

Transforming Data into Action

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Transforming Data into Action

Overview of this talk

- Goals of NCIN
- Rationale for establishing NCIN within NCRI
- Recent progress
- Looking forwards

NCIN Goal (1)

Goal for NCIN: To develop the best cancer information service of any large country in the world

Why?

- To provide feedback on performance to clinical teams
- To promote stronger commissioning
- To provide informed choice for patients
- To provide a unique opportunity for health services research

i.e. To improve outcomes

NCIN Goal (2)

- Is this achievable?

Yes: We have the fundamental building blocks

Yes: We have the support of all the essential partners

Yes: We have the mandate to collect the missing information we need

Rationale for establishing NCIN within NCRI



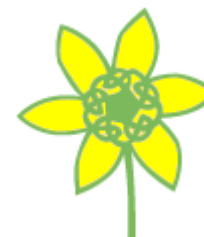
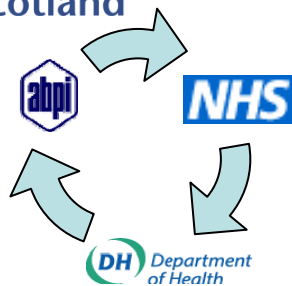
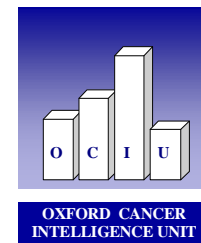
- NCRI is UK wide
- NCRI already brings together many of the necessary partners
- NCRI commands confidence
- NCRI provides opportunities for research (e.g. alongside NCRN)

Key building blocks

(A perspective from England)

- Cancer registries
 - Comprehensive information on incidence, mortality, survival
- Hospital Episode Statistics
 - Activity data and lengths of stay in the NHS
- National Screening Programmes
 - Coverage, QA measures, outcomes
- Cancer Waiting Times
 - 2ww, 31 day and 62 day targets
- Peer Review
 - Quality measures on >2000 teams and services
- Programme Budgeting
 - Expenditure on cancer by PCT

The Partnership (1)




The Partnership (2)




Recent Progress on Cancer Intelligence

- Cancer registries working together
 - National Cancer Information System (CIS)
- Data fusion
 - Bringing together large complementary datasets e.g. cancer registries and HES (1+1>2)
- Cancer Commissioning Toolkit



ARdentia
Intelligent Business Intelligence

- Applications
 - Cassius Configuration
 - CIS Tutorial and Guides
 - CISV4
 - Incidence
 - Cancer Networks
 - Numbers and Crude Rates
 - Quinary Ages
 - Standardised Rates
 - Health Boundaries
 - Local Government Boundaries
 - Old Health Boundaries
 - Mortality
 - Survival

Log Out 

Mortality

Incidence : Cancer Networks : Age Standardised Rates/Ratios : Compare Organisations

2005 C00-C97 exc C44: Invasive malignant neoplasms - excludes non-melanoma skin England

Directly Standardised Rate (European) 0 +

Chart

Rate per 100,000 or Rate Ratio (Persons)

