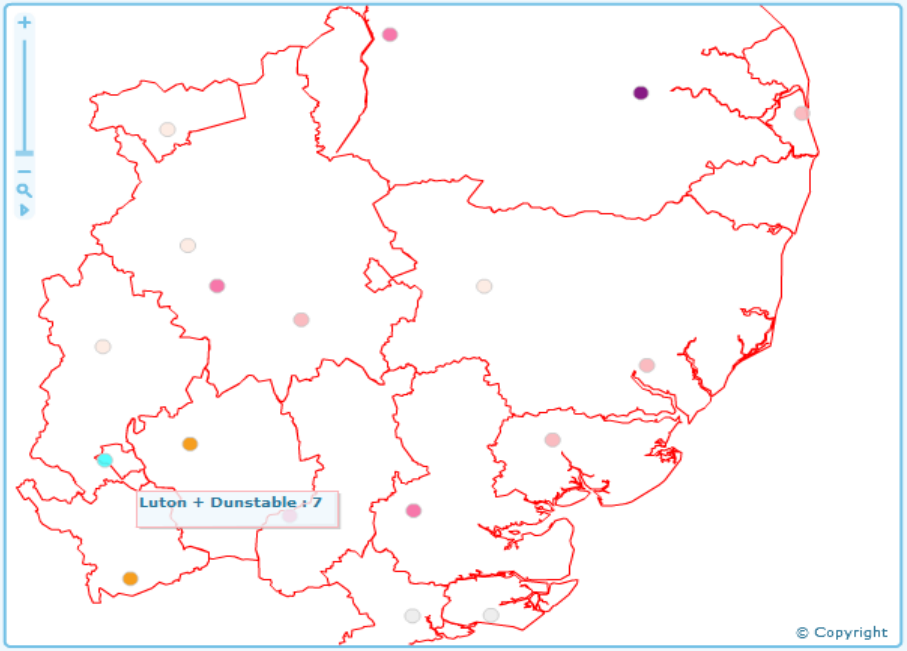
Tumour Groups >> Lung >> Nov 10

Confirmed Pathology Reports

Fighting cancer with information

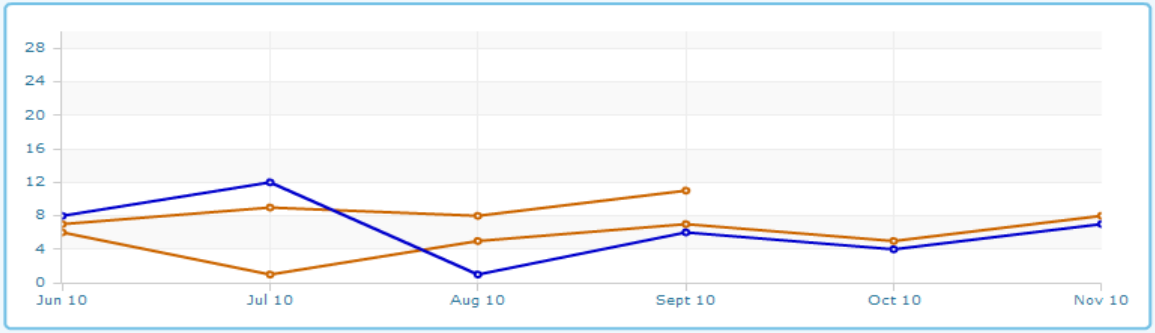
Data | Filter | Help

- Raw Pathology Data
  - Total Records Received
  - Number of Unique Patients
  - Number of New Tumours
- Tumour Groups
  - Brain/CNS
  - Breast
  - Endocrine
  - Gynaecological
  - Haematological
  - Head & Neck
  - Lower GI
  - Lung
    - Nov 10
    - Oct 10
    - Sept 10
    - Aug 10
    - Jul 10
    - Jun 10
  - Other
  - Sarcoma
  - Skin - C43 Only
  - Upper GI
  - Urological



Name	Indicator
Addenbrookes	8
Basildon	No Data
Bedford	0
Broomfield	9
Colchester	6
E+N Herts	No Data
Harlow	10
Hinchingbrooke	0
Ipswich	8
James Paget	6
Kings Lynn	9
Luton + Dunstable	7
Norfolk + Norwich	22
Papworth	10
Peterborough	2
Southend	No Data
West Herts	8
West Suffolk	1

This report shows the total number of pathology records received each month by a Trust. By using the data selector table (above and to the left of the report), these data can then be viewed by the Number of Unique Patients, the Number of New Registrations created from these data and the amount of New Tumours created by tumour group. A full user guide is available by clicking the link on the introduction page; this will give you detailed instructions on how to use this report effectively.



