



Public Health
England

National Cancer Registration and Analysis Service

National Data Sources and Recent Developments at PHE

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Recent Developments

- Securing our Future
- Forman review
- Independent Cancer Taskforce Report
 - *Save many thousands more lives*
 - *Transform patient experience and quality of life*
 - *Invest to save*

ACHIEVING WORLD-CLASS CANCER OUTCOMES

A STRATEGY FOR ENGLAND
2015-2020



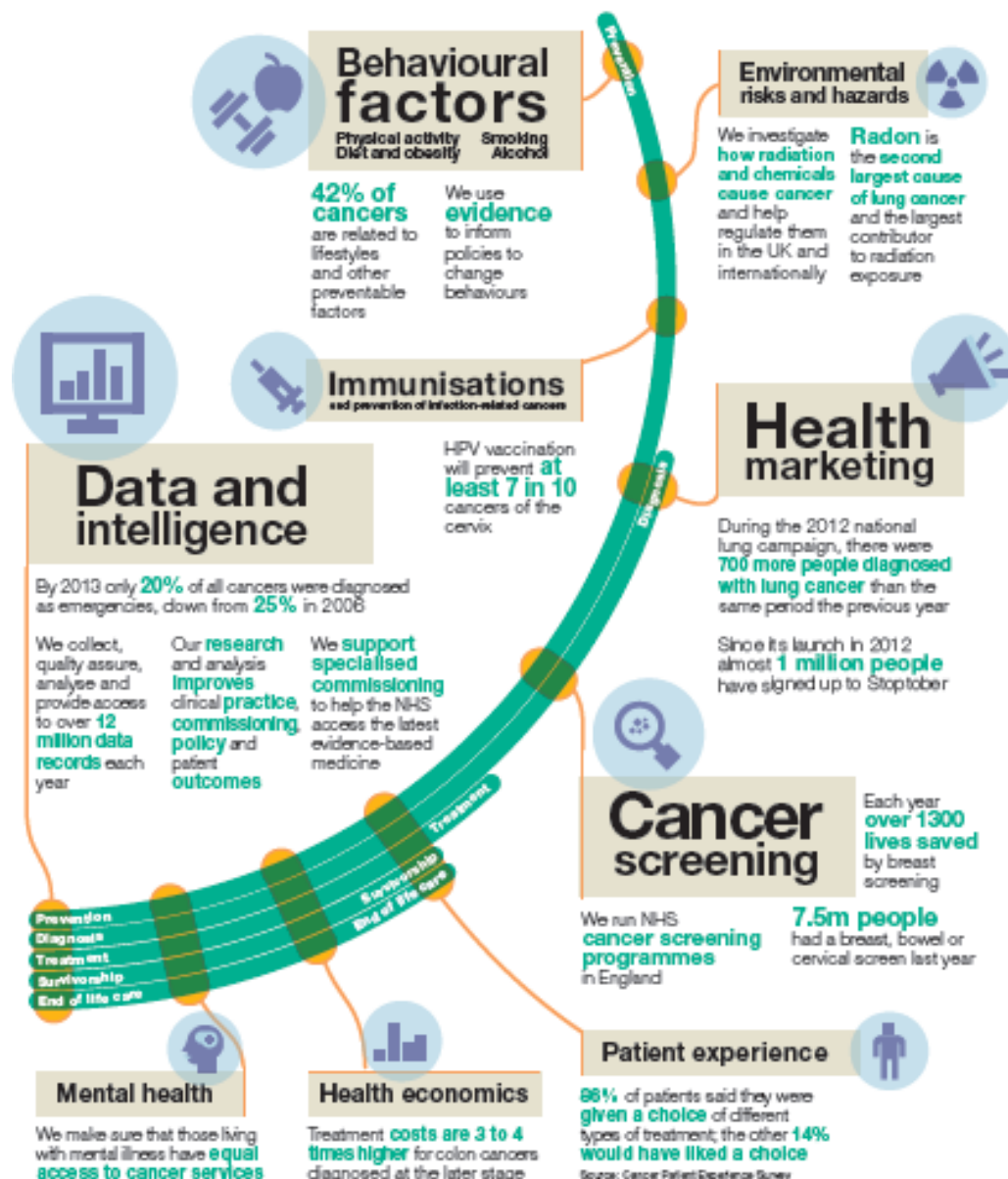


Recent Developments (contd.)

- **PHE Cancer Board (including CRUK and Macmillan)**
- **Integrated cancer strategy for PHE by summer 2016**
- **NCRAS – bringing together cancer registration and analysis ~ 330 staff; no longer use NCIN brand.**
- **Director of Cancer Analysis and Registration (Jem Rashbass)**
- **Revised Senior Team**
- **“The site-specific clinical reference groups continue to do an excellent job for PHE. We will consider how their work can be better aligned with other similar groups in NCRI, NICE and NHSE.”**
- **PHE Cancer Data and Outcomes Conference (June 13th/14th) - Manchester**

PHE is committed to beating cancer

More than 400 of our staff are working on cancer through all steps of the patient pathway.





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National Data Sources

Cancer Outcomes and Services Dataset (COSD)

Hospital Episode Statistics (In-patient, out-patient and A&E) – e.g. surgery, co-morbidity, routes to diagnosis, etc.)

Treatments – SACT, RTDS

Cancer Waiting Times

National Audits (Prostate, lung and new breast audit fully integrated with NCRAS)

Primary care prescription data

Diagnostic Imaging Dataset

Molecular Diagnostics

National Cancer Patient Experience Survey

Limited PROMs data



Key analytical deliverables - outline

Pre-diagnosis: Routes to Diagnosis, Prescription data, Be Clear on Cancer, ACE, Cancer Diagnostics (“Primary Care”) Audit

Screening

Diagnosis: Diagnostic Imaging Dataset

Therapeutics: Chemo, RTDS, Treatment pathway, Geographical variation, Surgery sub-speciality metrics

Progression: Progressive cancers, recurrence

Survivorship: Prevalence

Death: Survival (incl. by stage)

Experience: CPES, PROMs,

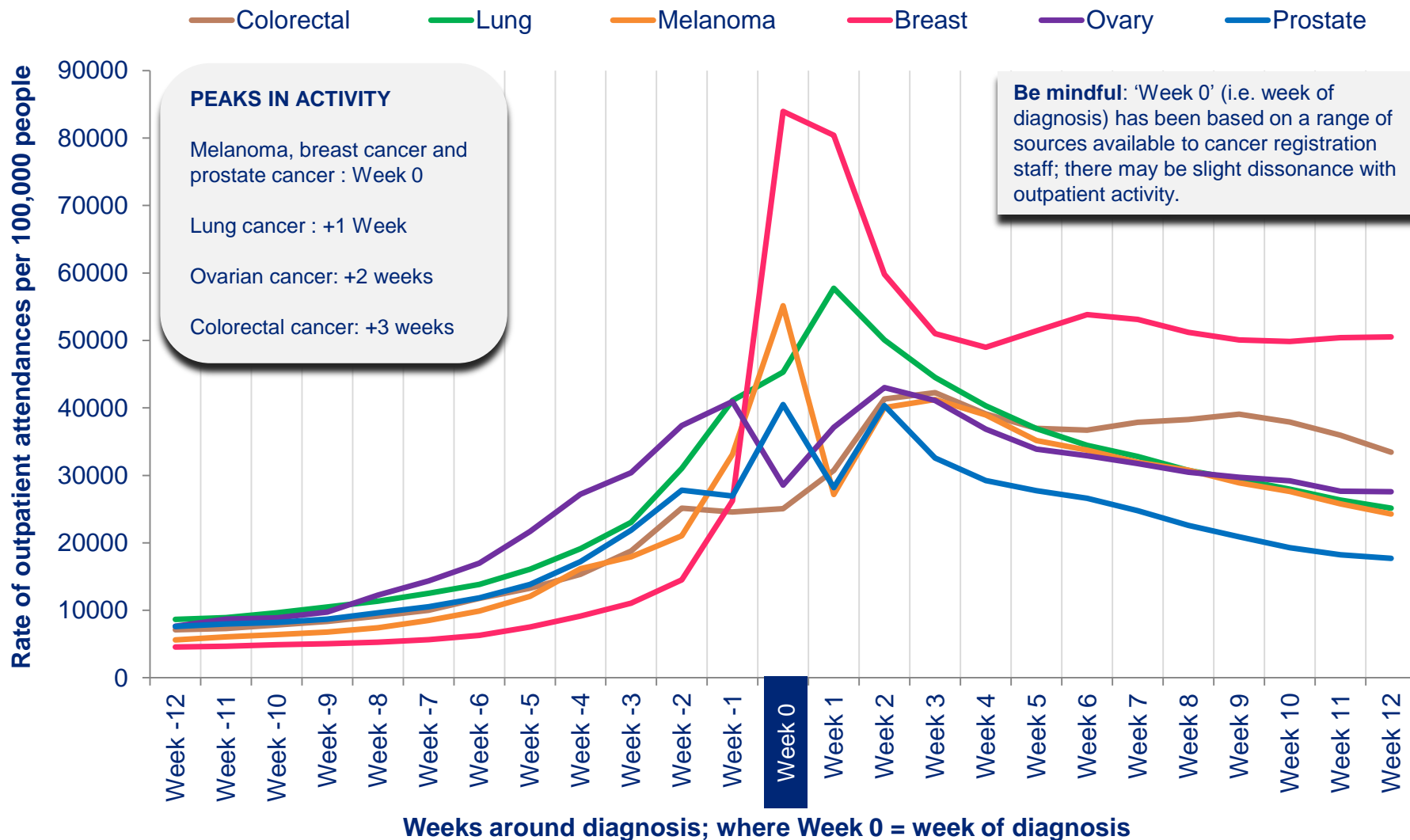
Infrastructure: Dashboards, Clinical Headline Indicators, CancerData, GP Profiles, CSQM



