Public Health England

National Cancer Intelligence Network

Frequency and characterisation of outpatient attendances before and after cancer diagnosis

S Miller · S McPhail · L Irvine · J Shelton · M Peake

NCIN Lung Cancer Workshop

Public Health England

Contents

- What are Hospital Episode Statistics (HES) outpatients data?
- Cohort rationale and top level stats
- Analysis
  - Volume pre-, post- and peri-diagnosis
  - Specialties: Focus on lung and breast cancers
  - Procedures
- Future potential…

Public Health England

What are 'HES outpatients' data?

- Health & Social Care Information Centre (HSCIC) provide HES outpatient data.
- Collection started 2003/4; England only; 2012/13 = 75.5m appointments attended.
- Outpatient data linked to cancer registrations for the first time.
- Inform other projects
    - E.g. post-diagnostic activity and Macmillan-NCIN 'progressive cancers' project

WE ARE MACMILLAN. CANCER SUPPORT

- Varying levels of variable completeness, field completion not always mandatory.
    - >99% of specialties recorded (i.e. not null and not unknown)
    - >99% first or follow-up attendances
    - c.13% of procedures complete (but not all patients will have one) [lung=12%]
- "Hot off press" – new and exploratory figures, more investigation needed.

Public Health England

Cohort summary

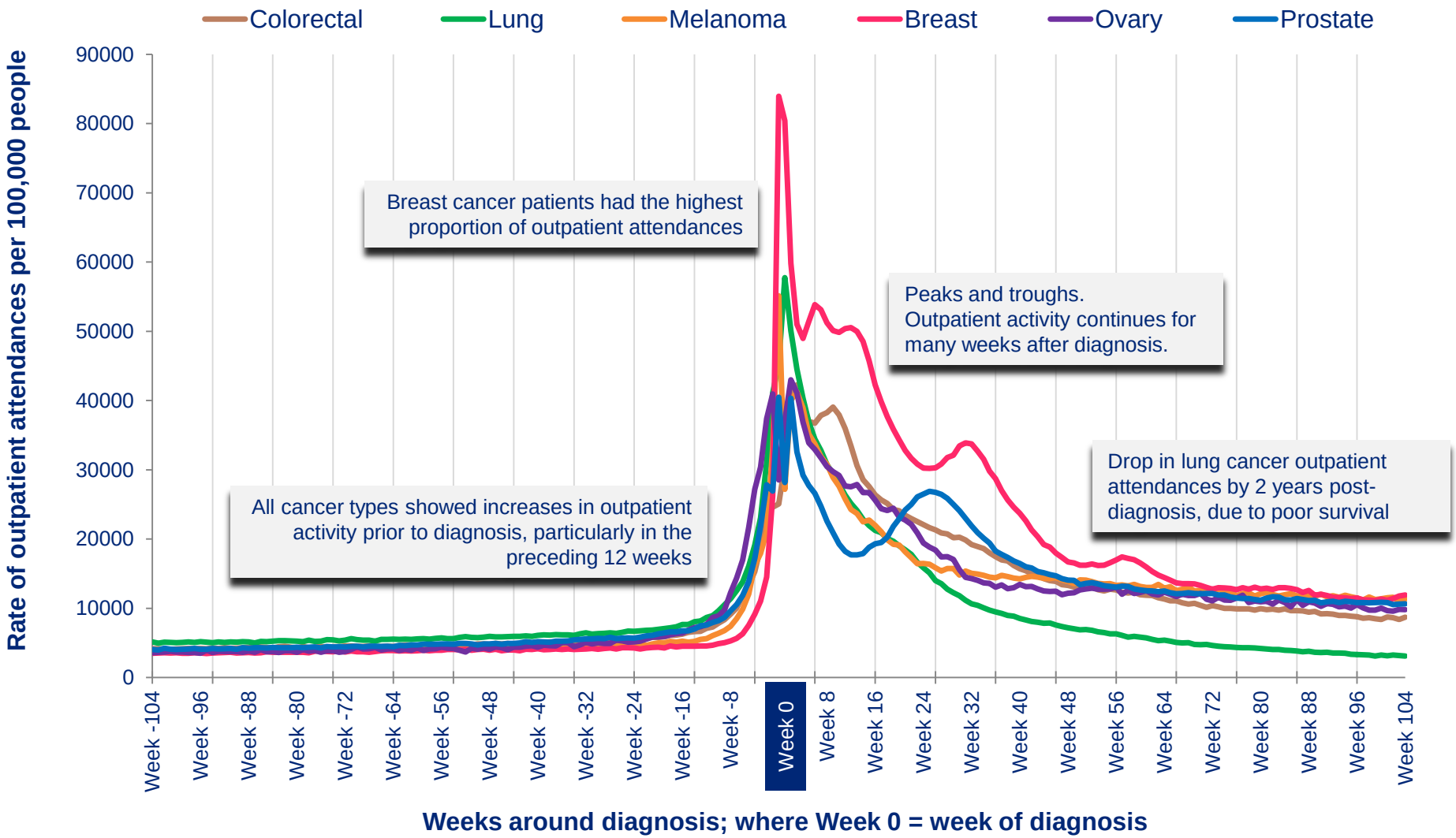
- We identified patients diagnosed with cancer 2008-2010 using cancer registrations.
- Selected: breast, bowel, lung, prostate, skin and ovarian = 473,718 people.
- ALL outpatient attendances 2006-2012 (2 years either side of diagnosis) = 11.6million.
    - More time needed to effectively separate cancer-related attendances.
    - Figures below will reflect number of people, survival rates and types of treatment.