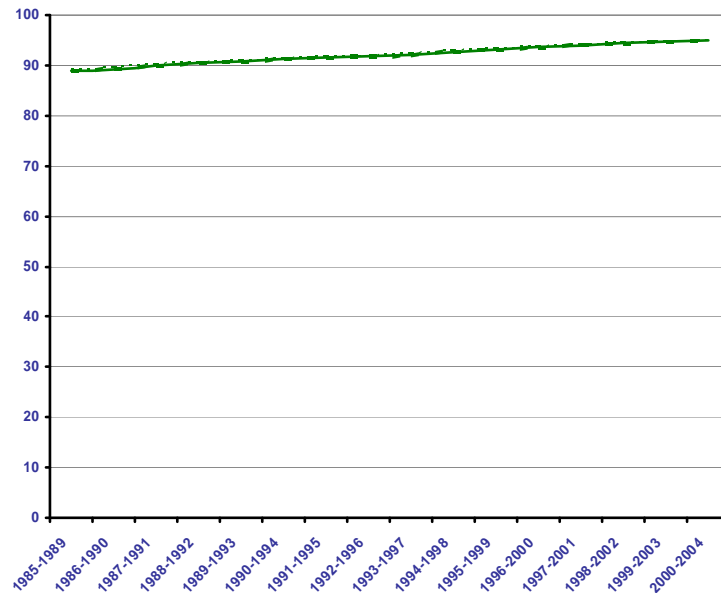
Organisation	Rate/Ratio Persons	95% Confidence Persons
England	~380	~370-390
N01 Lancashire and South Cumbria CN	~410	~400-420
N02 Greater Manchester and Cheshire CN	~420	~410-430
N03 Merseyside and Cheshire CN	~430	~420-440
N06 Yorkshire CN	~390	~380-400
N07 Humber and Yorkshire Coast CN	~380	~370-390
N08 North Trent CN	~400	~390-410
N11 Pan Birmingham CN	~400	~390-410
N12 Arden CN	~360	~350-370
N13 Mid Trent CN	~380	~370-390
N14 Derby/Burton CN	~390	~380-400
N15 Leicestershire, Northamptonshire and Rutland CN	~380	~370-390
N20 Mount Vernon CN	~360	~350-370
N21 West London CN	~370	~360-380
N22 North London CN	~360	~350-370
N23 North East London CN	~340	~330-350
N24 South East London CN	~380	~370-390
N25 South West London CN	~380	~370-390
N26 Peninsula CN	~400	~390-410
N27 Dorset CN	~420	~410-430
N28 Avon, Somerset and Wiltshire CN	~420	~410-430
N29 3 Counties CN	~370	~360-380
N30 Thames Valley CN	~380	~370-390
N31 Central South Coast CN	~390	~380-400
N32 Surrey, West Sussex and Hampshire CN	~350	~340-360
N33 Sussex CN	~360	~350-370
N34 Kent and Medway CN	~370	~360-380
N35 Greater West Midlands CN	~380	~370-390
N36 North of England CN	~400	~390-410
N37 Anglia CN	~360	~350-370
N38 Essex CN	~350	~340-360