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Outpatient attendances: volume distribution 2

by week and cancer type for 24-week peri-diagnostic period

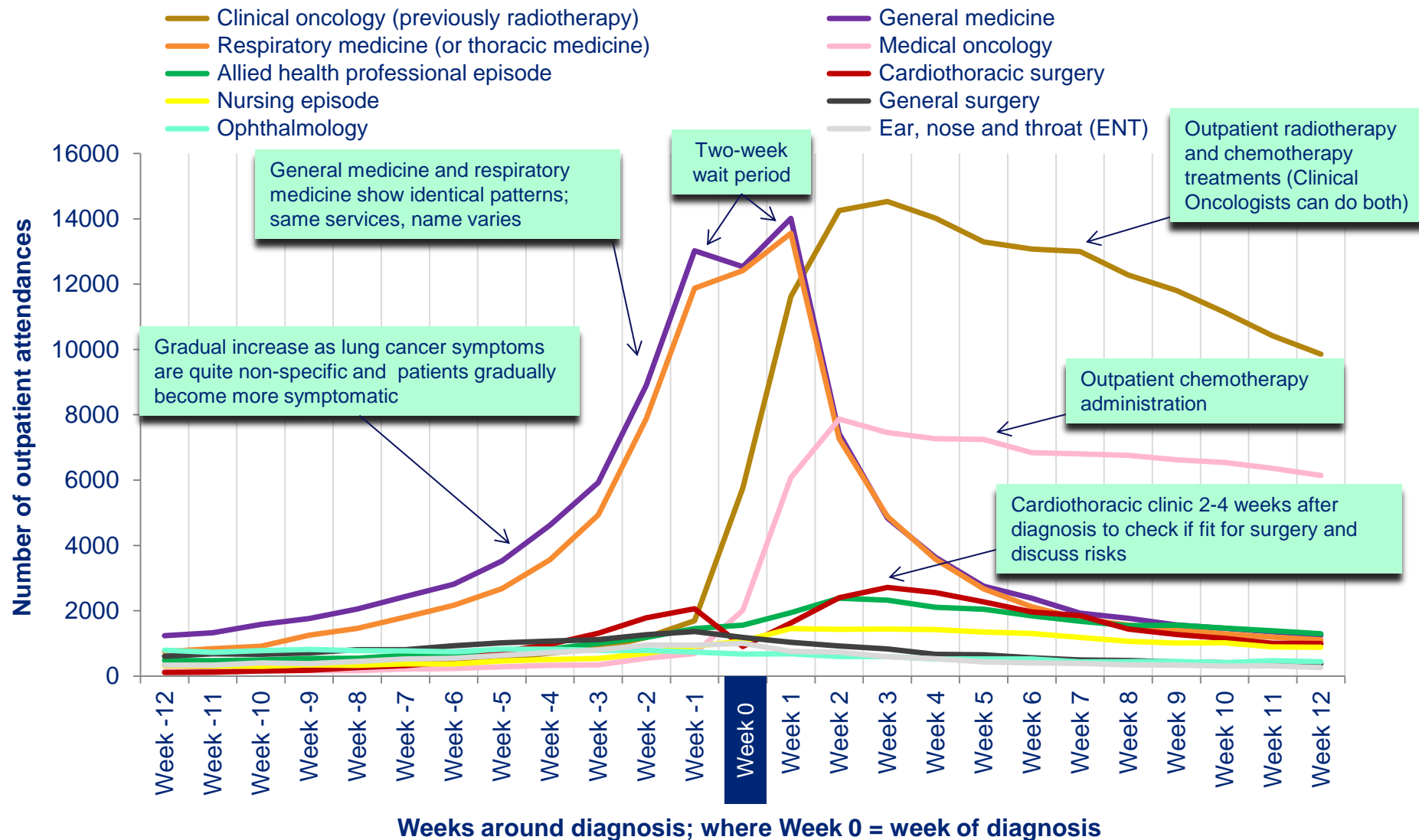


Source: Miller S, et al, NCIN Conference 2014



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Lung cancer: top 10 outpatient specialties by week for 24-week peri-diagnostic period



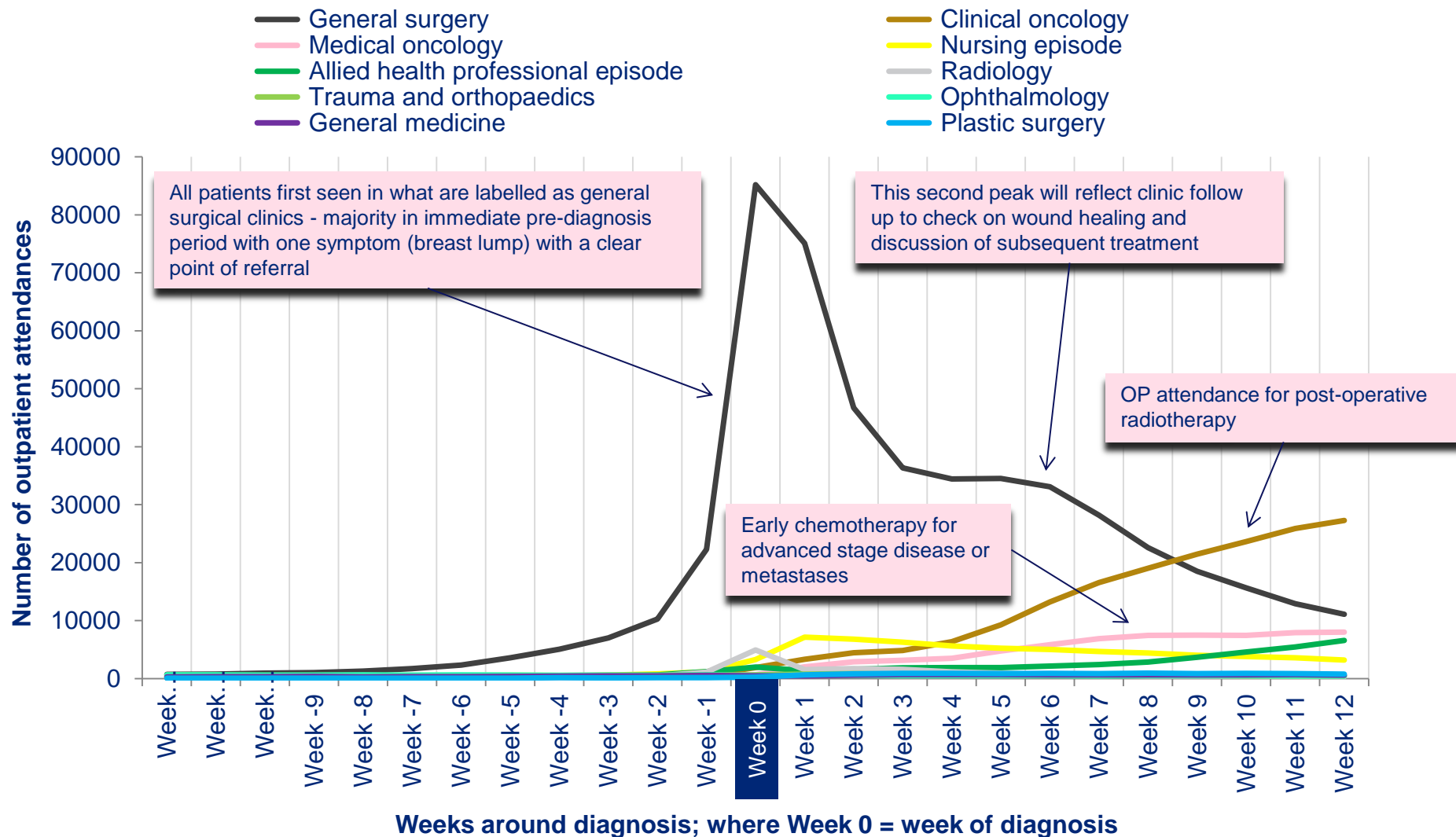
Source: Miller S, et al, NCIN Conference 2014