MDT Discussion

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Site Specific MDT's >> Lung >> Oct 10

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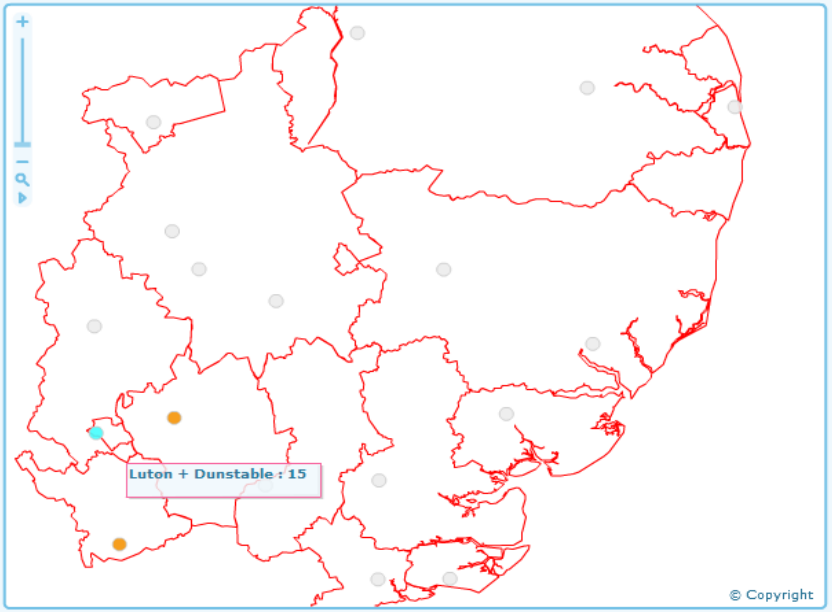
Fighting cancer with information

Patients Discussed at MDT

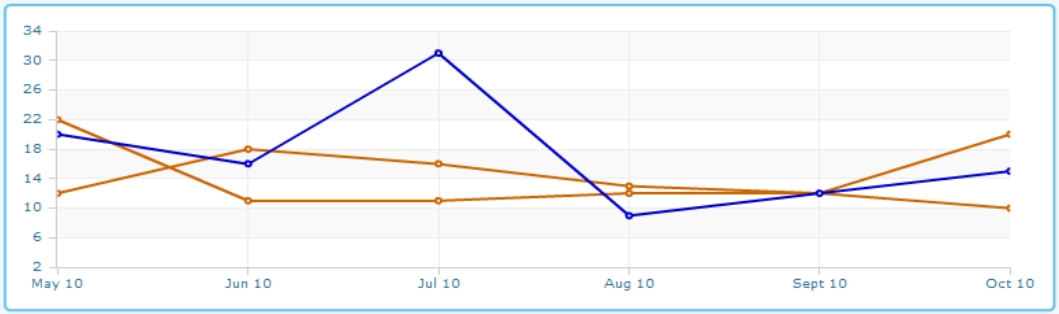
Data | Filter | Help

- Site Specific MDT's
  - Breast
  - Gynaecological
  - Haematological
  - Head & Neck
  - Thyroid
  - Lower GI
  - Lung
    - Oct 10
    - Sept 10
    - Aug 10
    - Jul 10
    - Jun 10
    - May 10
  - Skin
  - Upper GI
  - Pancreatic Cancer
  - Urology
  - Prostate Cancer

