

NCIN

national cancer
intelligence network



Using information to improve quality & choice

What is the NCIN?

Dr Mick Peake

Clinical Lead, NCIN

www.ncin.org.uk

NCIN

national cancer
intelligence network



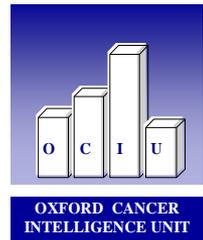
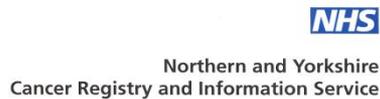
Using information to improve quality & choice

Goal for NCIN: “To develop the best cancer information service of any large country in the world – by 2012”

Mike Richards 2007

www.ncin.org.uk

NCIN Partners



Cancer Screening Programmes



Using information to improve quality & choice

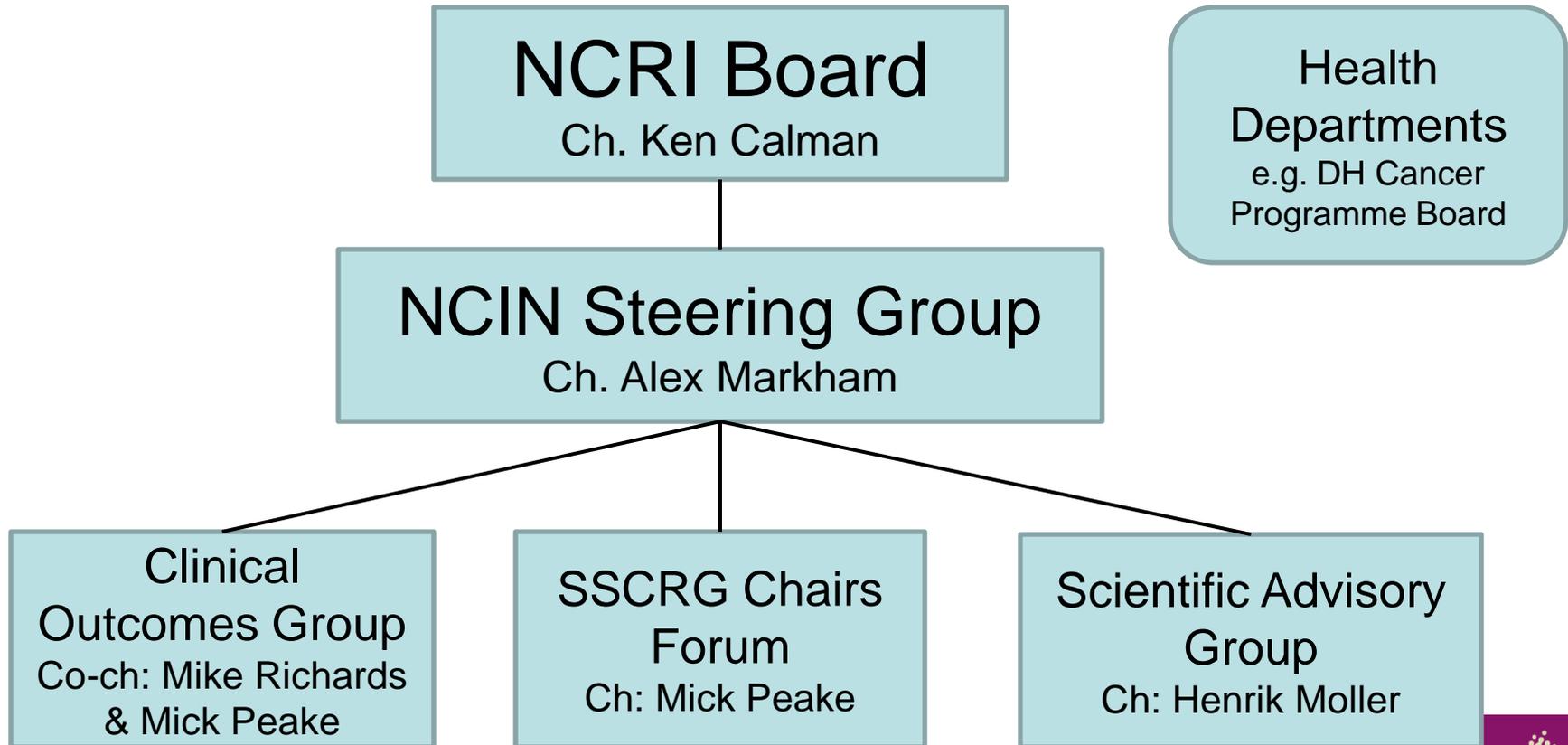
NCIN Direct Funders



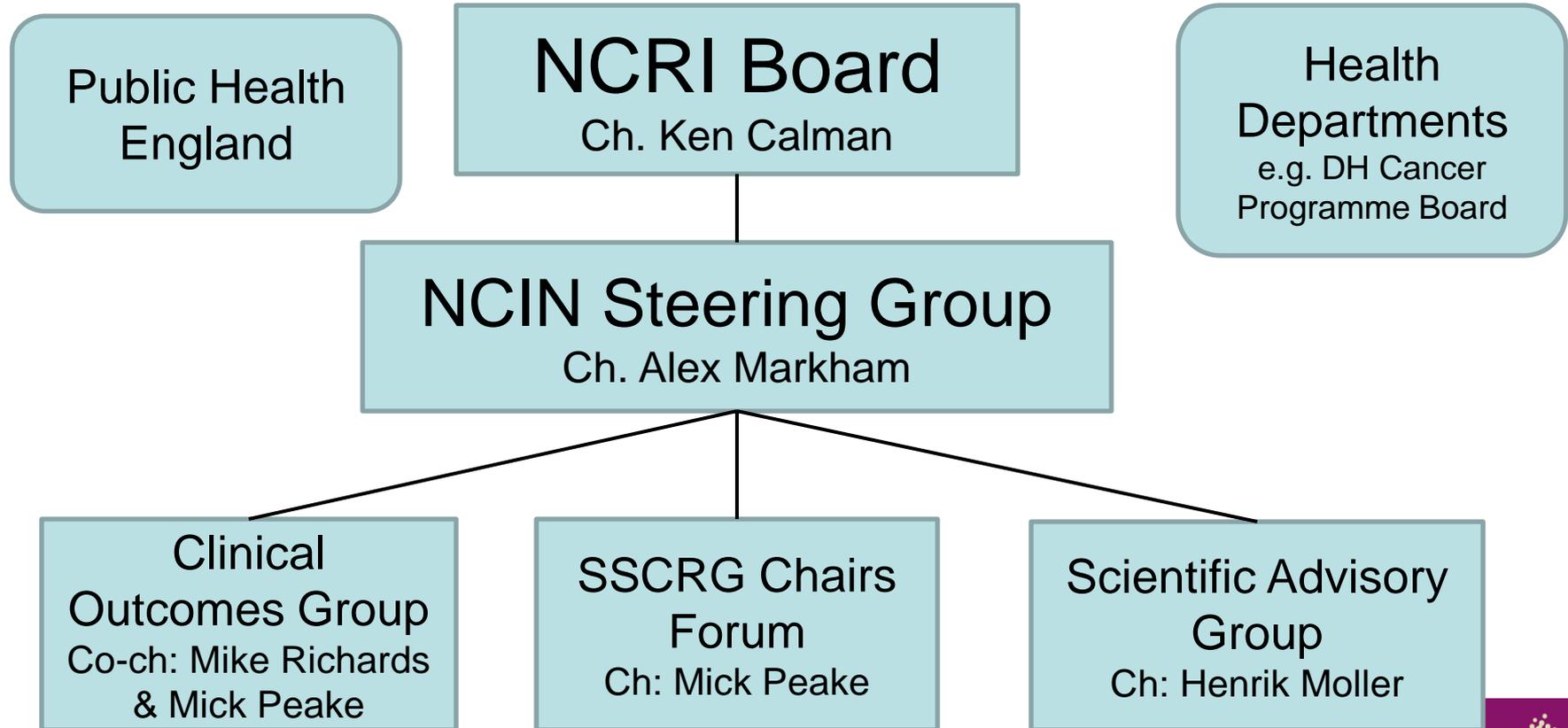
Using information to improve quality & choice