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Breast cancer: top 10 outpatient specialties

by week for 24-week peri-diagnostic period



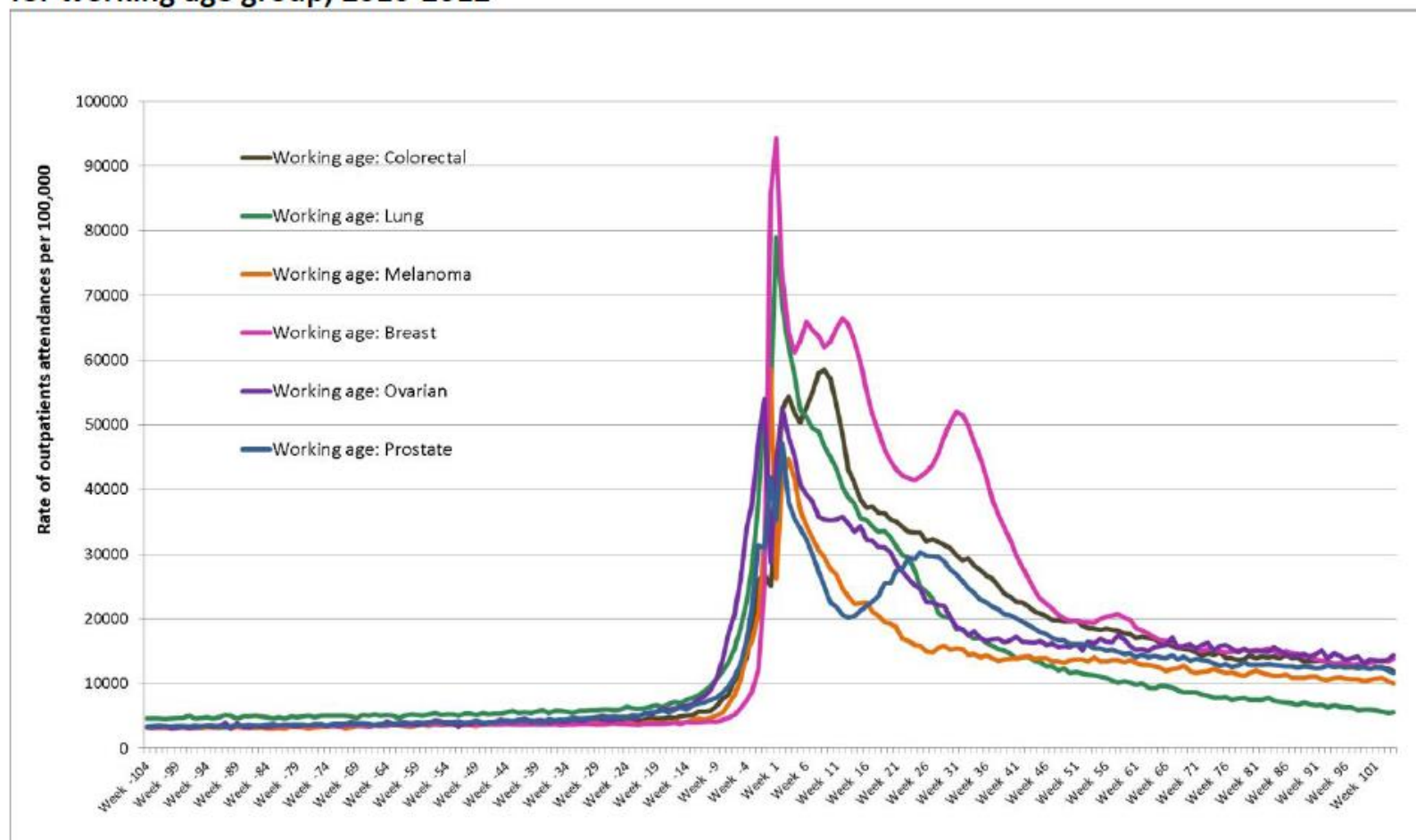
Source: Miller S, et al, NCIN Conference 2014



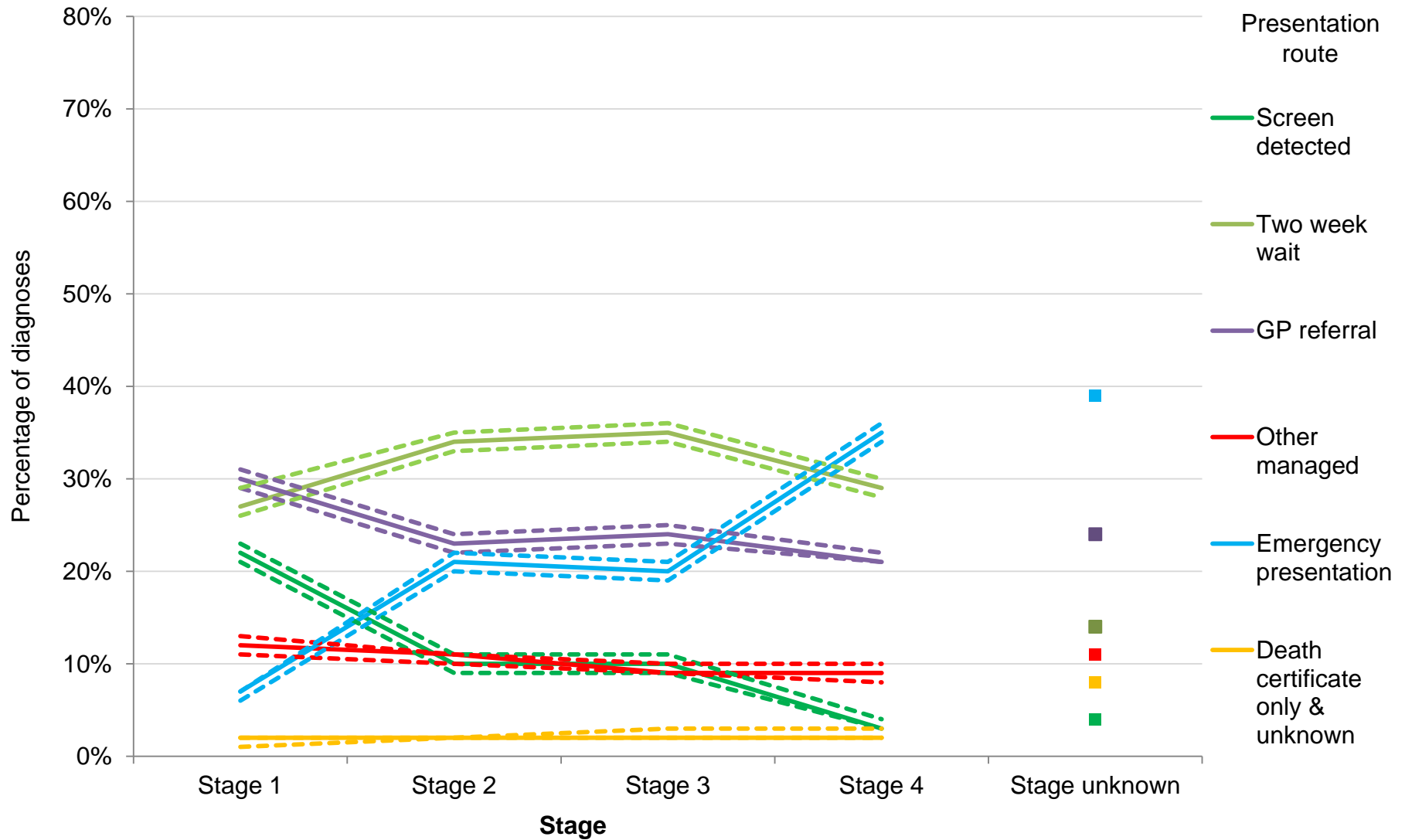
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People of Working Age with Cancer - Unpublished

