

Information Does it change practice?

Di Riley
AD Clinical Outcomes, NCIN

The National Cancer Intelligence Network is now operated by Public Health England



Data, data everywhere...



Where to look for change?

- Increased awareness of symptoms?
- Seeing GP earlier?
- Earlier diagnosis?
- More amenable to treatment?
- Better treatments?
- Better & responsive services?
- Better coordination between services?

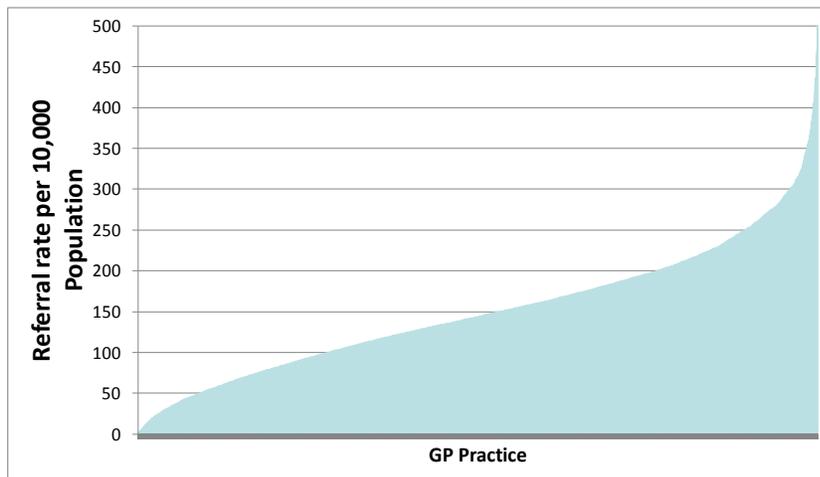
3 Examples

- GP Practice Profiles for Cancer
- Routes to diagnosis & emergency presentations
- Chemotherapy Data

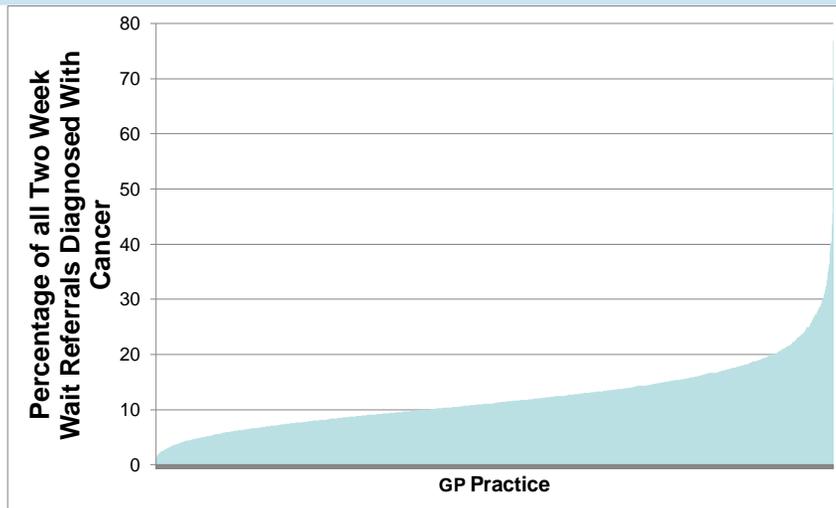
3 Examples

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TWW Referral rate per 10,000 by GP Practice, 2009



% Two Week Wait Referrals Diagnosed with Cancer by GP Practice, 2009



The Challenge?

- What else was known about cancer in 1⁰ Care?
- Could we provide *readily available* and comparative information at Practice level
- Could support role of 1⁰ Care in early detection and diagnosis projects
- Enhance local understanding and initiatives
- They were not for the purpose of performance management
- Launched December 2010, updated annually
- Shared with public – July 2012

GP Practice Profile for Cancer



Cancer indicators in (M46332) Dr Smith's Surgery, Another PCT (506)

These profiles provide comparative information for benchmarking and revealing variations at a General Practice level. They are intended to help primary care look at overall 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 'safe or at-risk' alerts.