● Rate/Ratio Persons — 95% Confidence Persons

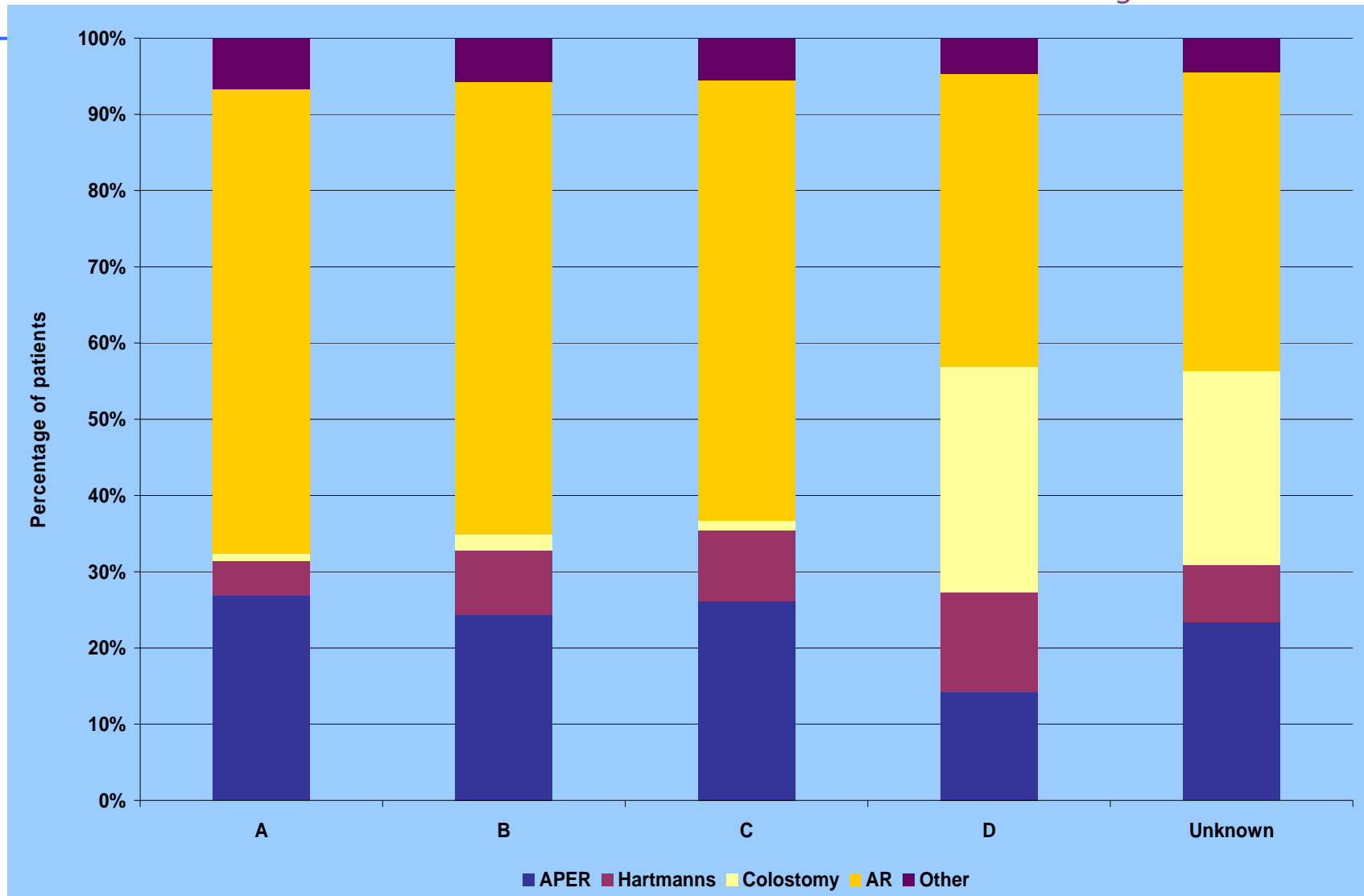
Table

Trends in one year cancer survival, breast cancer, females, England, 1985-2004 (five-year moving average)