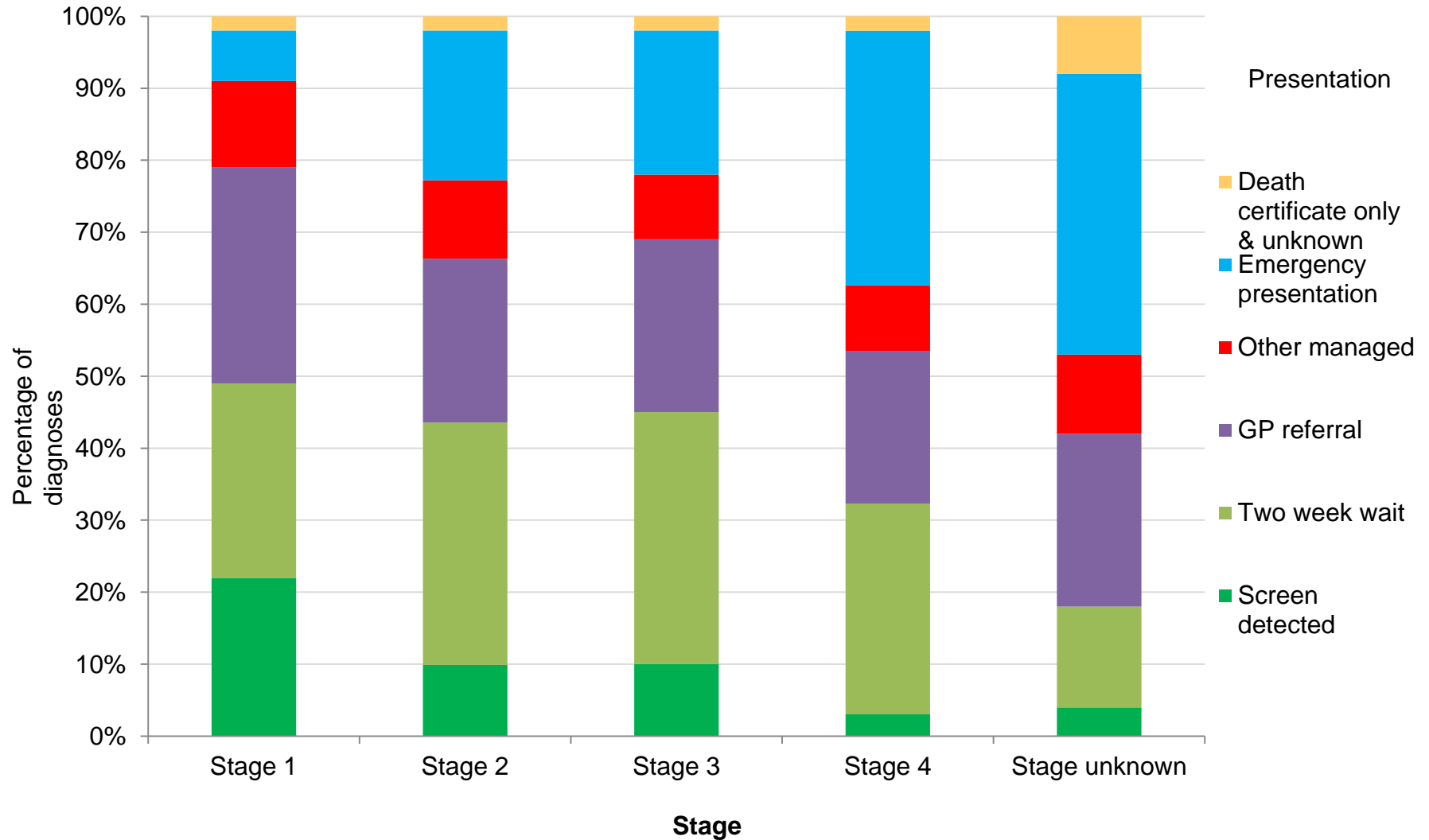
Figure 4: Outpatient attendances by week and cancer type for two years either side of diagnosis for working age group, 2010-2012



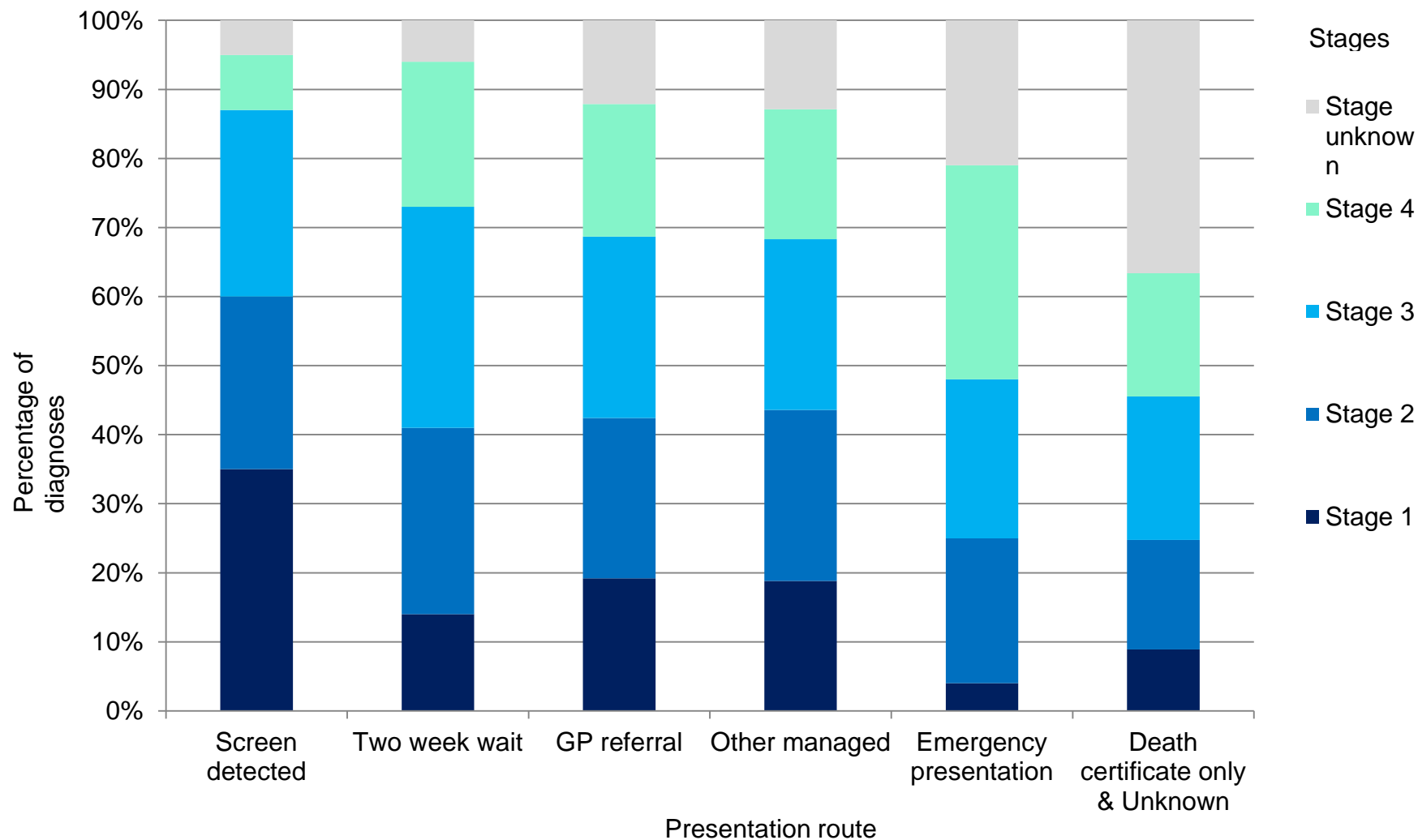
Percentage of tumour stages by presentation route,
Colorectal, 2012



**Percentage of tumour stages by presentation route,
Colorectal, 2012**



Percentage of presentation routes by tumour stage,
Colorectal, 2012



SACT for England - a world first

[Home](#) [About SACT](#) [FAQs](#) [About CIU](#) [SACT Training](#) [Reports](#) [Conferences](#)

Welcome to the SACT Systemic Anti-Cancer Therapy Dataset website

Start upload

Anon_10.csv

Demo_10.csv

C52X.csv

upload.csv



How to upload your data

Watch a video and read step-by-step instructions on how to upload chemotherapy data

Data submissions

View details of which trusts have uploaded their data into the SACT system

Top regimens

View the most common regimens used to treat each type of cancer

FEC + DOCETAXEL	8,224
DOCETAXEL	7,397
PACLITAXEL	6,800

This website brings together all current information on the Systemic Anti-Cancer Therapy (SACT) Dataset and its collection by the Chemotherapy Intelligence Unit (CIU). It provides guidance on the background to the dataset, what it covers and how to prepare for data submission via the [upload portal](#).