Practice population (2009/10): 16,121
PCT population (all practices): 168,967

● Practice is significantly different from PCT mean
● Practice is not significantly different from PCT mean
○ Statistical significance cannot be assessed
◆ Highest mean

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)	156	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%	71.6%	49.7%	79.6%	
	7 Females, 50-70, screened for breast cancer within 6 months of invitation (Uptake, %)	15	25.9%	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, %)	1954	80.2%	78.6%	81.6%	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	54.6%	51.7%	57.9%	51.6%	40.2%	35.3%	59.0%	
Cancer Waiting Times	10 Persons, 60-69, screened for bowel cancer within 6 months of invitation (Uptake, %)	292	60.2%	55.6%	64.5%	56.8%	55.1%	40.4%	64.8%	
	11 Two-week wait referrals (Number per 100,000 population)	162	100.1%	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	26	143	70	66	0	209	
	18 Two-week wait referrals with suspected skin cancer (Number per 100,000 population)	10	99	47	162	146	280	0	566	
	19 In-patient or day-case colonoscopy procedures (Number per 100,000 population)	103	1018	831	1234	877	513	302	1419	
Presentation & diagnosis	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%	45.6%	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%	

GP Practice Profile for Cancer



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	10 Persons, 60-69, screened for bowel cancer within 6 months of invitation (Uptake, %)

GP Practice Profile for Cancer



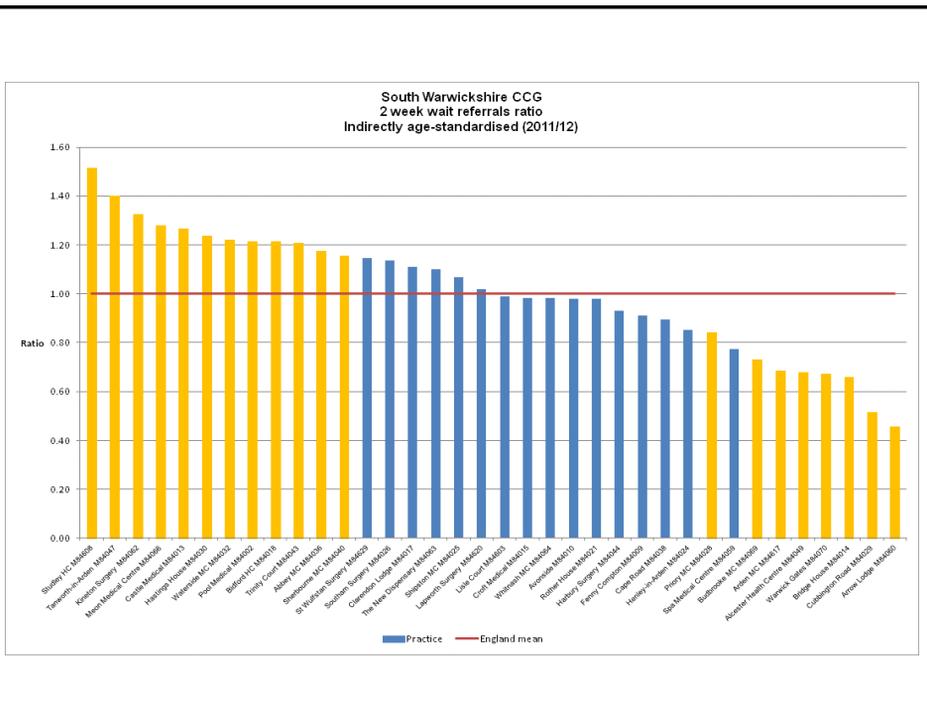
Category	Item	Value	Visual	Value
Cancer Waiting Times	11 Two-week wait referrals (Number per 100,000 population)	157		2599
	12 Two-week wait referrals (Number per 100,000 population, A)	10.5%		158.6%
	13 Two-week referrals with cancer (Conversion rate: % of all T)	5.7%		50.0%
	14 Number of new cancer cases treated (% of which are TWW)	12.5%		85.7%
	15 Two-week wait referrals with suspected breast cancer (Num)	0		702
	16 Two-week wait referrals with suspected lower GI cancer (Nu)	0		771
	17 Two-week wait referrals with suspected lung cancer (Numb)	0		209
	18 Two-week wait referrals with suspected skin cancer (Numb)	0		566
Presentation & diagnostics	19 In-patient or day-case colonoscopy procedures (Number pe)	302		1419
	20 In-patient or day-case sigmoidoscopy procedures (Number)	55		682
	21 In-patient or day-case upper GI endoscopy procedures (Nu)	729		2385
	22 Number of emergency admissions with cancer (Number pe)	239		1122
	23 Number of emergency presentations (% of presentations)	12.5%		100.0%
	24 Number of managed referral presentations (% of presentati)	0.0%		87.5%
	25 Number of other presentations (% of presentations)	0.0%		50.0%