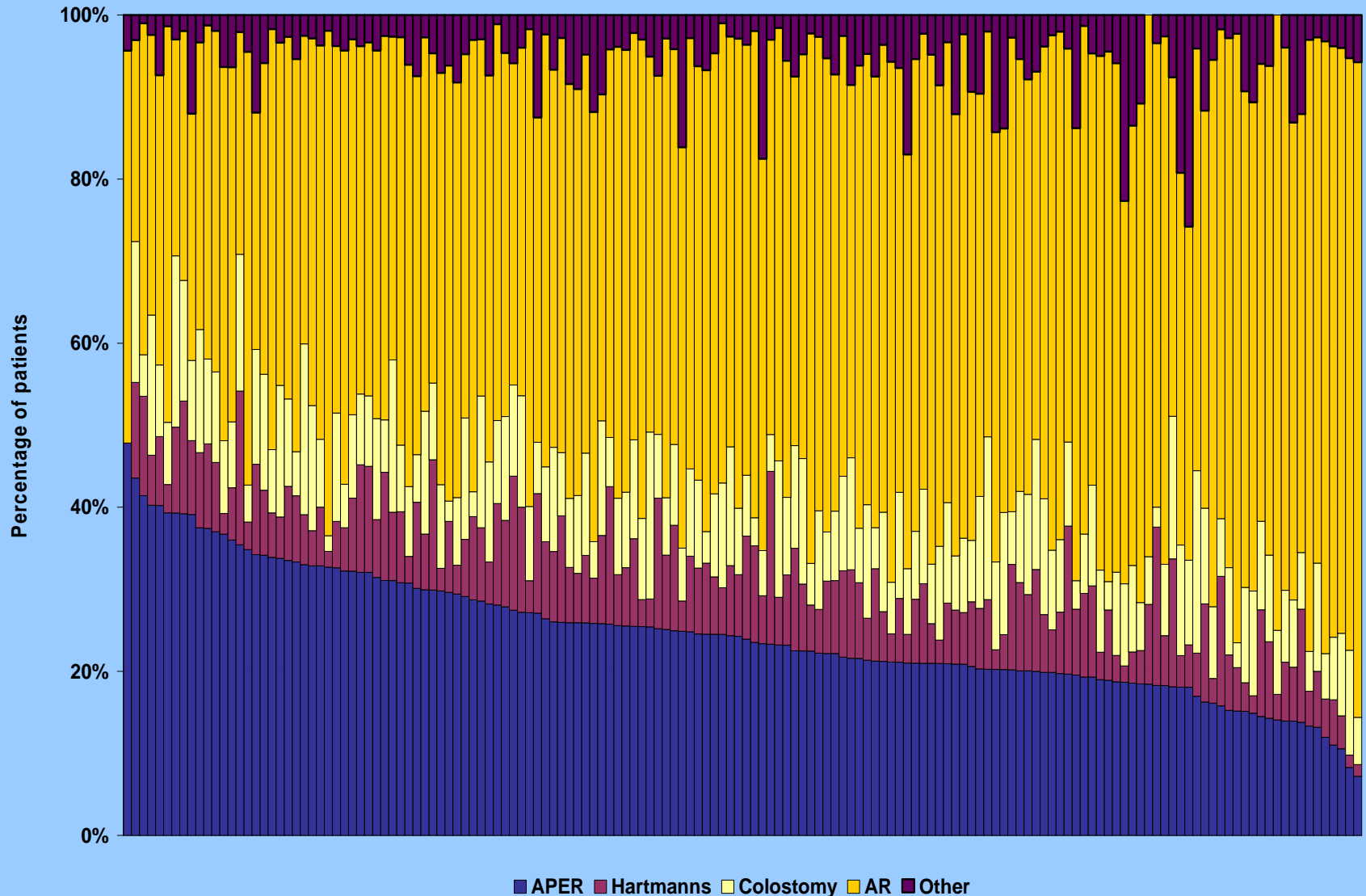
Year	Number in Cohort	Cumulative Deaths	Crude Rate	Relative Survival	95% Confidence Interval
1985-1989	115,172	15,559	86.5	88.9	88.7 - 89.1
1986-1990	119,114	15,547	86.9	89.3	89.1 - 89.5
1987-1991	124,244	15,370	87.6	89.9	89.7 - 90.1
1988-1992	129,482	15,379	88.1	90.4	90.3 - 90.6
1989-1993	133,081	15,422	88.4	90.7	90.6 - 90.9
1990-1994	135,249	15,064	88.9	91.2	91.0 - 91.4
1991-1995	137,167	14,890	89.1	91.5	91.3 - 91.7
1992-1996	138,737	14,829	89.3	91.7	91.5 - 91.9
1993-1997	140,591	14,485	89.7	92.1	91.9 - 92.2
1994-1998	143,894	13,911	90.3	92.7	92.6 - 92.9
1995-1999	148,009	13,696	90.7	93.1	93.0 - 93.3
1996-2000	151,320	13,222	91.3	93.6	93.5 - 93.8
1997-2001	153,862	12,835	91.7	94.1	93.9 - 94.2
1998-2002	155,571	12,546	91.9	94.4	94.2 - 94.5
1999-2003	158,404	12,306	92.2	94.7	94.5 - 94.8
2000-2004	160,007	11,947	92.5	95.0	94.8 - 95.1



Rectal surgery by Duke's stage



Rectal surgery by Hospital Trust



The CCT dashboard contains the key cancer metrics



Select PCT Network Ashton, Leigh and Wigan PCT

Cancer Landscape >



[Details](#)

Peer review >



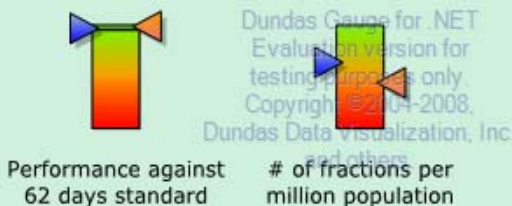
[Details](#)