NCIN Governance



NCIN Governance

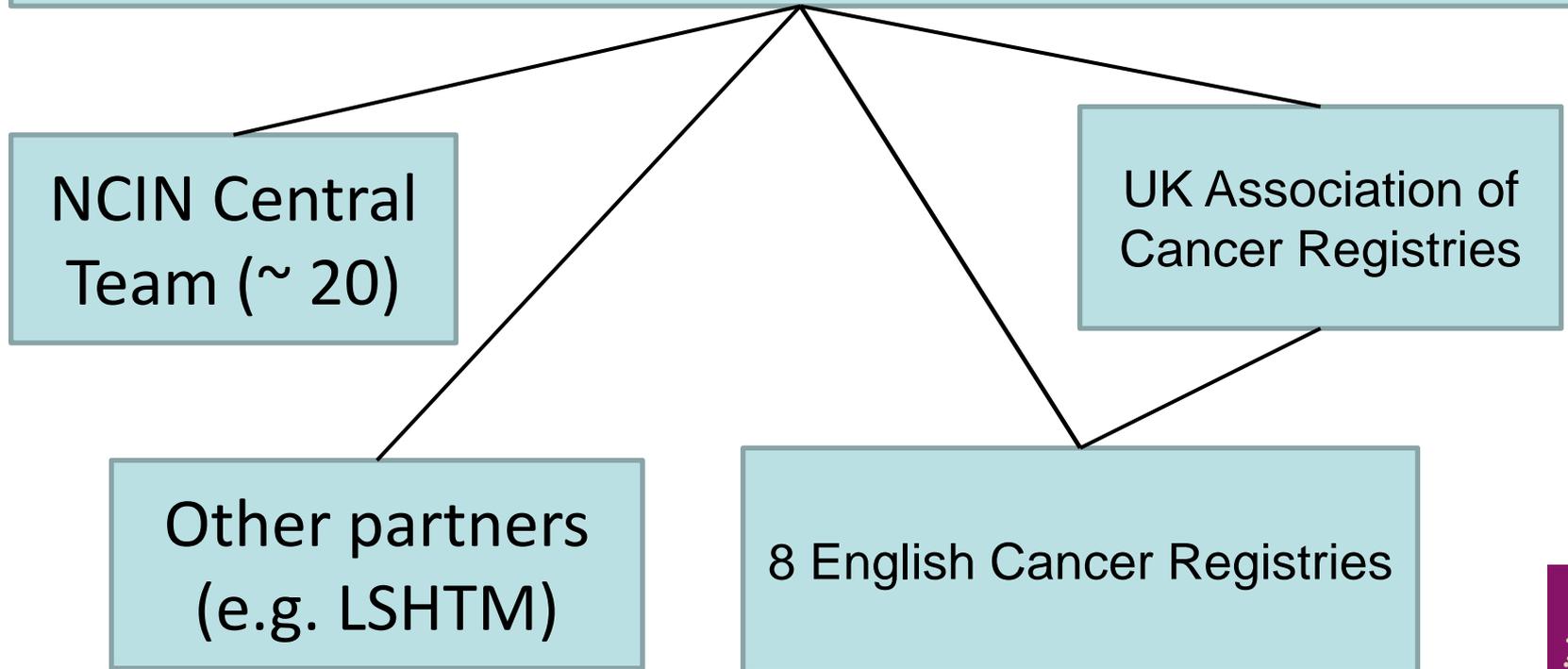


NCIN Organisation



NCIN Co-ordinating Senior Team

Chris Carrigan; Di Riley; Mick Peake; Henrik Möller; Anna Gavin; Michael Chapman



NCIN core objectives



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

Using information to improve quality & choice

Site-Specific Clinical Reference Groups

- **Brain/CNS**
- **Breast**
- **Children, Teenage & Young Adults**
- **Colo-rectal**
- **Gynaecological cancers**
- **Haematological cancers (including lymphoma)**
- **Head & Neck (including thyroid)**
- **Lung (including mesothelioma)**
- **Bone & soft tissue Sarcoma**
- **Skin (including non-melanoma)**
- **Upper GI (including Hepato-biliary)**
- **Urology (all 4 sub-types)**

Site-Specific Clinical Reference Groups

- In place since late 2008
- Very varied 'starting points' (e.g. Lung vs CNS tumours)
- Multi-disciplinary membership
- Strong links with professional bodies
- Work closely with a lead Cancer Registry
- Chairs' Forum meets twice a year
- Each holds annual workshops with Network SSG chairs
- Examples of work to date:
 - National Cancer Dataset
 - Review of National Cancer Data Repository
 - Work programmes
 - Production of 'data briefings'
 - Supporting Peer Review (Clinical Lines of Enquiry)

'Cross-cutting' Groups

- **Radiotherapy**
 - collection and use of RT data
- **Chemotherapy**
 - development and implementation of dataset
- **Pathology** (with RCPATH)
 - datasets
- **Radiology**: Joint RCR/NCIN working party
 - proforma-based (codable) reporting (diagnosis/stage)
 - extraction of data from RIS systems
- **Co-morbidity**
- **National Cancer Staging Panel (workshop 10th June)**
- **Health Economics workstream being established (workshop October 28th)**

NCIN – Main outputs

- National Cancer Data Repository
- National level reports
- E-Products:
 - eAtlas
 - Cancer Commissioning Toolkit
 - GP Practice profiles
- Data briefings
- Dataset development & implementation:
- Clinically-led work programmes
- HES-based ‘microsites’ (with NatCanStat)

Who do we produce intelligence for?

- Clinicians
- Department(s) of Health
- Health Care Providers
- Health Care Commissioners
- Research Community
- National Statistics
- International Cancer Benchmarking Partnership
- Patients and the public

National Cancer Data Repository (v2008)



Registry-HES linkage: 1985-2008 (England)

- >7.3 million tumour records from Registries
 - c. 30 fields of data
- >49 million hospital in patient episodes
 - c. 150 fields of data

Recently added

- National Cancer Audit data
- Co-morbidity (Charlson Index) recently added
- Radiotherapy Dataset now ready for analyses

National Cancer Data Repository: Potential linkages

- National cancer screening databases
- Outpatient HES
- IMS/ electronic chemotherapy prescribing (sample)
- National Cancer Dataset from Multi-disciplinary teams (stage, co-morbidity, performance status, etc.)
- Radiology reports & PET scans (2011?)
- Clinical trials
- Genetic/biobank and other research datasets
- PCT cancer budgeting data
- Scotland, Wales, Northern Ireland

Some national reports & analyses - www.ncin.org.uk



- **UK incidence & mortality**
- **One year survival**
- **Deprivation**
- **Prevalence**
- **Ethnicity**
- **Male Cancers**
- **Major Surgery**
- **Routes to Diagnosis**
- **Cervical, Breast and Head & neck cancers**
- **30-day mortality after coo-rectal surgery**

NCIN: Incidence and mortality



New cancer cases, crude and age-standardised incidence rates per 100,000 (with 95% confidence intervals), Cancer Networks, UK, 2005



Trends in one year cancer survival, England, 1985-2004



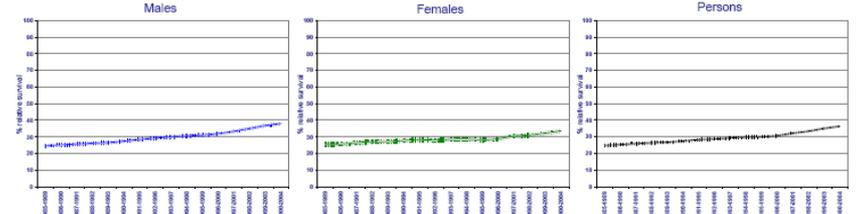
C00-C97 excl. C44: All malignant neoplasms (excl. non-melanoma skin cancer)

Cancer Network	Males				Females				Persons			
	Number of cases	Crude rate	ASR	95% confidence interval	Number of cases	Crude rate	ASR	95% confidence interval	Number of cases	Crude rate	ASR	95% confidence interval
NET Leukaemia and South-Central CH	4,417	563.5	448.9	432.0 - 467.2	4,157	544.2	365.0	346.4 - 387.6	8,574	553.1	407.0	392.1 - 424.1
NET Greater Manchester and Cheshire CH	1,707	512.6	486.9	463.6 - 489.9	1,720	487.6	387.9	348.5 - 389.6	3,427	495.1	402.9	387.2 - 419.8
NET Mersey Valley and Cheshire CH	4,289	563.9	442.6	431.0 - 455.0	4,209	575.1	387.2	378.2 - 396.4	8,498	570.5	439.8	426.1 - 445.1
NET Yorkshire CH	4,028	474.9	417.9	405.1 - 431.8	3,805	455.6	364.6	345.2 - 384.2	7,833	467.1	386.0	373.6 - 398.1
NET Yorkshire and Yorkshire Coast CH	2,895	526.9	436.2	426.9 - 445.7	2,850	502.5	365.8	342.4 - 371.4	5,745	514.7	379.8	369.0 - 389.2
NET North-Trent CH	4,823	540.7	430.8	423.0 - 445.2	4,800	519.8	376.2	356.8 - 397.7	9,623	529.8	403.4	386.0 - 422.0
NET Fife/Highland CH	4,485	484.8	434.1	421.2 - 448.9	4,211	438.0	361.4	345.1 - 387.8	8,696	461.6	366.2	348.7 - 403.8
NET Wales CH	3,278	482.1	384.4	368.5 - 403.4	2,210	445.7	338.0	321.2 - 350.7	5,488	465.9	360.2	349.3 - 371.0
NET Mid-Trent CH	4,269	543.2	418.8	405.0 - 431.4	4,018	487.8	368.1	347.4 - 370.8	8,287	520.1	386.8	369.2 - 397.2
NET Derbyshire CH	1,762	517.9	428.4	405.4 - 443.4	1,641	454.4	361.0	335.0 - 389.6	3,403	486.9	366.2	354.7 - 401.6
NET Leeds, West Yorkshire and York CH	3,818	483.4	432.8	423.4 - 441.8	3,620	443.5	362.3	343.2 - 381.2	7,438	470.3	377.8	369.0 - 383.8
NET Mersey CH	2,484	481.7	377.9	362.5 - 391.8	2,524	417.6	333.1	318.4 - 348.8	5,008	427.0	361.9	345.2 - 365.4
NET West London CH	3,119	382.1	372.4	363.2 - 381.6	3,120	352.8	304.8	278.9 - 330.4	6,239	368.4	301.8	287.2 - 309.8
NET South London CH	3,879	362.9	388.8	384.7 - 403.4	2,929	324.7	304.8	292.9 - 316.6	6,808	334.6	340.9	338.9 - 337.2
NET South West London CH	2,472	326.2	364.3	348.1 - 379.8	2,421	323.0	301.7	289.2 - 314.1	4,893	324.1	303.0	292.4 - 307.6
NET South East London CH	2,267	378.6	423.8	398.3 - 449.8	2,281	371.6	342.4	328.9 - 358.6	4,548	376.3	371.0	360.9 - 381.6
NET South West London CH	2,523	380.7	414.9	399.0 - 431.2	2,458	385.3	378.8	378.9 - 388.4	4,981	388.0	393.0	393.0 - 393.0
NET Hampshire CH	4,774	387.3	412.4	403.4 - 424.5	5,014	382.2	362.1	373.5 - 384.7	9,788	384.7	367.2	368.0 - 405.1
NET Kent CH	2,460	399.9	436.9	423.0 - 450.8	2,204	326.1	436.9	423.0 - 450.8	4,664	372.7	439.8	439.8 - 439.8
NET West of England CH	3,064	392.0	434.8	422.4 - 448.0	3,010	322.9	360.8	339.5 - 381.1	6,074	347.4	407.7	389.4 - 430.0
NET Cotswolds CH	2,893	361.3	381.8	378.0 - 401.7	2,858	363.2	343.5	329.5 - 357.5	5,751	351.7	367.2	357.3 - 377.8
NET Thames Valley CH	4,917	427.9	436.4	438.1 - 431.8	3,051	405.4	360.8	352.5 - 371.3	7,968	421.7	381.8	376.0 - 389.3
NET Central South Coast CH	3,247	386.0	428.4	411.7 - 435.0	3,111	325.3	376.9	359.0 - 400.8	6,358	345.2	368.0	361.6 - 407.6
NET Surrey, West Sussex and Hampshire CH	3,808	424.8	363.7	343.9 - 385.5	3,187	432.1	320.4	306.5 - 332.2	6,995	428.1	381.9	378.9 - 384.1
NET Bristol CH	2,743	522.7	381.2	347.8 - 415.8	2,607	519.8	322.0	306.8 - 331.2	5,350	519.5	341.8	332.2 - 351.8
NET East of England CH	3,761	471.9	381.9	369.5 - 384.4	3,610	484.6	340.7	329.2 - 351.2	7,371	488.2	381.3	372.9 - 389.8
NET London Midlands CH	4,822	481.2	388.4	383.0 - 400.8	4,100	480.1	360.8	350.7 - 369.6	8,922	480.6	370.7	361.8 - 379.8
NET South of England CH	1,718	381.2	434.6	414.0 - 454.1	1,700	314.6	307.4	292.7 - 304.8	3,418	352.9	367.9	361.8 - 404.4
NET Avon CH	4,162	362.9	389.3	374.8 - 397.4	3,111	431.2	381.8	378.1 - 384.8	7,273	437.4	368.9	358.0 - 381.6
NET Essex CH	1,265	379.7	374.1	374.1 - 374.1	1,010	424.8	374.1	374.1 - 374.1	2,275	424.8	374.1	374.1 - 374.1
England	118,203	488.9	437.9	436.8 - 439.3	113,340	467.8	362.3	346.1 - 364.9	231,643	478.3	364.0	371.6 - 361.6