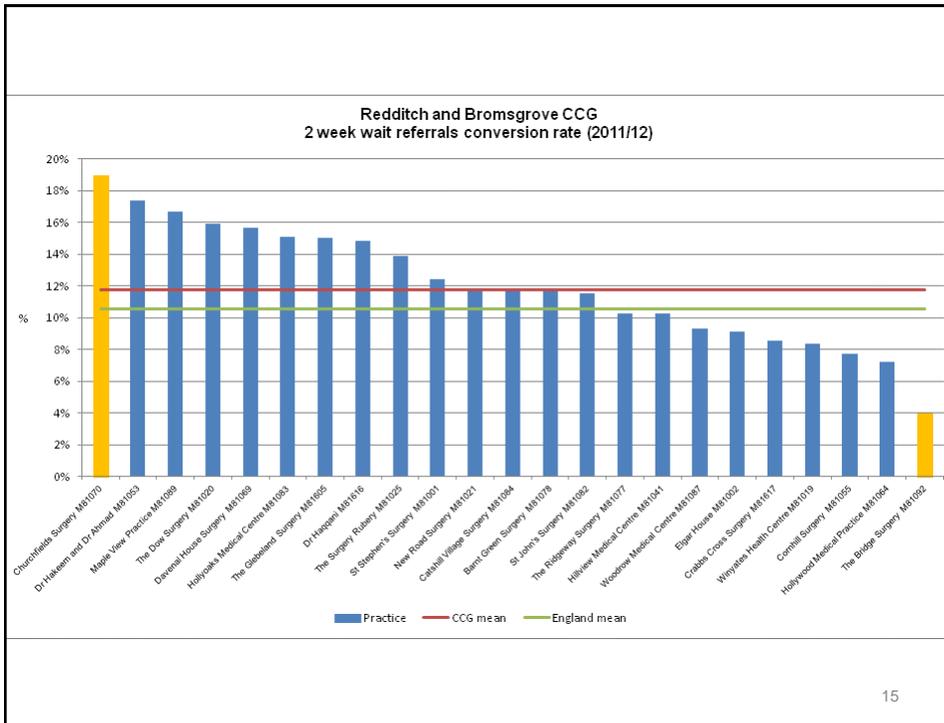
INDIVIDUALISED PRACTICE REPORTS

Dr Bruce Eden
GP Adviser
Arden Cancer Network

Report Content

- ▶ NAEDI background
- ▶ Encouraged to register with CCT
- ▶ How to interpret profiles
- ▶ What can you do to improve early diagnosis?
 - Prevention information for patients
 - Awareness campaigns
 - Smoking, alcohol and obesity
 - Screening levels
 - Are NICE referral criteria used by all clinicians?
 - Audit suggestions
 - Website links
 - Safety-netting check-list





Comparative Charts Summary

- ▶ Simple to understand
- ▶ GPs like to compare with their colleagues
- ▶ If outlier, practice usually wants to know why
- ▶ Examples of consequences
 - Bowel screening
 - Cervical screening
 - 2ww referrals/conversion rate
 - NCAT/RCGP audit of patient journey