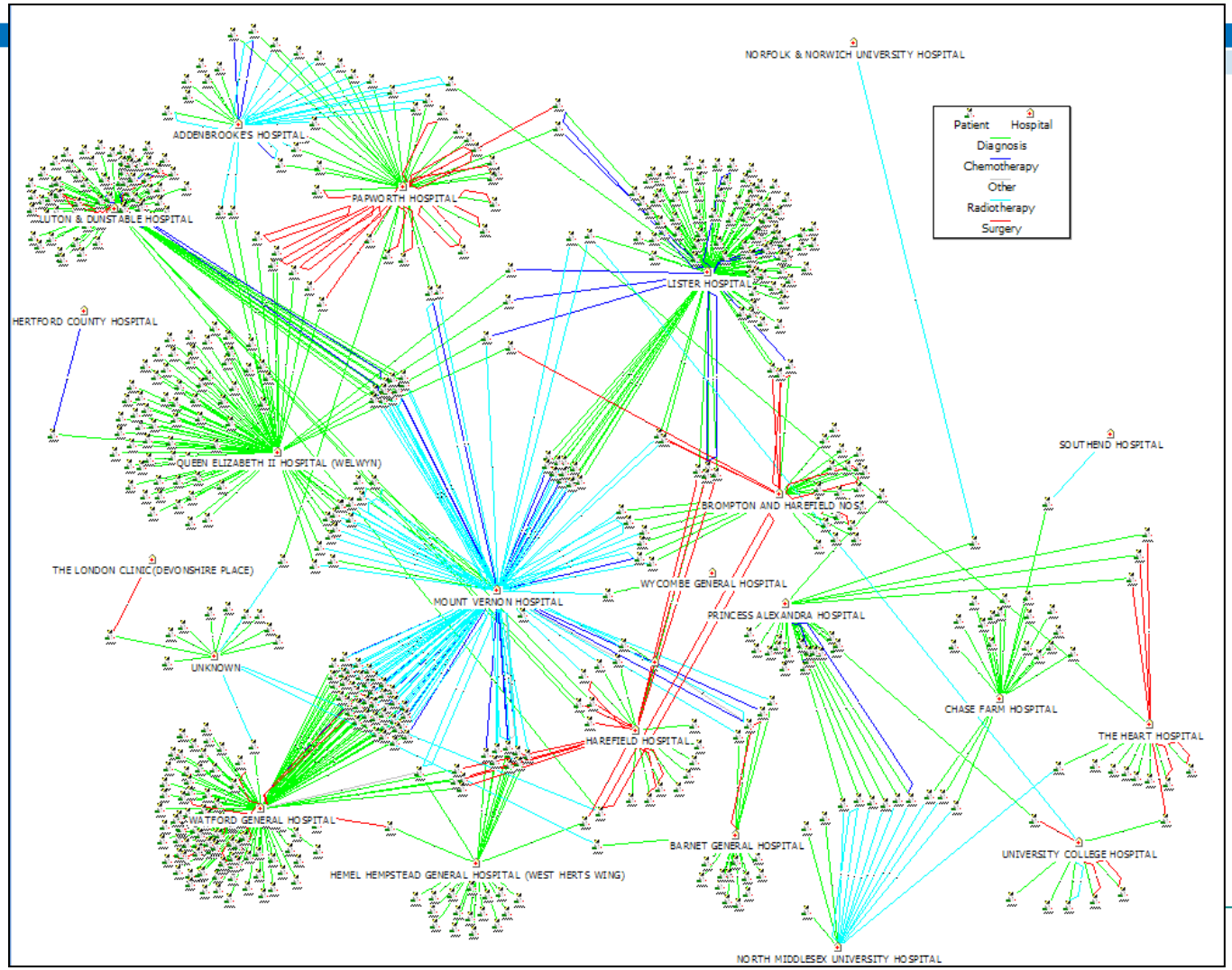


Name	Indicator
Addenbrookes	No Data
Basildon	No Data
Bedford	No Data
Broomfield	No Data
Colchester	No Data
E+N Herts	20
Harlow	No Data
Hinchingbrooke	No Data
Ipswich	No Data
James Paget	No Data
Kings Lynn	No Data
Luton + Dunstable	15
Norfolk + Norwich	No Data
Papworth	No Data
Peterborough	No Data
Southend	No Data
West Herts	10
West Suffolk	No Data

This report shows the total number of patients discussed at an MDT each month by a Trust (after certain normalisation of the data has been completed). By using the data selector table (above and to the left of the report), these data can then be viewed by site specific MDT, please refer to the Tumour Groupings on the index page for more accurate understanding of the tumours currently being assessed. A full user guide is available by clicking the link on the introduction page; this will give you detailed instructions on how to use this report effectively.



2009 Lung Cancer Patient Pathway



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Thank you

Any Questions