Register and Submit

Register on portal [Register](#)

Access portal [Portal](#)

[What you need to do](#)

 [Monthly Process](#)

 [Monthly Submission](#)

[Timetable](#)

Helpdesk Info Snapshots and Training Information

[Click here to access snapshots and information on training](#)

SACT Data

SACT Data Completeness report (December 2014 to November 2015)

England															
All Diagnostic Groups															
Number of patients		% NHS Number		% Date of Birth		% Current gender		% Ethnicity		% Patient postcode					
177,869	↑	100%	M	100%	M	100%	→	95%	→	100%	M				
Number of tumour records		% GP Practice Code		% GMC Code		% Consultant Specialty		% Primary diagnosis		% Morphology		% Stage of disease at start of programme			
188,828	↑	92%	→	95%	→	95%	→	100%	→	51%	↑	53%	↓		
Number of regimens		% Programme number		% Regimen number		% Treatment intent		% Regimen name		% Height at start of regimen		% Weight at start of regimen		% Performance Status at start of regimen	
282,713	↑	88%	→	77%	↑	92%	→	100%	M	70%	↑	72%	↑	57%	↑
		% Comorbidity adjustment		% Date of decision to treat		% Start date of regimen		% Clinical trial		% Chemo radiation		% Number of cycles planned			
		60%	↑	89%	↓	100%	M	90%	↑	83%	↑	77%	↑		
Number of cycles		% Cycle number		% Start date of cycle		% Weight at start of cycle		% Performance Status at start of cycle		% OPCS procurement code		% of Cycles with Drug records			
917,141	↑	100%	M	98%	→	70%	↑	61%	↑	67%	→	94%	→		
Number of drug records		% Drug name		% Actual dose per administration		% Administration route		% Administration date		% OPCS Delivery code		% Organisation code of drug provider			
2,315,211	↑	100%	→	96%	↑	98%	→	100%	→	74%	→	99%	↑		
Number of outcome records		% Date of Final Treatment		% Regimen modification (dose reduction)		% Regimen modification (time delay)		% Regimen modification (stopped early)		% Regimen outcome summary		% Date of death			
225,289	↑	34%	↑	68%	↑	39%	↑	65%	↑	9%	→	14%	↓		

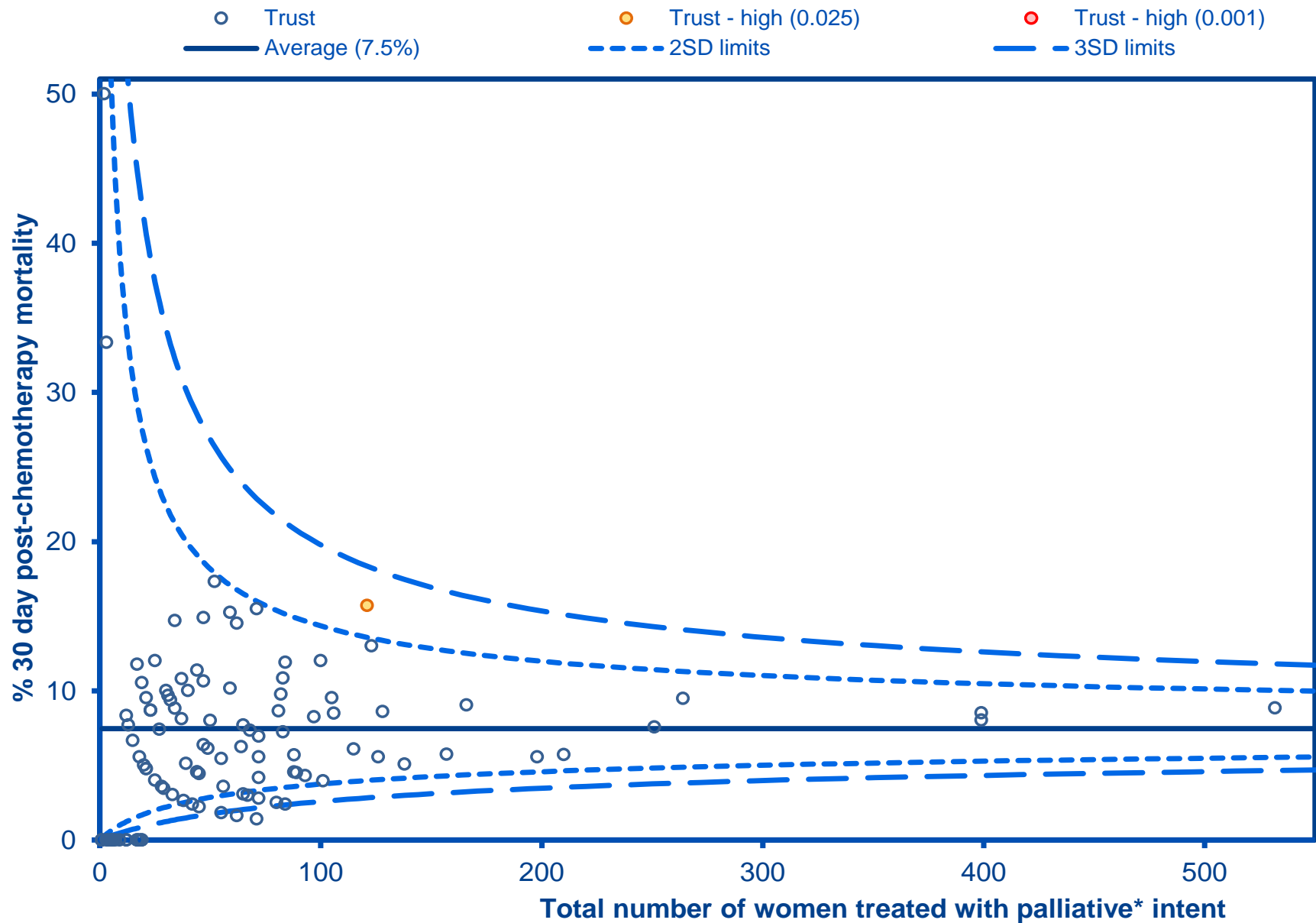


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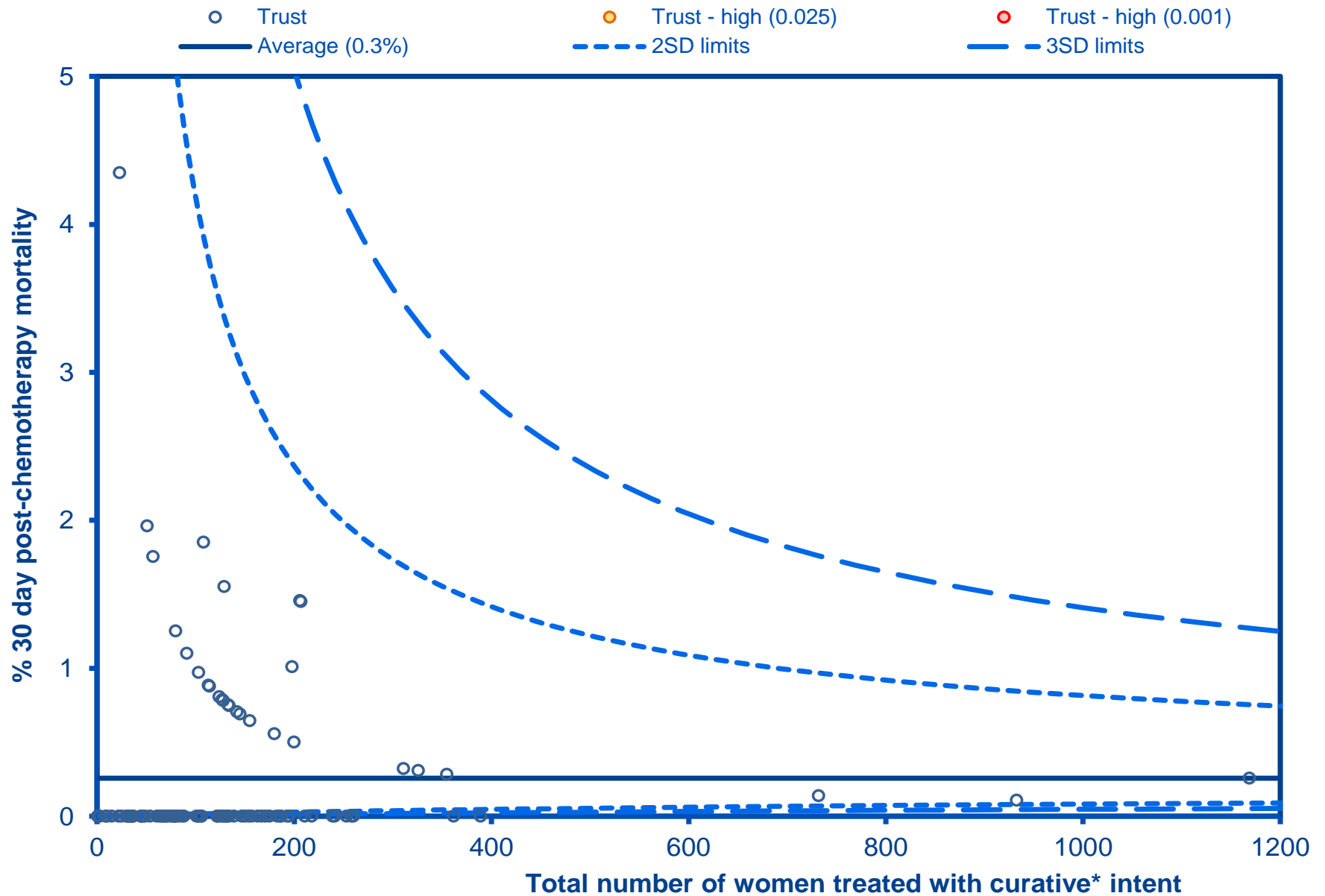
Deaths within 30 days of chemotherapy in breast and lung cancer: an analysis using SACT data for patients treated in England in 2014