3 Examples

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- **Routes to diagnosis & emergency presentations**
- Chemotherapy Data

Routes to Diagnosis



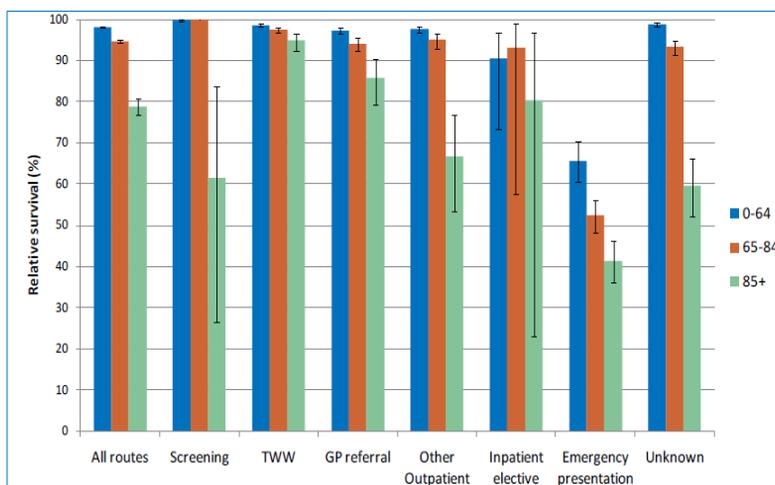
Diagnosed via Screening

Diagnosed via Emergency

Routes to diagnosis by cancer type for all malignant diagnoses, excluding C44 (non-melanoma skin cancer) and multiples, in England, 2007

All Persons	Screen detected	Two Week Wait	GP referral	Other outpatient	Inpatient elective	Emergency presentation	Death Certificate Only	Unknown	Total	Number of patients
Acute leukaemia		3%	17%	14%	4%	57%	0%	4%	100%	2,551
Bladder	32%	28%	15%	2%	18%	0%	4%	100%	7,665	
Brain & CNS	1%	17%	14%	4%	58%	0%	6%	100%	4,147	
Breast	21%	42%	12%	9%	0%	4%	12%	100%	34,232	
Cervix	14%	16%	25%	16%	2%	12%	0%	13%	100%	2,085
Chronic leukaemia		10%	30%	12%	2%	30%	1%	16%	100%	2,869
Colorectal	26%	24%	15%	4%	25%	1%	6%	100%	27,903	
Kidney	20%	29%	18%	1%	24%	1%	6%	100%	5,172	
Larynx		31%	32%	21%	1%	12%	0%	3%	100%	1,583
Lung		22%	20%	13%	1%	38%	1%	5%	100%	29,420