C15: Oesophagus

Years of diagnosis	Males					Females					Persons				
	Number in Cohort	Cumulative Deaths	% Crude Survival	% Relative Survival	95% Confidence Interval	Number in Cohort	Cumulative Deaths	% Relative Survival	% Crude Survival	95% Confidence Interval	Number in Cohort	Cumulative Deaths	% Crude Survival	% Relative Survival	95% Confidence Interval
1985-1989	11,222	6,010	29.1	24.4	23.0 - 27.2	8,263	6,262	24.1	23.5	24.5 - 26.5	19,485	12,272	23.5	24.9	24.2 - 25.6
1990-1994	11,421	5,948	26.8	27.4	26.6 - 28.2	8,202	6,102	26.2	27.7	26.9 - 28.5	22,623	14,716	26.6	27.8	26.1 - 28.1
1995-1999	14,779	10,454	29.8	31.1	30.3 - 31.9	9,522	6,689	26.6	27.2	27.2 - 29.2	24,301	17,363	28.4	30.0	29.4 - 30.6
2000-2004	17,156	10,959	35.1	37.8	37.2 - 38.7	9,724	6,647	31.9	31.9	31.6 - 34.6	26,880	17,606	34.6	36.6	35.4 - 37.4

Estimated change per 5-yr cohort (%): Males 4.5, 1.7, - 7.2; Females 2.1, 0.6, - 6.6; Persons 3.7, 0.8, - 6.6



Cancer Network	Males					Females					Persons				
	Number in Cohort	Cumulative Deaths	% Crude Survival	% Relative Survival	95% Confidence Interval	Number in Cohort	Cumulative Deaths	% Relative Survival	% Crude Survival	95% Confidence Interval	Number in Cohort	Cumulative Deaths	% Crude Survival	% Relative Survival	95% Confidence Interval
NET Leukaemia and South-Central CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Greater Manchester and Cheshire CH	400	481	42.4	46.7	40.9 - 48.9	429	309	28.4	31.1	28.1 - 32.1	829	790	40.0	40.0	40.0 - 40.0
NET Mersey Valley and Cheshire CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Yorkshire CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Yorkshire and Yorkshire Coast CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET North-Trent CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Fife/Highland CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Wales CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Mid-Trent CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Derbyshire CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Leeds, West Yorkshire and York CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Mersey CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET West London CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET South London CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET South West London CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Hampshire CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Kent CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET West of England CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Cotswolds CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Thames Valley CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Central South Coast CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Bristol CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET East of England CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET London Midlands CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET South of England CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Avon CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
NET Essex CH	1,111	781	29.8	31.2	28.2 - 31.1	879	418	27.2	28.8	24.8 - 32.7	1,990	1,199	39.1	35.1	31.9 - 37.2
England	17,156														

Trends in 1 year survival: England 1985-2004

C00-C97 excl. C44: All malignant neoplasms (excl. non-melanoma skin cancer)

Males

Years of diagnosis	Number in Cohort	Cumulative Deaths	% Crude Survival	% Relative Survival	95% Confidence Interval
1985-1989	414,345	221,027	46.7	49.3	49.1 - 49.5
1990-1994	445,012	219,778	50.6	53.6	53.4 - 53.7
1995-1999	468,127	208,001	56.0	58.9	58.7 - 59.0
2000-2004	504,166	196,766	61.0	64.1	63.9 - 64.2

Estimated change per 5-yr cohort (%):	5.0	4.3 - 5.7
P value:	0.001	

Notes on Trend

Estimated 5.0% change per 5 year cohort gives an estimated increase of 1% per annum.

Females

Years of diagnosis	Number in Cohort	Cumulative Deaths	% Crude Survival	% Relative Survival	95% Confidence Interval
1985-1989	423,315	172,317	59.3	61.4	61.3 - 61.6
1990-1994	453,522	172,691	61.9	64.2	64.0 - 64.3
1995-1999	475,530	168,215	64.6	67.0	66.8 - 67.1
2000-2004	498,802	164,881	66.9	69.4	69.3 - 69.5

Estimated change per 5-yr cohort (%):	2.7	2.4 - 2.9
P value:	<0.001	

Notes on Trend

Estimated 2.7% change per 5 year cohort gives an estimated increase of 0.53% per annum.

Persons

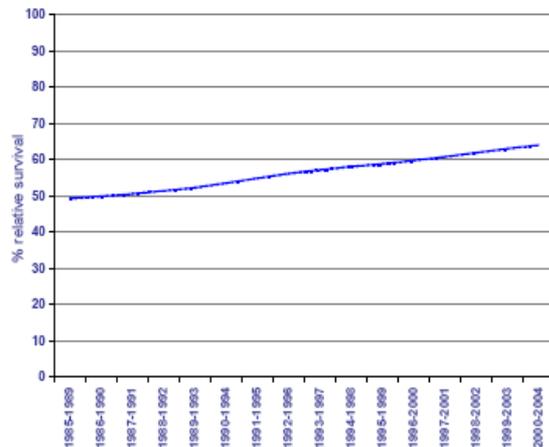
Years of diagnosis	Number in Cohort	Cumulative Deaths	% Crude Survival	% Relative Survival	95% Confidence Interval
1985-1989	837,660	393,344	53.0	55.5	55.4 - 55.6
1990-1994	898,534	302,469	56.3	59.0	58.9 - 59.1
1995-1999	943,657	374,216	60.3	63.0	62.9 - 63.1
2000-2004	1,002,968	361,647	63.9	66.7	66.6 - 66.8

Estimated change per 5-yr cohort (%):	3.8	3.5 - 4.1
P value:	<0.001	

Notes on Trend

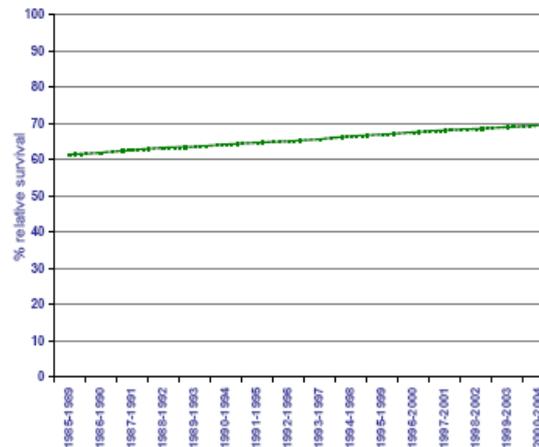
Estimated 3.8% change per 5 year cohort gives an estimated increase of 0.76% per annum.