Dodwell D, Wallington M, Bomb M

Breast, palliative* intent

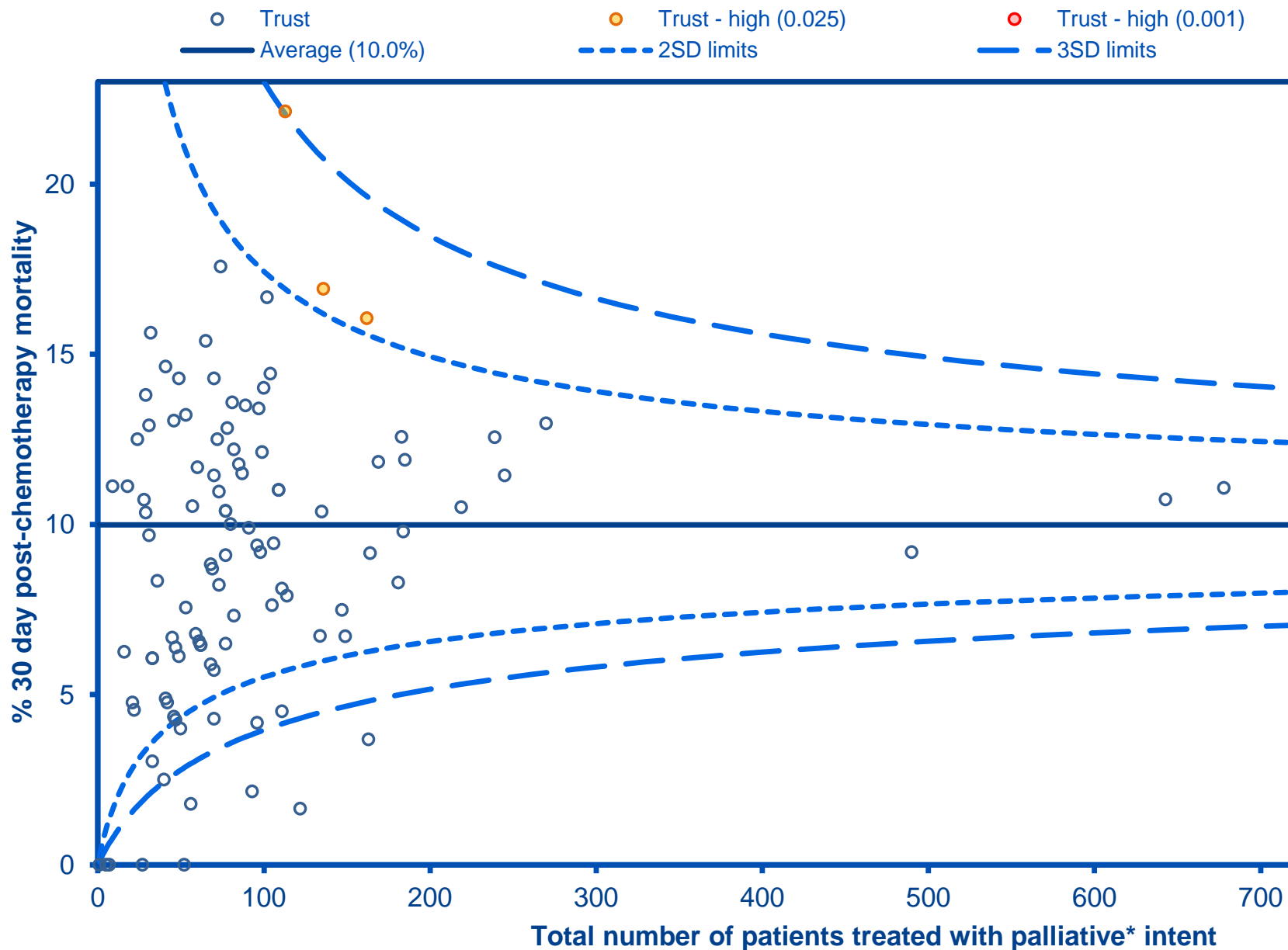


Breast, curative* intent



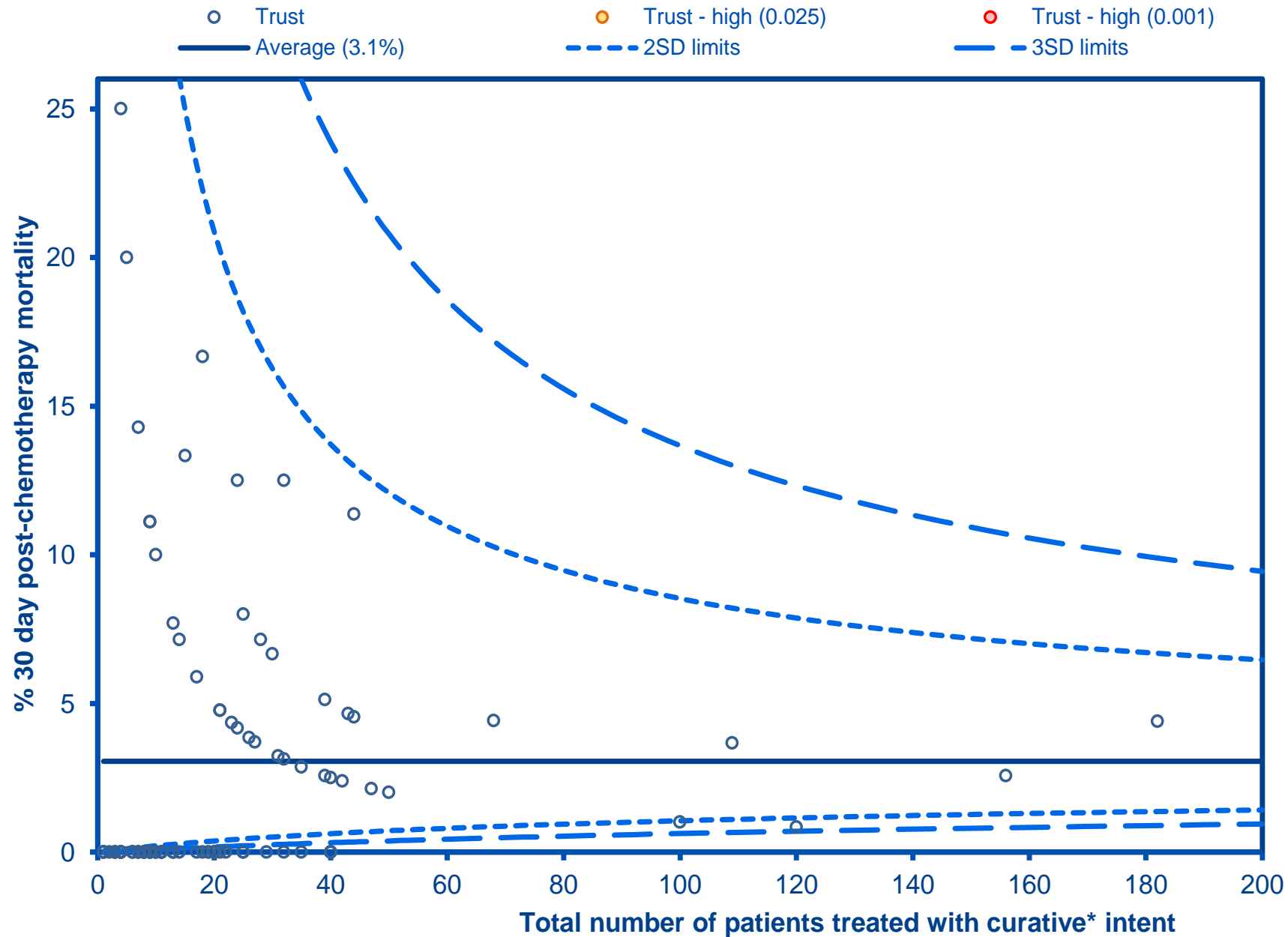
SACT (January 2014 to December 2014)