1yr Relative Survival by age & RtD

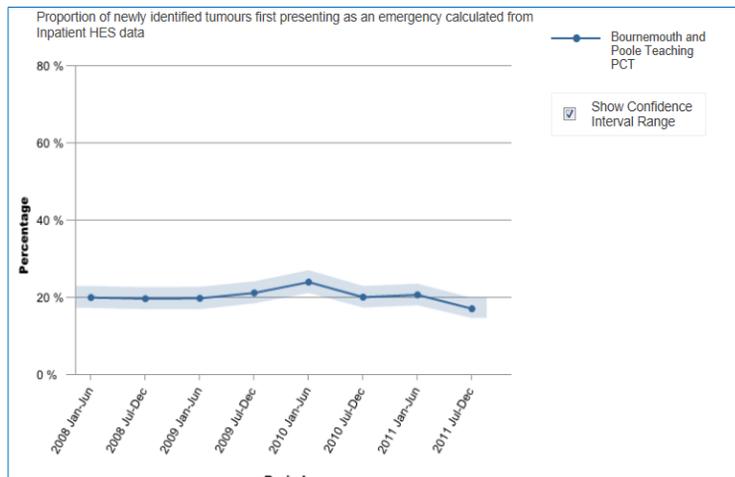


Impact

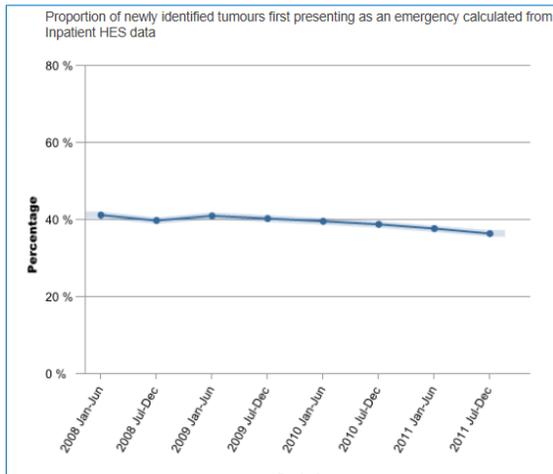
- Impact on outcomes and awareness initiatives
- Focus on understanding and reducing emergency presentations
- Now 'rapid emergency presentations data' available in the Cancer Commissioning Toolkit



Proxy measure for 'EP' – all cancers by PCT



Proxy measure for 'EP' – lung cancer



- CCGs can track effects of local policy and service changes rapidly and robustly
- More time needed to see impact on survival outcomes

3 Examples

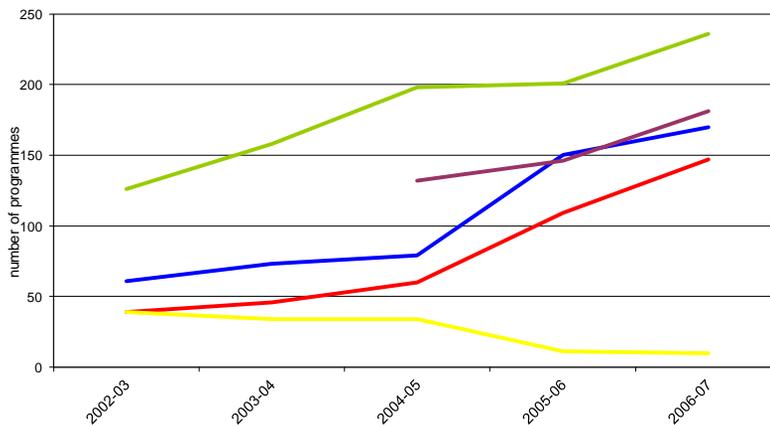
- GP Practice Profiles for Cancer
- Routes to diagnosis & emergency presentations
- **Chemotherapy Data**

Rationale

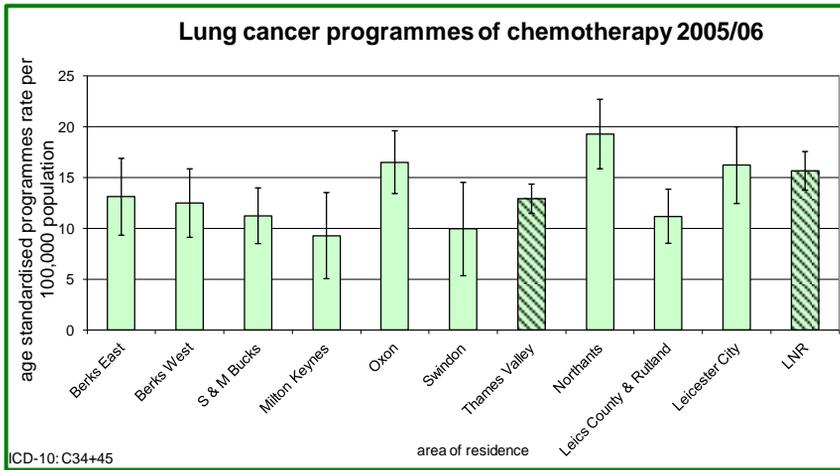
- Cancer ~10%+ NHS budget
- Chemotherapy ~20% of the cancer budget
- Travesty - do or did not understand:
 - Who has what, where, when and why?
 - What are the benefits and what does it really cost?
- New NHS dataset – Systemic Anti-Cancer Therapy (SACT) dataset
 - Collection across England began in April 2012