Males



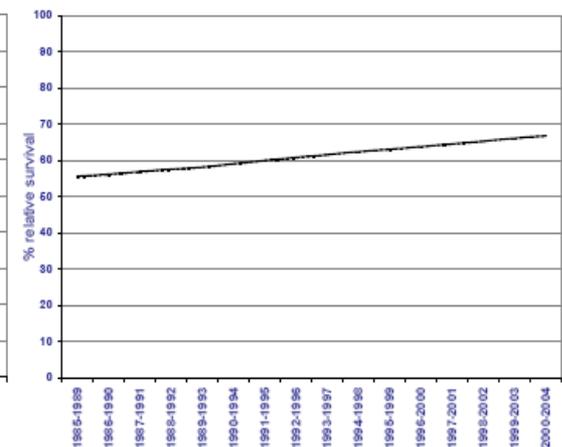
Rolling 5 year cohorts

Females



Rolling 5 year cohorts

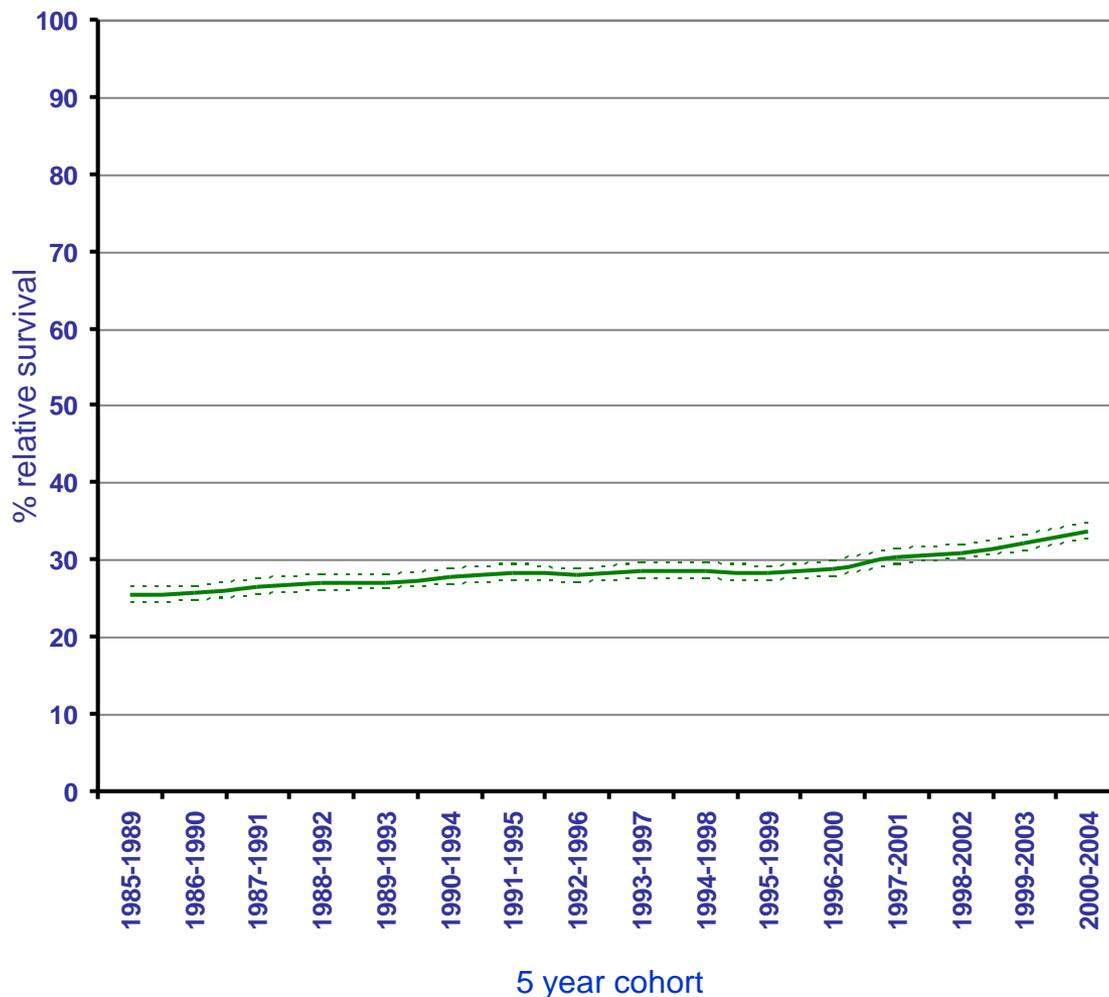
Persons



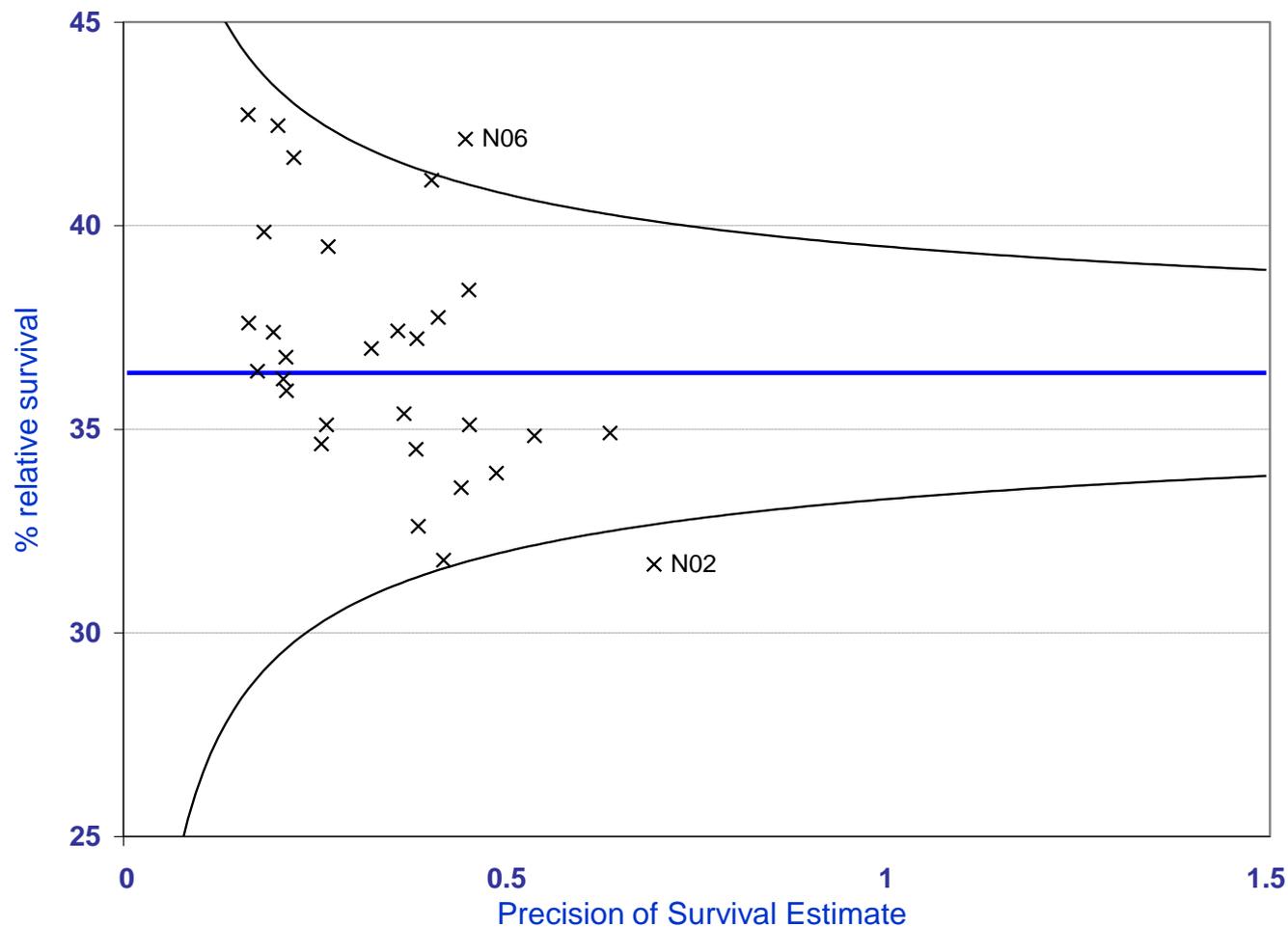
Rolling 5 year cohorts

--- Dotted lines show 95% confidence limits

Oesophagus: Trends in 1yr survival



Oesophagus 2005 by Cancer Network



Lung Cancer Incidence by deprivation

Cancer incidence by deprivation quintile, England, 1995 - 2004

C33-C34: Trachea, bronchus and lung

Males

Deprivation Quintile	Number of cases	Crude Rate	ASR	95% Confidence Interval	ASR Ratio	Excess Cases
1995-1999						
Least deprived	12,764	54.9	47.1	45.3 - 47.9	1.0	0
2	17,063	72.6	58.7	57.8 - 59.5	1.2	3,265
3	20,225	86.8	70.1	69.1 - 71.0	1.5	6,623
4	23,793	98.8	87.7	86.6 - 88.8	1.9	11,005
Most deprived	27,443	112.7	110.9	109.6 - 112.2	2.4	15,788
Overall	101,308	85.4	74.1	73.6 - 74.5		
2000-2004						
Least deprived	12,544	51.2	41.3	40.6 - 42.1	1.0	0
2	15,920	65.4	49.6	48.8 - 50.4	1.2	2,647
3	18,525	76.3	59.7	58.8 - 60.5	1.4	5,693
4	21,525	88.3	76.3	75.3 - 77.3	1.8	9,866
Most deprived	24,361	99.2	100.6	99.4 - 101.9	2.4	14,345
Overall	92,865	76.3	63.7	63.3 - 64.1		

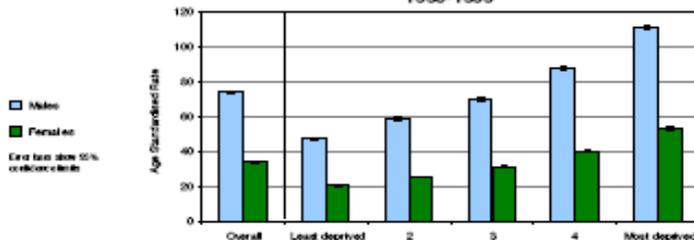
Females

Number of cases	Crude Rate	ASR	95% Confidence Interval	ASR Ratio	Excess Cases
1995-1999					
7,175	29.6	20.8	20.4 - 21.3	1.0	0
9,397	38.1	26.3	24.8 - 26.9	1.2	1,670
11,578	46.5	31.0	30.4 - 31.5	1.5	3,786
14,122	55.9	40.1	39.5 - 40.8	1.9	6,786
16,733	65.2	58.1	57.3 - 58.9	2.5	10,165
59,005	47.3	33.8	33.5 - 34.0		
2000-2004					
7,691	30.7	20.9	20.5 - 21.4	1.0	0
10,290	40.8	26.0	25.5 - 26.5	1.2	2,003
12,140	47.8	31.1	30.5 - 31.7	1.5	3,972
14,719	57.6	40.7	40.0 - 41.3	1.9	7,149
17,024	66.4	55.9	55.0 - 56.7	2.7	10,647
61,894	46.8	34.0	33.6 - 34.3		

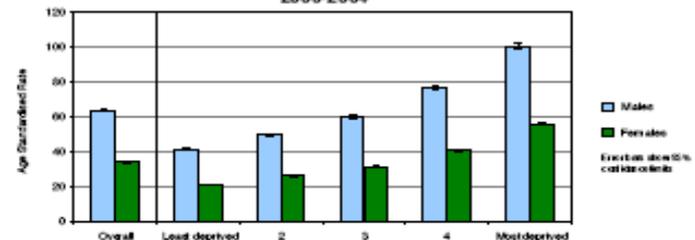
Persons

Number of cases	Crude Rate	ASR	95% Confidence Interval	ASR Ratio	Excess Cases
1995-1999					
19,969	41.9	32.0	31.5 - 32.4	1.0	0
26,460	54.9	39.6	39.1 - 40.0	1.2	5,025
31,803	66.6	47.5	47.0 - 48.0	1.5	10,409
37,915	77.2	60.1	59.5 - 60.7	1.9	17,760
44,178	88.3	77.8	77.1 - 78.6	2.4	25,951
160,313	65.9	50.9	50.7 - 51.2		
2000-2004					
20,295	40.9	29.8	29.4 - 30.3	1.0	0
26,210	52.9	36.3	35.8 - 36.7	1.2	4,650
30,665	61.7	43.3	42.9 - 43.8	1.5	9,066
36,244	72.6	55.8	55.3 - 56.4	1.9	17,008
41,375	82.5	75.2	74.5 - 75.9	2.5	24,993
154,729	62.2	46.9	46.6 - 47.1		