Lung, palliative* intent



SACT (January 2014 to December 2014)

Lung, curative* intent



SACT (January 2014 to December 2014)

30 day mortality for breast – age

Curative intent

Age group	<30D Mort	Total patients	<30D Mort (%)	Odds Ratio	P> z	95% CI
24-49	4	5,171	0.1%	0.63	0.472	0.18 - 2.23
50-59	6	4,833	0.1%	Comparison Group		
60-69	19	3,895	0.5%	3.56	0.007	1.41 - 8.98
70+	14	1,674	0.8%	5.17	0.001	1.94 - 13.78

Palliative intent

Age group	<30D Mort	Total patients	<30D Mort (%)	Odds Ratio	P> z	95% CI
24-49	129	1,523	8.5%	1.38	0.013	1.07-1.78
50-59	143	2,048	7.0%	Comparison Group		
60-69	156	2,073	7.5%	1.08	0.516	0.85-1.38
70+	136	1,946	7.0%	0.89	0.376	0.70-1.15

30 day mortality for breast – PS

Curative intent

Performance status	<30D Mort	Total patients	<30D Mort (%)	Odds Ratio	P> z	95% CI
0	15	7,553	0.2%	Comparison Group		
1	10	3,198	0.3%	0.16	0.001	0.05-0.45
2-4	6	252	2.4%	7.47	<0.001	2.73-20.47
Not recorded	12	4,570	0.3%	1.18	0.682	0.54-2.55

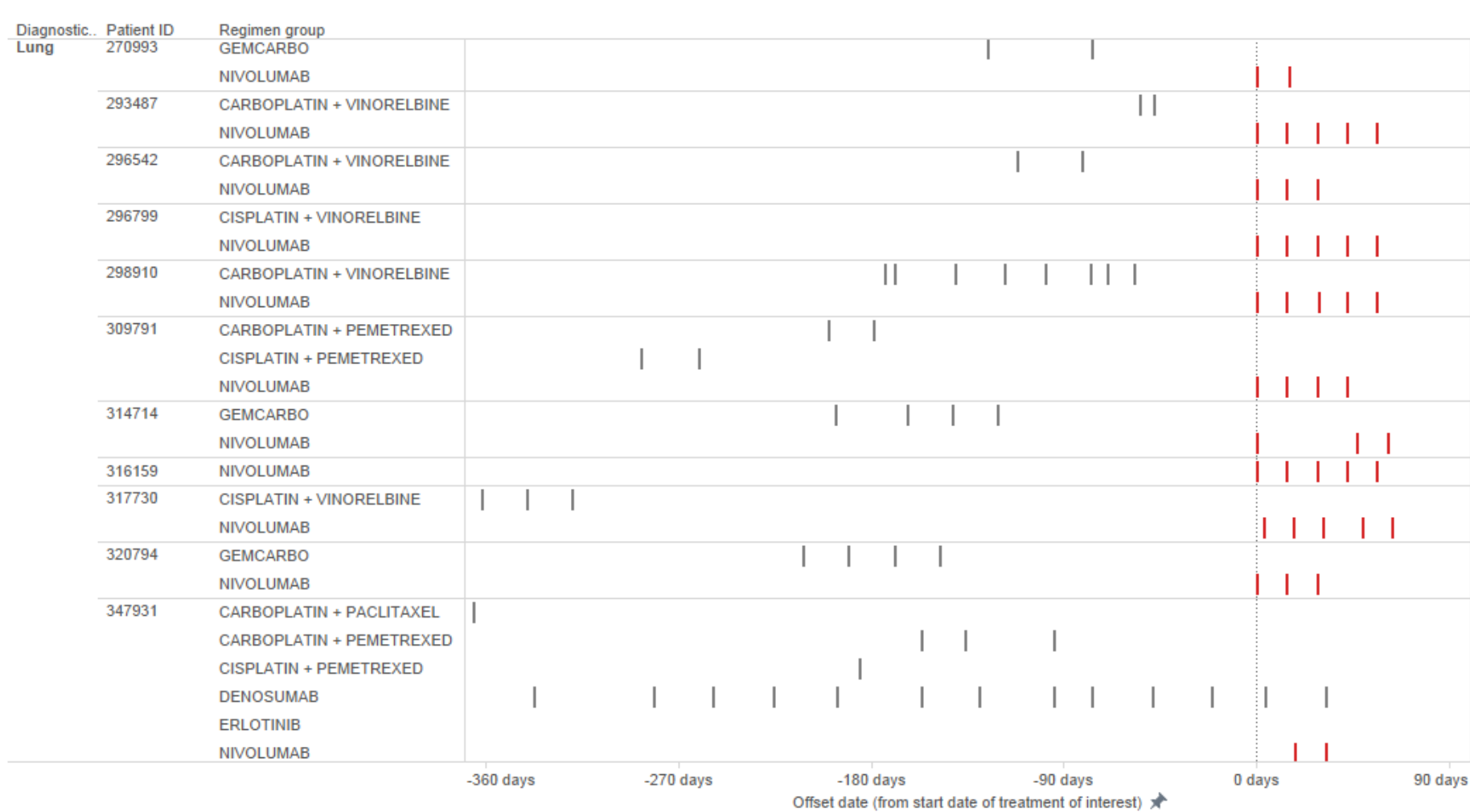
Palliative intent

Performance Status	<30D Mort	Total patients	<30D Mort (%)	Odds Ratio	P> z	95% CI
0	73	2,070	3.5%	Comparison Group		
1	163	2,506	6.5%	0.29	<0.001	0.22-0.37
2-4	129	699	18.5%	6.93	<0.001	5.10-9.42
Not recorded	199	2,315	8.6%	2.80	<0.001	2.11-3.72

30 day mortality for lung – ‘real world’ vs RCT

Cancer type	Treatment intent	Number of patients	% of total patients	<30D Mort (n)	<30D Mort (%)
NSCLC	Curative	1,936	18%	56	2.9%
	Palliative	7,546	69%	710	9.4%
	Not recorded	1,510	14%	95	6.3%
	All intents combined	10,992	100%	861	7.8%
SCLC	Curative	370	11%	15	4.1%
	Palliative	2,550	78%	302	11.8%
	Not recorded	370	11%	47	12.7%
	All intents combined	3,290	100%	364	11.1%
Lung (not recorded)	Curative	157	19%	3	1.9%
	Palliative	540	64%	51	9.4%
	Not recorded	145	17%	5	3.4%
	All intents combined	842	100%	59	7.0%