Lung chemotherapy trend

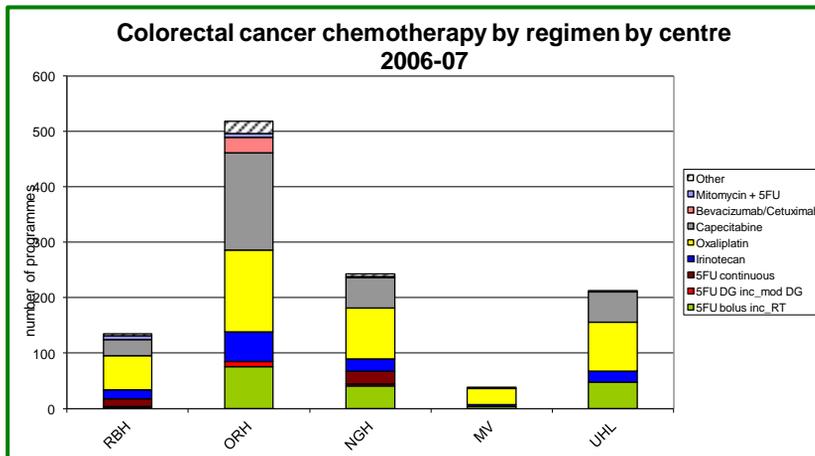
All lung cancer chemotherapy trend by centre



Rates per PCT



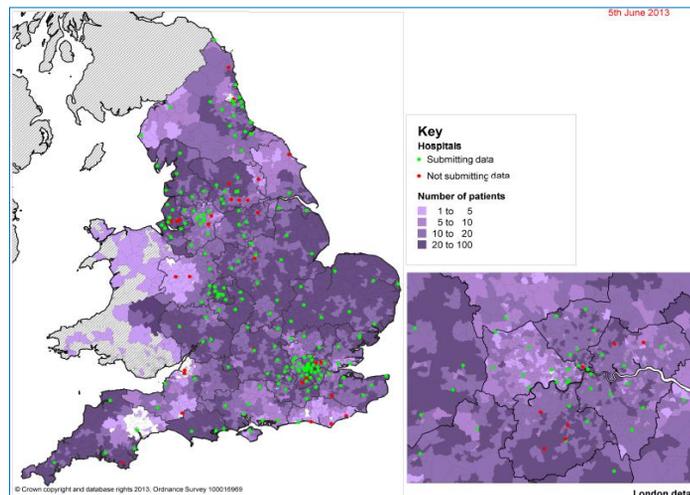
Regimens commenced by trust



SACT Dataset

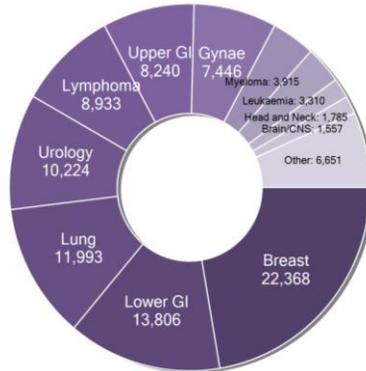
The SACT dataset is divided into six sections:

1. Demographics – including commissioner and provider initiating treatment
2. Clinical status
3. Programme and regimen
4. Cycle
5. Drug details
6. Outcome