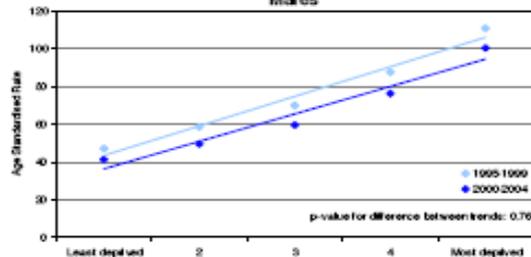
1995-1999



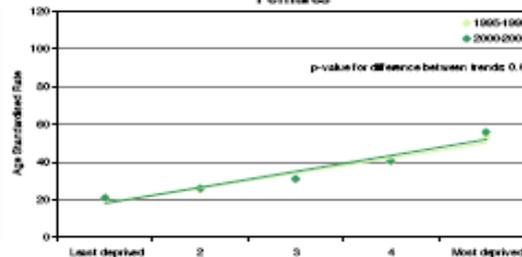
2000-2004



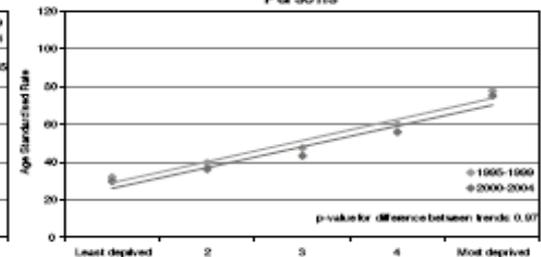
Males



Females



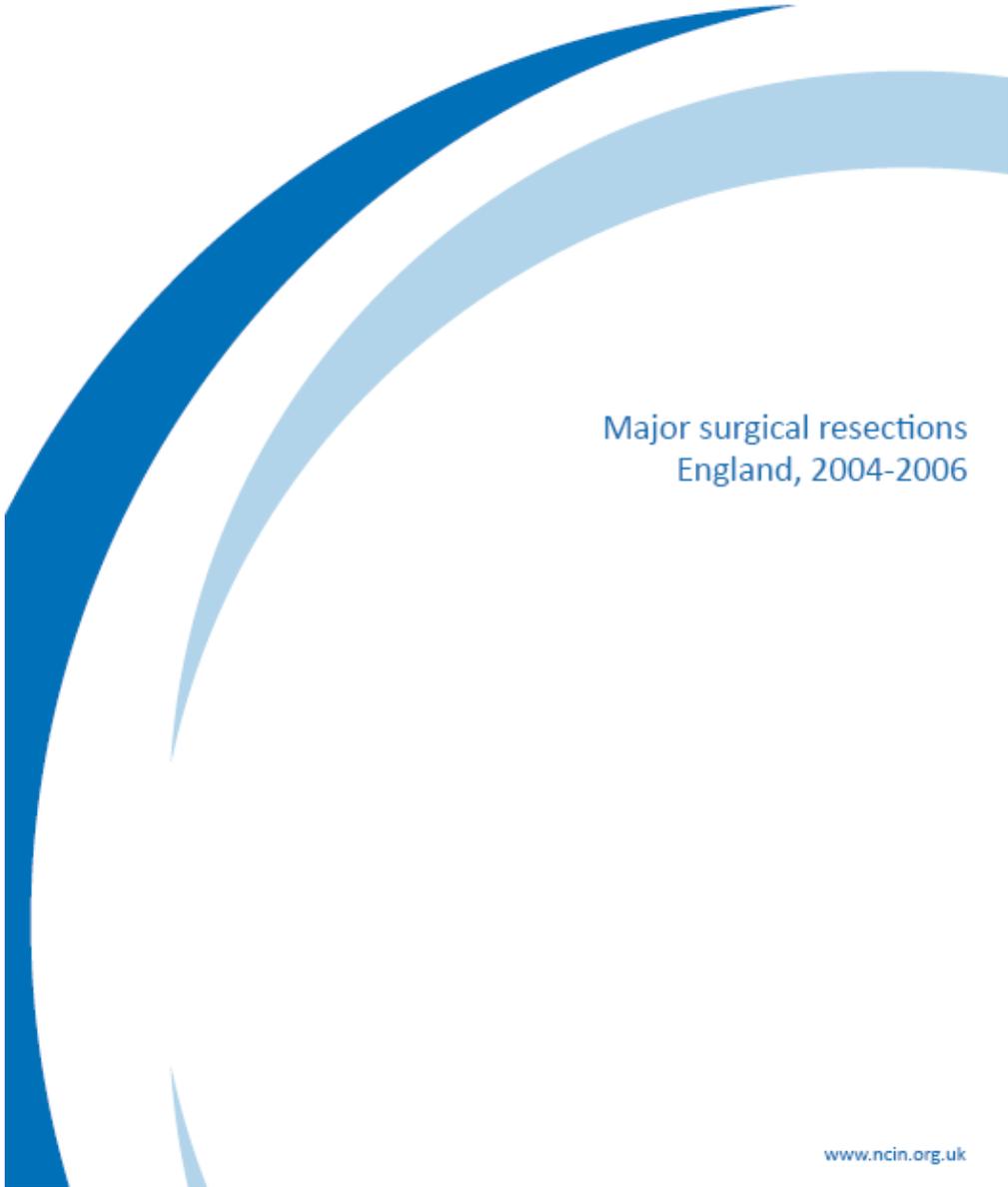
Persons



Cohort	Est. Deprivation Gap (Difference in ASR)	95% Confidence Interval	Modelled % Change for Trend	P-value for Trend
1995-1999	65.5	49.0 - 86.1	15.0%	0.002
2000-2004	62.4	37.5 - 87.4	18.2%	0.004

Cohort	Est. Deprivation Gap (Difference in ASR)	95% Confidence Interval	Modelled % Change for Trend	P-value for Trend
1995-1999	33.8	20.7 - 46.9	19.6%	0.004
2000-2004	36.8	20.3 - 53.3	22.2%	0.006

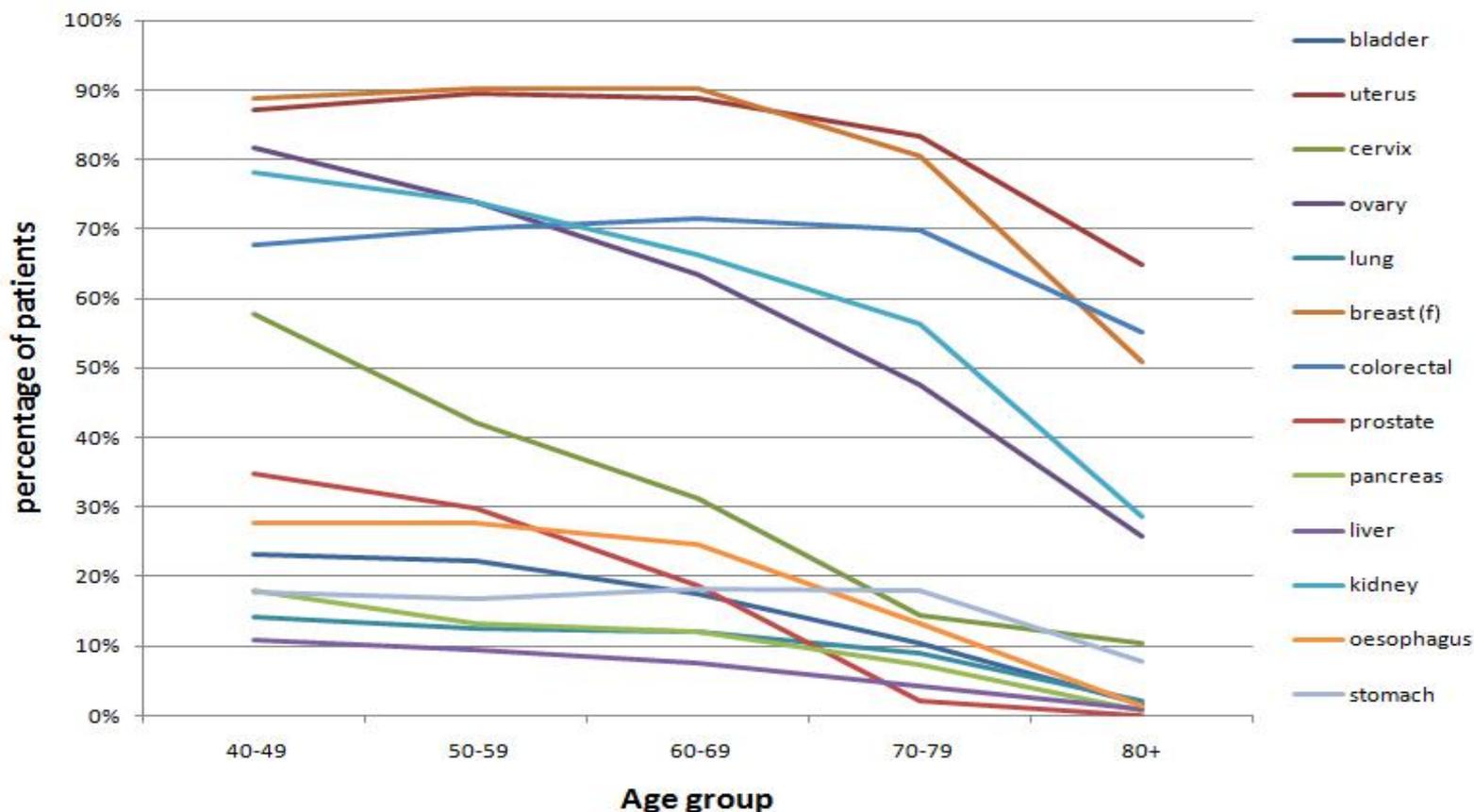
Cohort	Est. Deprivation Gap (Difference in ASR)	95% Confidence Interval	Modelled % Change for Trend	P-value for Trend
1995-1999	47.4	31.1 - 63.7	17.1%	0.003
2000-2004	47.7	27.2 - 68.3	19.6%	0.005