Treatment sequence for patients with lung cancer receiving NIVOLUMAB

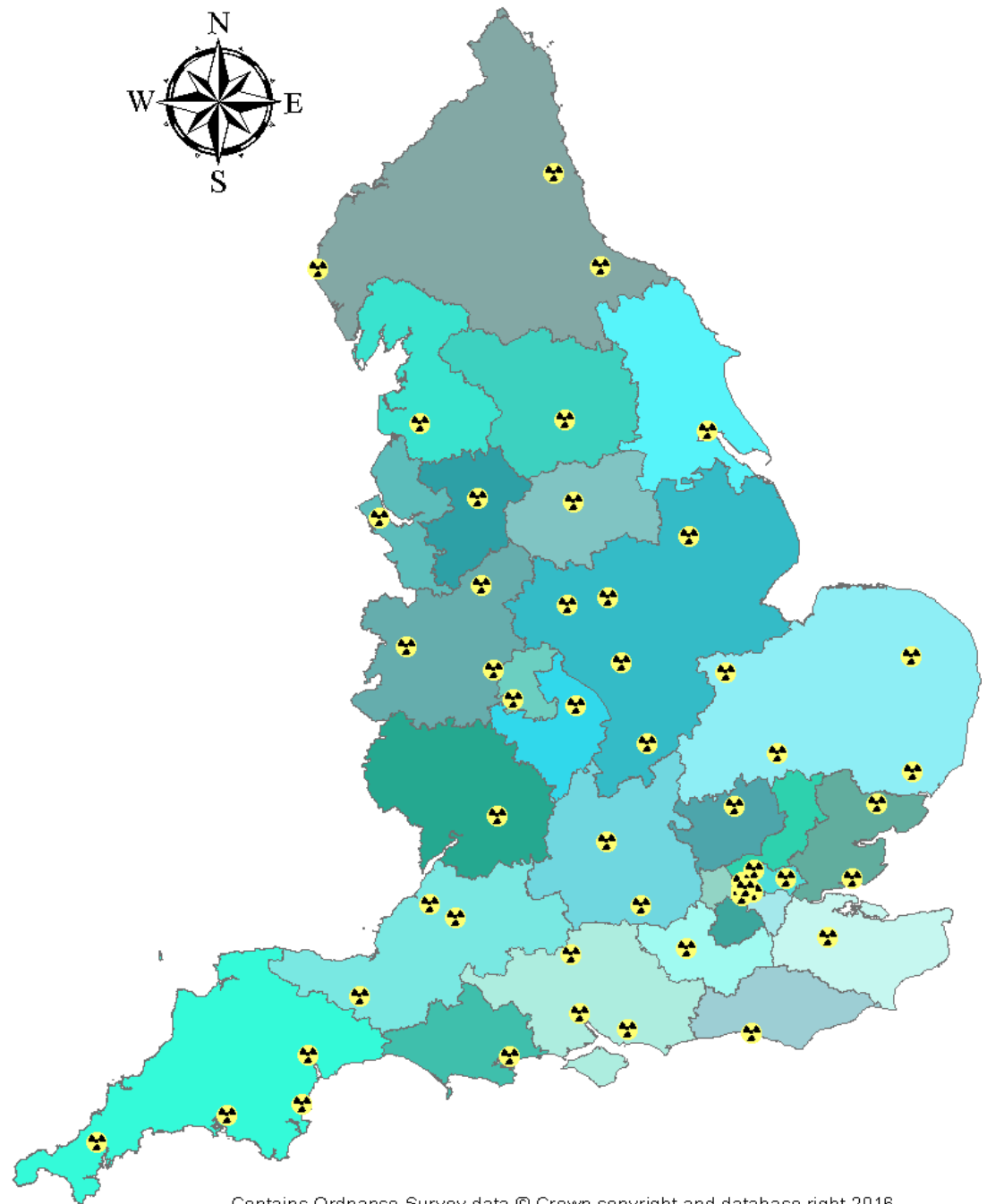


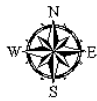
Source: SACT, accessed December 2015

Radiotherapy Dataset

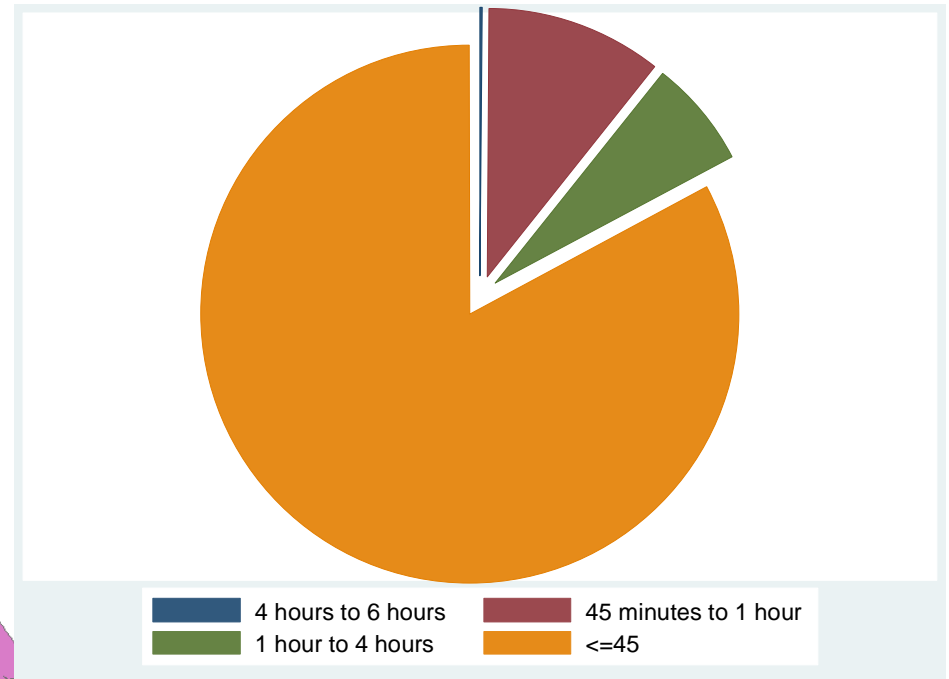
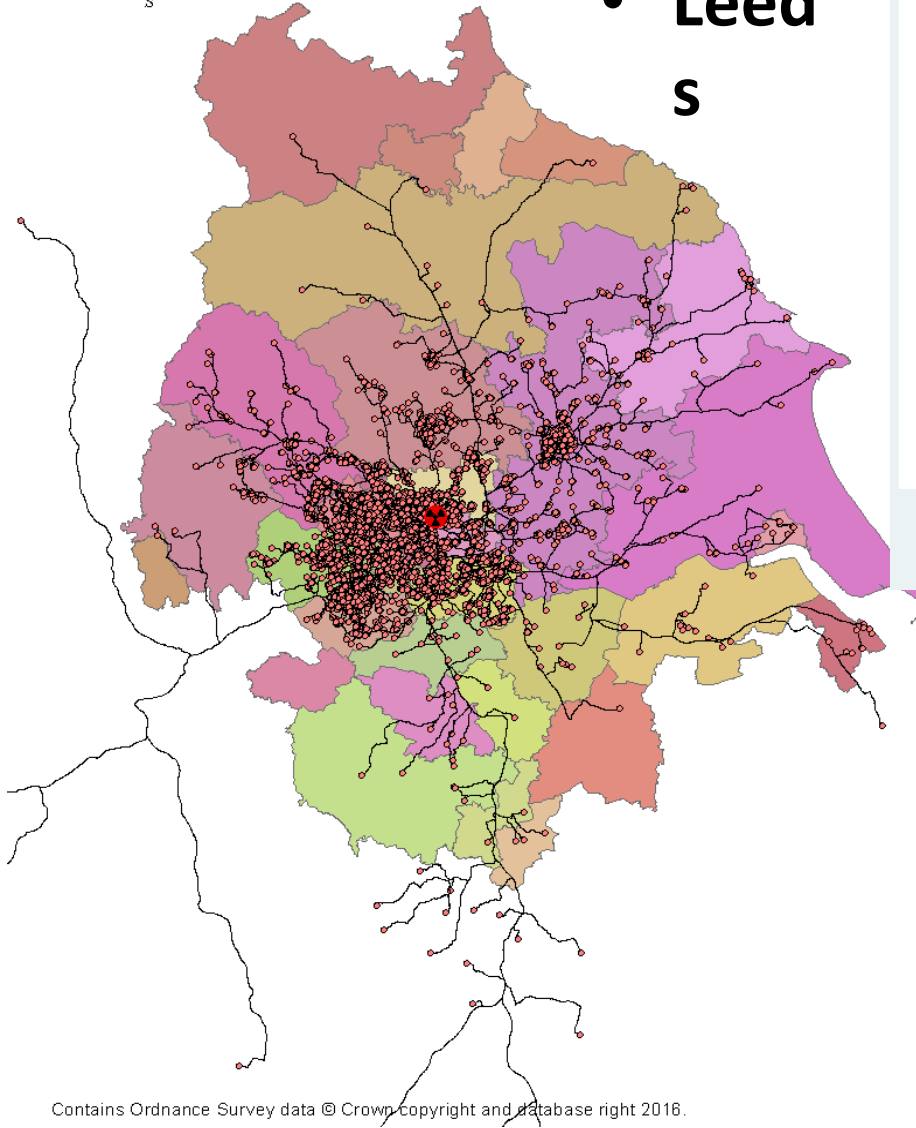
- Collected since April 2009
- Collection, collation and reporting by NatCanSat team (Liverpool) until 2016; collected (for England) by PHE from April 2016
- Historical data available for analysis
- Need for string clinical interpretation in its analysis

Radiotherapy centres in England





- Leeds



Work in progress:

“Mapping radiotherapy activity across England between 1st April 2014 and 31st March 2015. ICD-10 codes (C00 – C97 exc C44) were included in these analyses.”