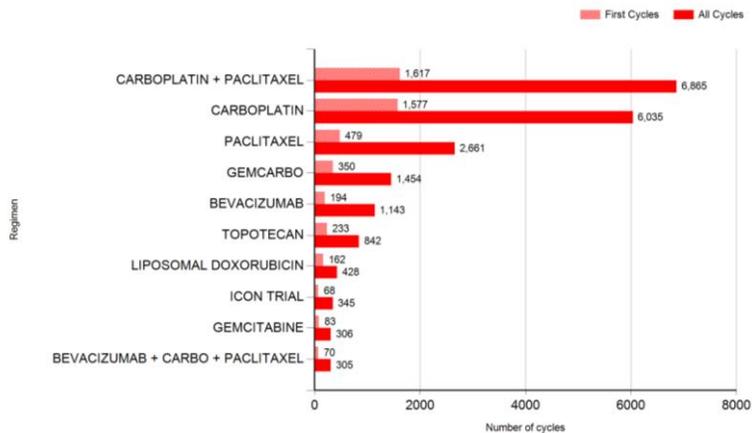


Patients by Diagnostic Group

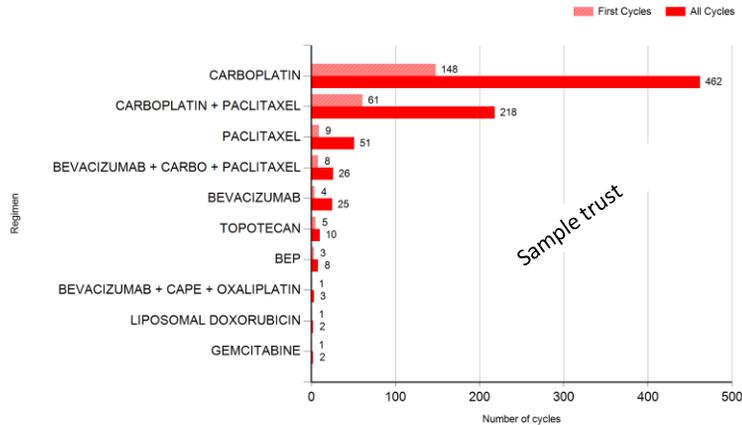
Breast: 22,368 (22%) Urology: 10,224 (10%) Gynae: 7,446 (7%) Head and Neck: 1,785 (2%)
 Lower GI: 13,806 (14%) Lymphoma: 8,933 (9%) Myeloma: 3,915 (4%) Brain/CNS: 1,557 (2%)
 Lung: 11,993 (12%) Upper GI: 8,240 (8%) Leukaemia: 3,310 (3%) Other: 6,651 (7%)



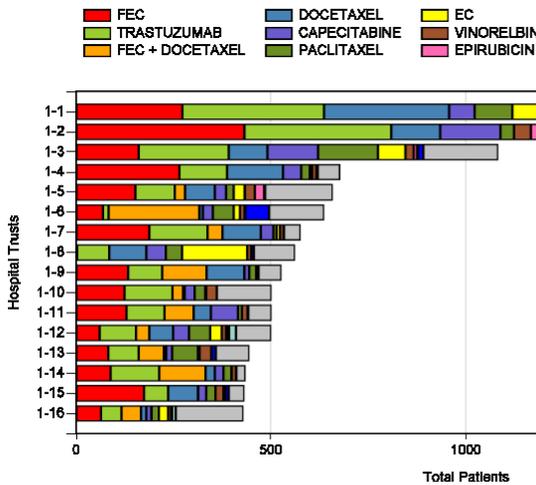
Top Gynae Regimens (Ovary)



Top Gynae Regimens – Provider (Ovary)



Preliminary Review – are there any variation in regimens (breast)



NOTE of Caution:

- Preliminary data
- Not all providers submitting data yet
- Any apparent differences in prescribing patterns may be clinically appropriate
- Services already evaluating their data

In summary: Can information change or influence practice?



- Make TIMELY information readily available
- Must be acknowledged as credible, accurate, etc
- Address questions collaboratively with clinical teams and expert groups – CLINICAL OWNERSHIP KEY
- Develop methodology applying scientific rigour
- Test early data – developmental indicators
- Evaluate with ‘the service’ through the ‘CCT’
- Commissioners and clinical teams can track effects of national / local policy and service changes rapidly and robustly



Thank you

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