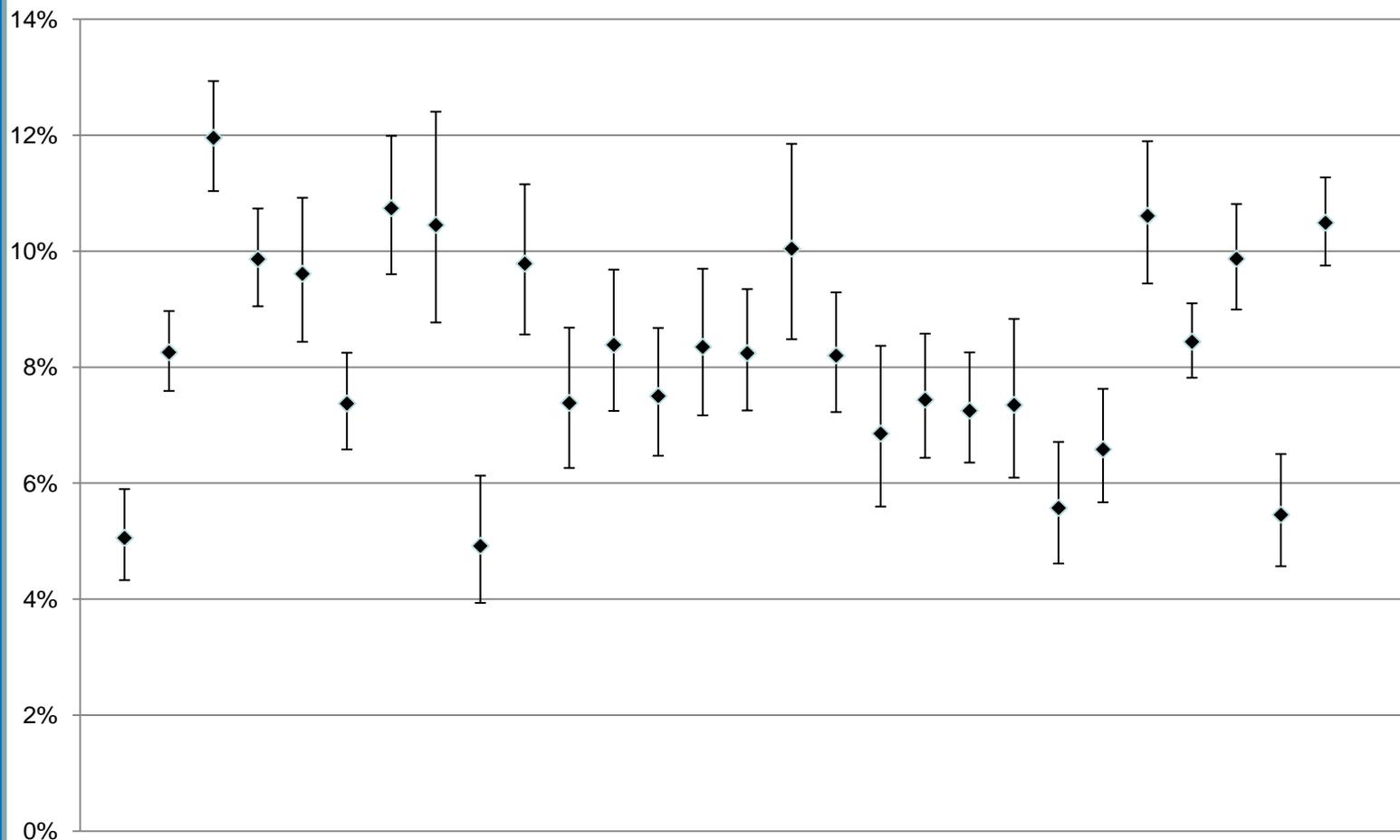
Major surgical resections
England, 2004-2006

Major resection rates by age

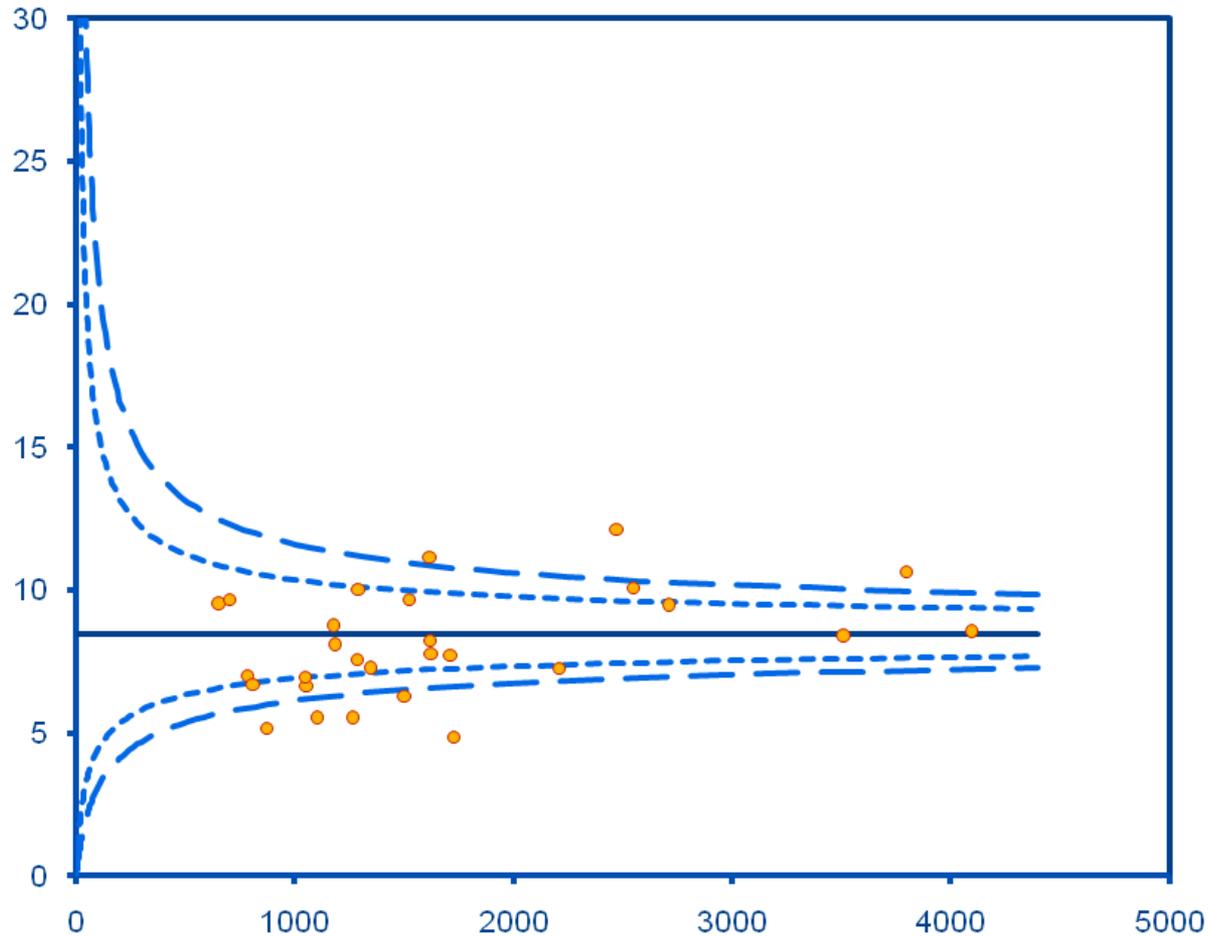
Percentage of patients with a record of a major resection, by age and cancer site, patients diagnosed 2004-2006, followed up to 2007



Cancer Networks – Lung



Using information to improve quality & choice



Using information to improve quality & choice

Routes to Diagnosis

	GP/OP referral	Two Week Wait	Emergency presentation	Other outpatient	Screen detected	Inpatient elective	DCO	Unknown	Total	Number of patients
Acute leukaemia	17%	3%	61%	12%	0%	4%	0%	4%	100%	380
Bladder	22%	36%	18%	13%	0%	6%	1%	5%	100%	1,167
Brain & CNS	18%	2%	49%	20%	0%	5%	0%	5%	100%	740
Breast	8%	40%	5%	5%	28%	2%	0%	13%	100%	5,646
Cervix	21%	17%	12%	8%	23%	3%	1%	15%	100%	308
Chronic leukaemia	26%	6%	45%	13%	0%	4%	1%	4%	100%	629
Colorectal	19%	29%	24%	12%	0%	8%	0%	7%	100%	4,515
Kidney	22%	26%	23%	16%	0%	5%	0%	8%	100%	928
Larynx	35%	34%	8%	14%	0%	5%	0%	3%	100%	216
Lung	15%	26%	38%	10%	0%	4%	1%	7%	100%	3,893
Melanoma	23%	39%	4%	8%	0%	5%	0%	22%	100%	1,686
Multiple myeloma	20%	14%	44%	13%	0%	4%	1%	5%	100%	606
Non-Hodgkin's lymphoma	25%	22%	25%	13%	0%	6%	1%	9%	100%	1,349
Oesophagus	15%	32%	21%	14%	0%	13%	0%	4%	100%	912
Oral	32%	27%	5%	14%	0%	4%	1%	17%	100%	458
Ovary	20%	29%	28%	11%	0%	3%	1%	8%	100%	853
Pancreas	13%	20%	45%	10%	0%	5%	1%	7%	100%	917
Prostate	26%	28%	11%	11%	0%	7%	0%	16%	100%	4,865
Stomach	14%	24%	31%	13%	0%	11%	1%	6%	100%	801
tbc (other)	21%	18%	34%	12%	0%	4%	1%	9%	100%	4,323
Testis	14%	47%	9%	15%	0%	4%	0%	11%	100%	259
Uterus	28%	36%	8%	12%	0%	5%	0%	12%	100%	918
Total	19%	28%	22%	11%	5%	5%	1%	10%	100%	36,369