Awareness, Screening and Early Detection >



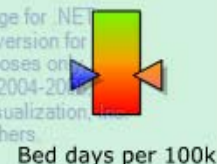
[Details](#)

Treatment >



[Details](#)

Inpatient >



[Details](#)

Living with Cancer >



[Details](#)

Funding Cancer Care >



[Details](#)

Legend:  National level  Local level  National target

[View cancer specific dashboard >](#)

Each metric can be observed in more detail with information on sources and guidance



Select PCT Network 3 Counties



Cancer Landscape >

Coming soon

Mortality rate per 100k population for <75yrs

10 year change in mortality rates

[Details](#)

Peer review >

73.2%

70.6%

Compliance with full MDT measures

Source: Data taken from CQIINS (Cancer Quality Information Network System), presently for the first round of Peer Review (March 2004 - March 2007). Reviewed against the Manual for Cancer Services 2004, Sections 2B to 2H

Guidance: The NHS Cancer Plan (2000) gave a commitment that all patients with cancer have the right to have their care or treatment discussed at a multidisciplinary team meeting. It is important that the MDT

[Details](#)

Early Detection >

Screening age range

% cases diagnosed through urgent referral

1 year survival rate

[Details](#)

Treatment >

Performance against 62 days standard

of fractions per million population

Chemotherapy

Coming soon

[Details](#)

Living with Cancer >

Coming soon

Compliance with patient experience

[Details](#)

Funding Cancer Care >

Cancer share of spend

[Details](#)

Legend: ▶ National level ▶ Local level ▶ National level

[View cancer specific dashboard >](#)

NCIN: Looking forwards

- Dealing with gaps in currently available data
- Developing partnership working
- Making best use of opportunities

Gaps in currently available data

- Primary Care
- Staging and comorbidity
- Detailed pathology
- Radiotherapy
- Chemotherapy
- Relapse
- Patient reported outcomes
- (Ethnicity)

Looking forwards: Closing the gaps

- Primary Care: GPRD and other systems
- Staging: Mandatory datasets
- Pathology: Recording of RCPATH datasets
- Radiotherapy: RES dataset
- Chemotherapy: Chemotherapy dataset
- Relapse: Linkage to Cancer Waiting Times
- Patient Reported Outcomes: ?
- Comorbidity: Linkage to HES

Looking Forwards: Developing the partnership



- Steering Group (Chair: Sir Alex Markham)
- Lead registries for different cancers
- National Clinical Leads

- Developing clear governance arrangements
- Building links with multiple individuals and organisations (National audits, professional societies, researchers etc.)

Looking Forwards: Early products

- Electronic commissioning toolkit
- Analyses of cancers in teenagers and young adults
- Secondary cancers
- Making information available to the public: NHS Choices
- Follow up of patients in clinical trials
- Trends in one year survival rates

(Cancer Reform Strategy: Box 42)

Looking Forwards: Links to CRS initiatives

- National surveys of symptom awareness
- National Audit in Primary Care
- National Cancer Survivorship Initiative
- Cancer Patient Experience Survey Programme
- National Cancer Equality Initiative
- Inpatient Management Programme
- End of Life Care Strategy

Lead areas for cancer registries

- Lung – Thames
- Breast – WMCIU
- Colorectal – NYCRIS
- Urology – SWCIS
- CNS – ECRIC
- Gynae – Trent
- Head & Neck – Oxford
- TYAC – NWCIS
- Skin – SWCIS
- Upper GI – Thames
- Sarcoma – WMCIU
- Haematology – NYCRIS
- Children – CCRG

**To be supported by
National Clinical
Reference Groups**

Looking Forwards: Cross cutting analyses

- Prevalence: Current and projected
- Ethnicity
- International comparisons
- Health economics
- Outpatient and GP attendances
- Rare cancers

NCIN: Summary

- This launch marks a very important step forward for cancer intelligence
- There is a huge amount to do – and it won't always be easy
- But the prize is great: Better information will lead to better outcomes