All cancer Routes to Diagnosis: by cancer type

All malignant registrations
South West 2007
excluding C44 and multiples

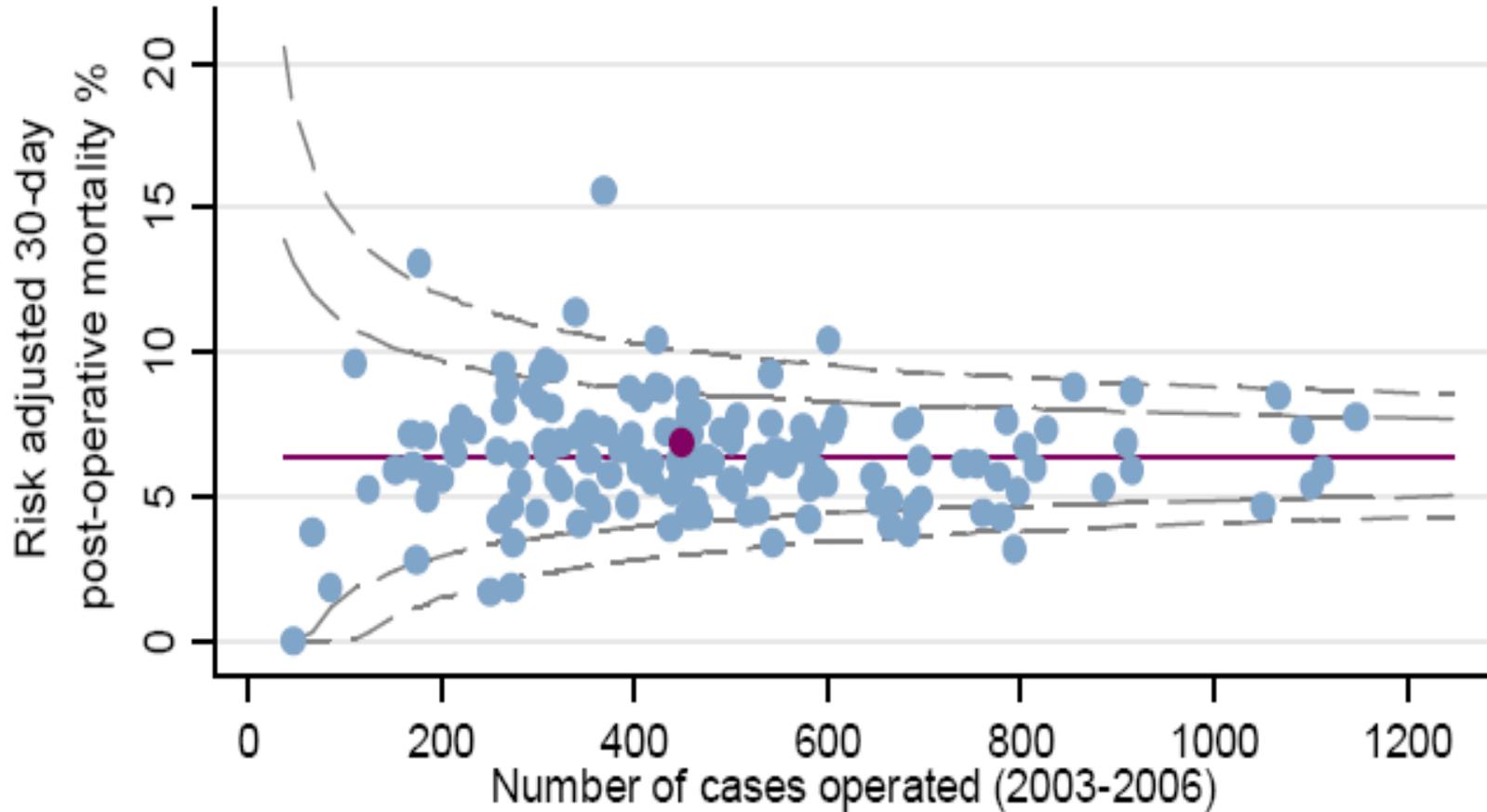


Relative one year survival: by cancer type

Malignant registrations, South West 2007, excluding multiples and DCOs

Cancer type	GP/OP referral (+TWW)		Emergency		Other route		EUROCARE
	Relative Survival	95% CIs	Relative Survival	95% CIs	Relative Survival	95% CIs	Relative Survival
Acute leukaemia	39.7	(28.1 - 51)	39.4	(32.9 - 45.8)	40.4	(29 - 51.5)	
Bladder	78.3	(74.6 - 81.5)	34.0	(27.3 - 40.8)	79.2	(73.2 - 84)	85.3
Brain & CNS	68.4	(60.1 - 75.4)	34.0	(29.1 - 38.9)	60.6	(53.6 - 66.8)	39.1
Breast	97.7	(96.8 - 98.4)	50.8	(44.4 - 56.9)	98.2	(97.5 - 98.8)	95
Colorectal	84.5	(82.7 - 86.2)	48.4	(45.2 - 51.5)	79.5	(76.9 - 81.9)	74.7
Kidney	81.1	(76.8 - 84.7)	24.0	(18.4 - 30)	72.4	(66.1 - 77.7)	74.7
Lung	39.8	(37.4 - 42.3)	8.9	7.6 - 10.3)	32.4	(29.1 - 35.7)	36.1
Multiple myeloma	83.6	(76.8 - 88.5)	53.1	(46.5 - 59.2)	73.0	(63.7 - 80.3)	70.5
Non-Hodgkin's lymphoma	86.6	(83.2 - 89.3)	43.7	(38.1 - 49.1)	80.9	(76 - 84.9)	73.1
Oesophagus	43.8	(38.9 - 48.6)	22.4	(16.7 - 28.7)	45.5	(39.5 - 51.4)	36.3
Other	81.1	(79.8 - 82.4)	27.2	(25.2 - 29.2)	77.8	(76.1 - 79.5)	
Ovary	83.4	(79.1 - 86.9)	38.8	(32.4 - 45.1)	72.1	(64.7 - 78.3)	70.7
Pancreas	21.0	(16.6 - 25.9)	6.0	(4.1 - 8.6)	22.3	(16.8 - 28.4)	19.2
Prostate	98.0	(97 - 98.7)	48.2	(43.6 - 52.7)	98.3	(96.9 - 99.1)	92.2
Stomach	49.1	(43.1 - 54.8)	17.7	(13.3 - 22.8)	47.6	(41 - 54)	44.1

30 day mortality data: Colo-rectal cancer surgery



NCIN data briefings 2010-11

- **CNS Tumour – developing a tumour registry**
- **Soft tissue sarcomas – Incidence & Survival**
- **Cervical cancer incidence and screening coverage**
- **Pancreatic carcinoma in the young**
- **Geographic variation in primary liver & gall bladder cancers**
- **Oral cavity cancers**
- **Major surgical resections in England**
- **Routes to diagnosis**
- **Malignant pleural mesothelioma**
- **Bone sarcomas – incidence and survival**
- **Breast cancer (x3): Deprivation; elderly; ethnicity**
- **Prostate cancer survival**
- **Skin cancer registration**
- **30-day colo-rectal surgery mortality**
- **The effect of rurality on cancer incidence and mortality**
- **Where do patients with blood cancers die?**
- **Survival of Children, Teenagers and Young Adults with Cancer in England**

e-Products (www.ncin.org.uk)

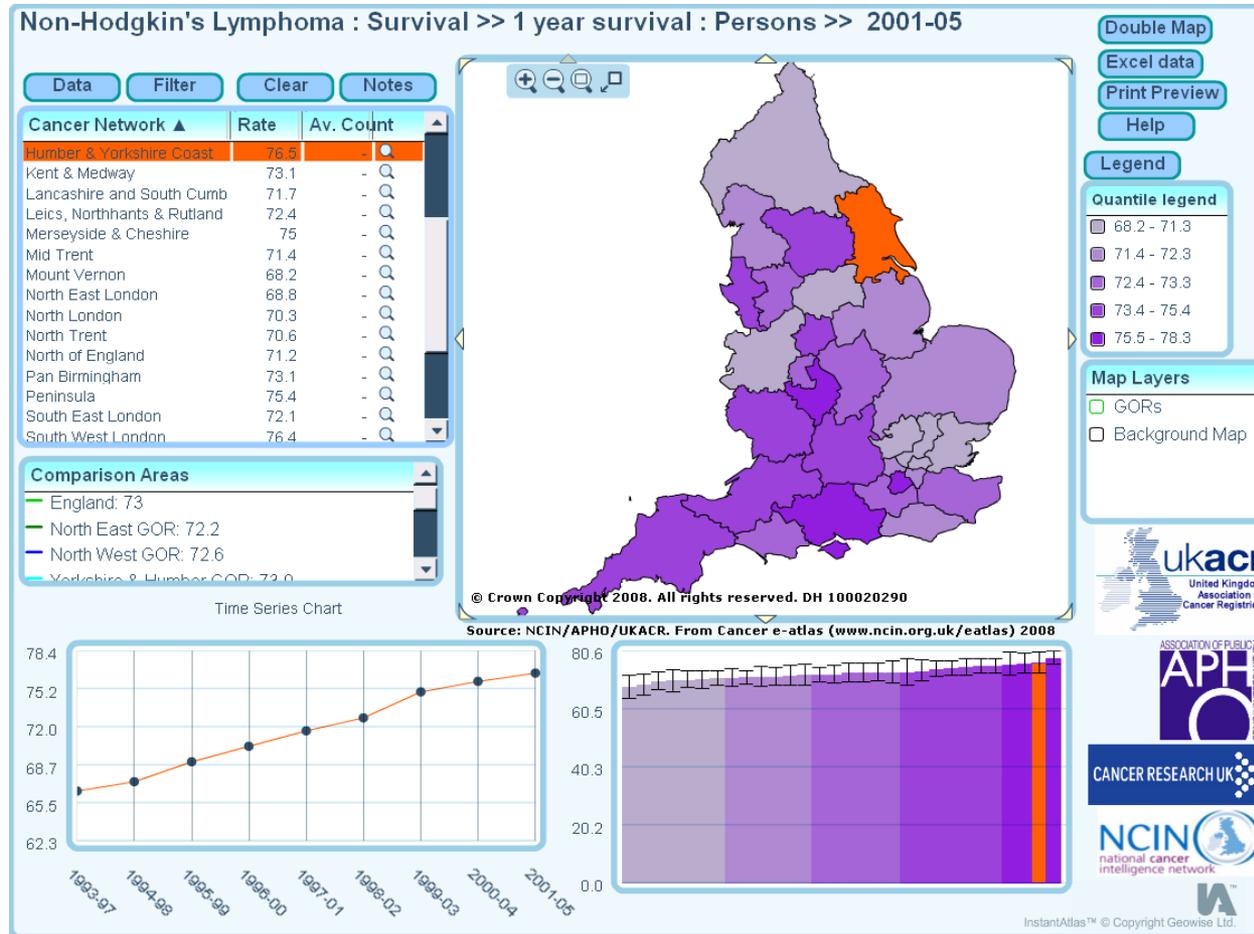


- Cancer e-Atlas
- UK Cancer Information Service (UKCIS)
- Cancer Commissioning Toolkit
- GP Practice profiles
- HES Microsites
- Various portals:
 - Inequalities portal (with National Cancer Equality Initiative)
 - Cancer mortality by PCT

Using information to improve quality & choice

National Cancer e-Atlas

www.ncin.org.uk/eatlas



Using information to improve quality & choice

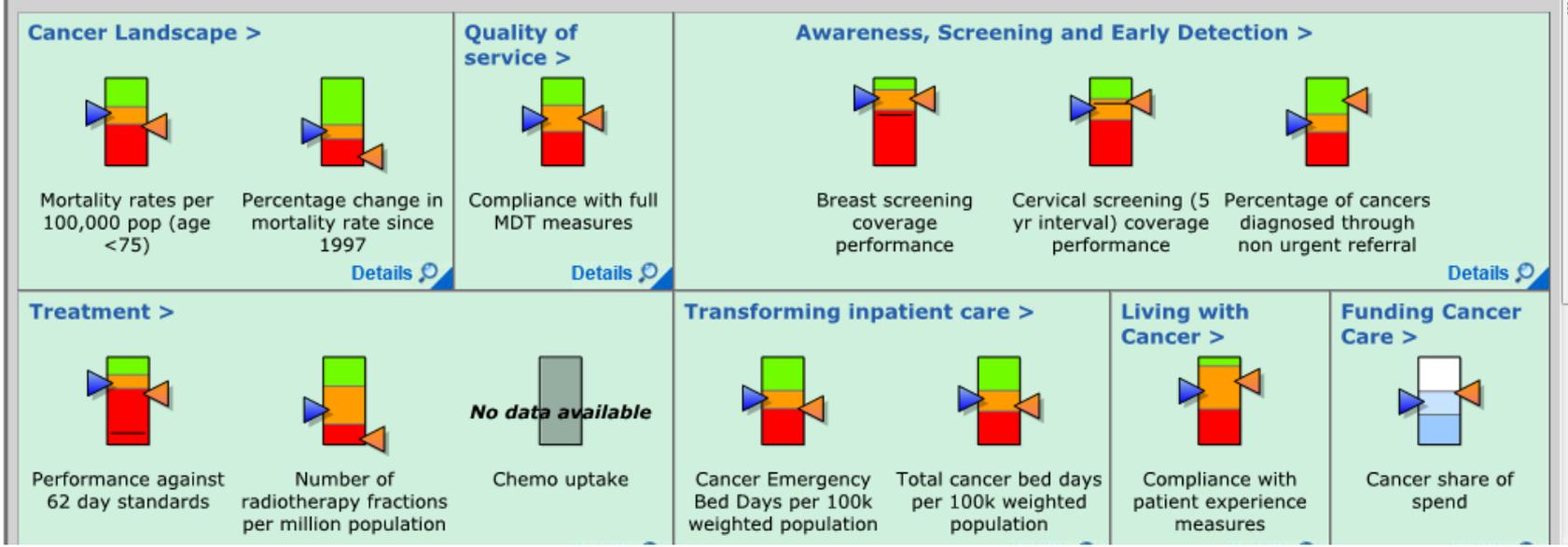


Cancer Commissioning Toolkit - dashboard



Welcome Kath Yates [Log out](#)

Select PCT Network Ashton, Leigh and Wigan PCT



GP Practice profiles

- Significantly different from PCT median
- Not significantly different than PCT median
- Significance testing not appropriate



Cancer indicators in Practice 6, ANON PCT (1)



National Cancer Action Team

Domain	Indicator (Rate or Ratio)	Number	Rate or Ratio	Median Practice	Lowest Practice	Quartile ranges of practice rates/ratios in PCT	Highest Practice
Demographic	Practice Population (% of average practice in PCT)	12874	159.9	94.5	19.8		261.4
	Practice Population aged 65+ (% of population in this practice aged 65+)	1882	15%	14%	0%		26%
	Socio-economic deprivation quintile, 1= affluent (% of practice population income deprived)	3	14%	15%	5%		35%
	New cancer cases (Crude rate - new cases per 10,000 population)	52	383.8	421.6	190.9		557.1
	Cancer deaths (Crude rate - deaths per 10,000 population)	22	126.0	186.6	105.0		282.7
	Prevalant cancer cases (% of population with cancer)	156	1.2%	1.2%	0.1%		3.0%
Cancer screening	Number aged 60-74 screened (breast) in last 30 months (3 year coverage, %)	427	74.0	66.4	34.3		95.0
	Number aged 60-74 screened (breast) within 6 months of invitation (Uptake, %)	222	77.0	70.2	35.9		96.8
	Number aged 24-49 screened (cervix) in last 42 months (3.5 year coverage, %)	426	84.9	68.0	33.2		97.4
	Number aged 60-69 screened (bowel) in last 30 months (2.5 year coverage, %)	239	46.8	69.2	32.7		96.0
	Number aged 60-69 screened (bowel) within 6 months of invitation (Uptake, %)	458	68.8	66.6	33.4		97.4
Cancer waiting Times	Two-week wait referrals (Rate per 10,000 population)	218	169.3	181.4	0.0		403.9
	Two-week referrals with cancer (Conversion rate - % of all T/w/w referrals with cancer)	29	13%	9%	0%		24%
	Number of new Cancer Waiting Time cases (number per 10,000 population)	56	43.5	37.9	0.0		92.9
Presentation & Diagnostics	In-patient or Day-case Colonoscopy procedures (Rate per 10,000 population)	5	15.5	17.4	9.0		23.7
	In-patient or Day-Case Flexi-sig procedures (Rate per 10,000 population)	7	22.4	16.1	8.5		24.0
	In-patient or Day-case UGI endoscopy procedures (Rate per 10,000 population)	13	16.7	17.1	8.1		23.9
	Two-week referrals with suspected breast cancer (Rate per 10,000 population)	47	36.5	38.4	0.0		88.0
	Two-week referrals with suspected lower GI cancer (Rate per 10,000 population)	45	35.0	31.0	0.0		76.5
	Two-week referrals with suspected lung cancer (Rate per 10,000 population)	3	2.3	5.0	0.0		17.2
	Two-week referrals with suspected skin cancer (Rate per 10,000 population)	27	21.0	25.8	0.0		131.1
	Number of emergency admissions with cancer (Rate per 10,000 population)	11	23.5	15.6	8.1		23.9
	Number of emergency presentations (Rate per 10,000 population)	15	15.9	18.2	10.4		29.9
	Number of managed presentations (Rate per 10,000 population)	11	19.5	16.9	8.0		23.9
Number of other presentations (Rate per 10,000 population)	12	15.2	18.5	10.4		29.9	

Detailed “Microsites”

Back

1 of 1 100% Find | Next Select a format Export

Major LGIT Surgical Procedures: Any Diagnosis Procedures by Network of Trust and Consultant (Provider Based Analysis)

HES Cancer Data Extract 9 (1997/08 - 2006/07)

		1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	Grand Total
East Kent Hospitals NHS Trust	Colectomy	162	178	163	174	158	144	145	148	142	139	1,553
	Excision of Rectum	98	137	106	117	84	136	121	142	123	146	1,210
	Trust Total	260	315	269	291	242	280	266	290	265	285	2,763
Maidstone and Tunbridge Wells NHS Trust	Colectomy	83	101	100	98	89	99	96	79	107	111	963
	Excision of Rectum	59	99	71	77	63	72	72	72	72	86	743
	Trust Total	142	200	171	175	152	171	168	151	179	197	1,706
Medway NHS Foundation Trust	Colectomy	49	63	50	71	63	66	74	67	59	48	610
	Excision of Rectum	49	48	49	39	49	52	49	60	63	63	521
	Trust Total	98	111	99	110	112	118	123	127	122	111	1,131
Dartford and Gravesham NHS Trust	Colectomy	33	42	42	49	47	43	52	46	47	48	449
	Excision of Rectum	37	16	24	37	36	27	35	38	41	49	340
	Trust Total	70	58	66	86	83	70	87	84	88	97	789
Grand Total		570	684	605	662	589	639	644	652	654	690	6,389

..with detailed “drill through”



Back

1 of 1 100% Find | Next Select a format Export

Major LGIT Surgical Procedures: Any Diagnosis Procedures by Network of Trust and Consultant (Provider Based Analysis)

HES Cancer Data Extract 9 (1997/08 - 2006/07)

		1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	Grand Total	
East Kent Hospitals NHS Trust	Colectomy	162	178	163	174	158	144	145	148	142	139	1,553	
	Excision of Rectum	98	137	106	117	84	136	121	142	123	146	1,210	
	Trust Total	260	315	269	291	242	280	266	290	265	285	2,763	
Maidstone and Tunbridge Wells NHS Trust	Colectomy	37	28	37	30	34	32	40	33	57	50	378	
	C14	10	23	15	23	22	19	14	11	20	22	179	
	C14	10	8	10	17	10	18	21	8	15	9	126	
	C14	12	13	13	7	4	7	5	3	2		66	
	C14	8	13	8	5	7	9	3	8	2		63	
	C14	4	11	9	3	6	4	5	4	3	3	52	
	C14		3	7	10	2	2	2		2		28	
	C14					3	7	4	8	3		25	
	C14										21	21	
	C14	2	2	1	3	1	1	2	4		1	17	
	C14										3	2	5
	C14											1	1
	C14											1	1
Excision of Rectum	59	99	71	77	63	72	72	72	72	72	86	743	
Trust Total	142	200	171	175	152	171	168	151	179	197	197	1,706	
Medway NHS Foundation Trust	Colectomy	49	63	50	71	63	66	74	67	59	48	610	
	Excision of Rectum	49	48	49	39	49	52	49	60	63	63	521	
	Trust Total	98	111	99	110	112	118	123	127	122	111	1,131	

Dataset development

- Cancer Services & Outcomes Dataset (COSD)
- Radiotherapy Dataset (RTDS)
- Systemic Anti-Cancer Therapy dataset (SACT)
- RCPATH datasets
- Others (e.g. Radiology)

Research potential

- **Analysis of Data Repository (∞)**
 - Hospital ‘footprint’
 - Primary care data
- **Follow up of longer term outcomes of patients in clinical trials:**
 - OP visits/primary care data
 - Recurrence
 - Late effects
 - Survival
- **Planning of clinical trials**
- **Biosample annotation**
- **Development of PROMS.....**

"Liberating Information, Improving Outcomes"

NCIN and UKACR Conference

15-17 June 2011, Hilton London Metropole

Register at: www.ncin.org.uk

Using information to improve quality & choice

NCIN



national cancer
intelligence network

Using information to improve quality & choice

www.ncin.org.uk