	Breast	Prostate	Lung	Colorectal	Melanoma	Ovary
Number of cancer registrations 2008-2010	123,245	102,344	101,310	98,958	30,578	17,283
Number of outpatient attendances 2006-2012	3,758,834	2,418,358	1,983,606	2,354,059	696,727	402,978
Mean number of outpatient attendances per patient	30	24	20	24	23	23
Ratio of pre- to post-diagnostic outpatient attendances	1:5	1:3	2:3	1:3	1:3	1:3
% of outpatient attendances in 24-week peri-diagnostic period	28%	22%	35%	27%	26%	29%

Public Health England

Outpatient attendances: volume distribution 1

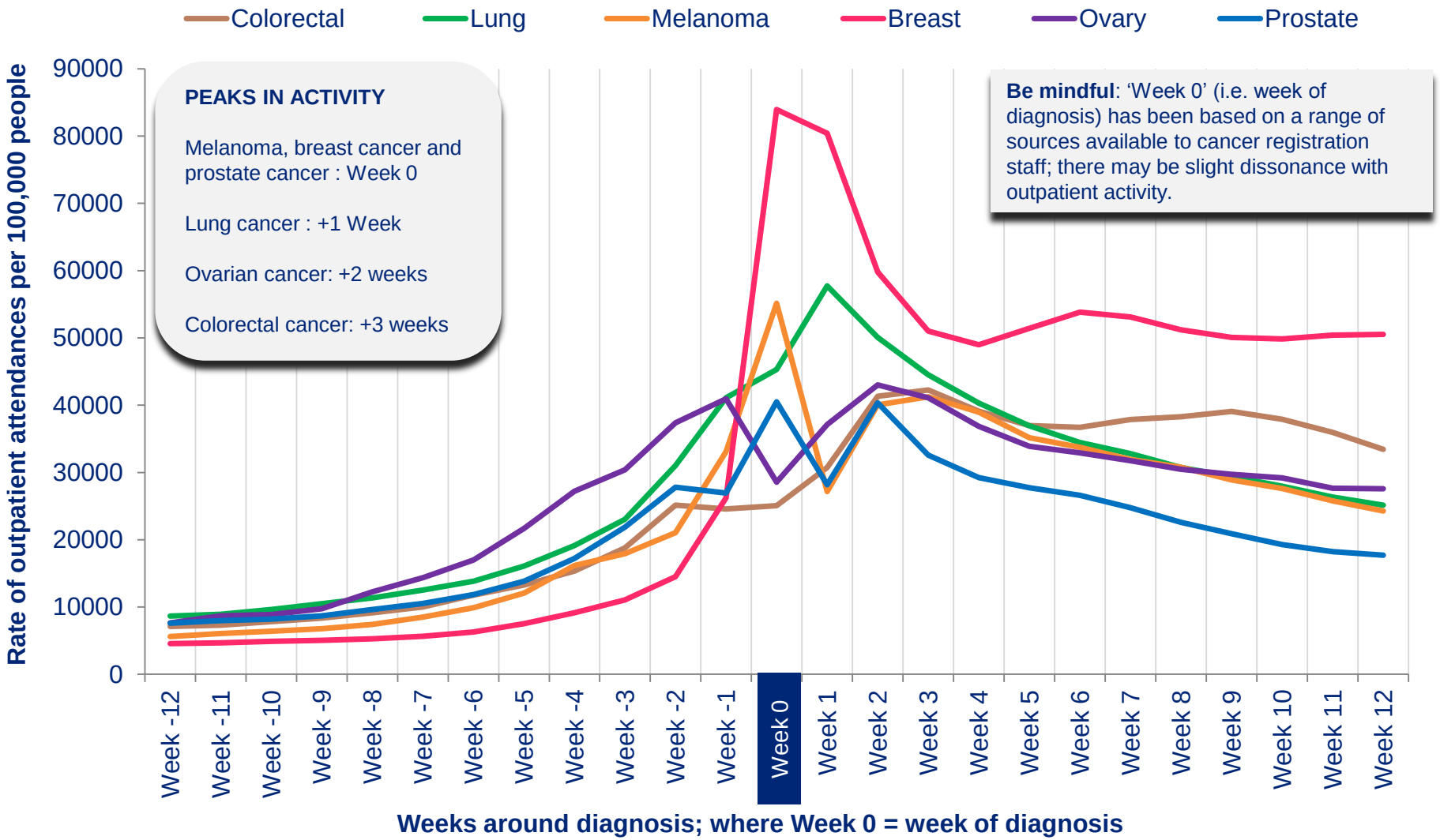
by week and cancer type for two years either side of diagnosis



Public Health England

Outpatient attendances: volume distribution 2

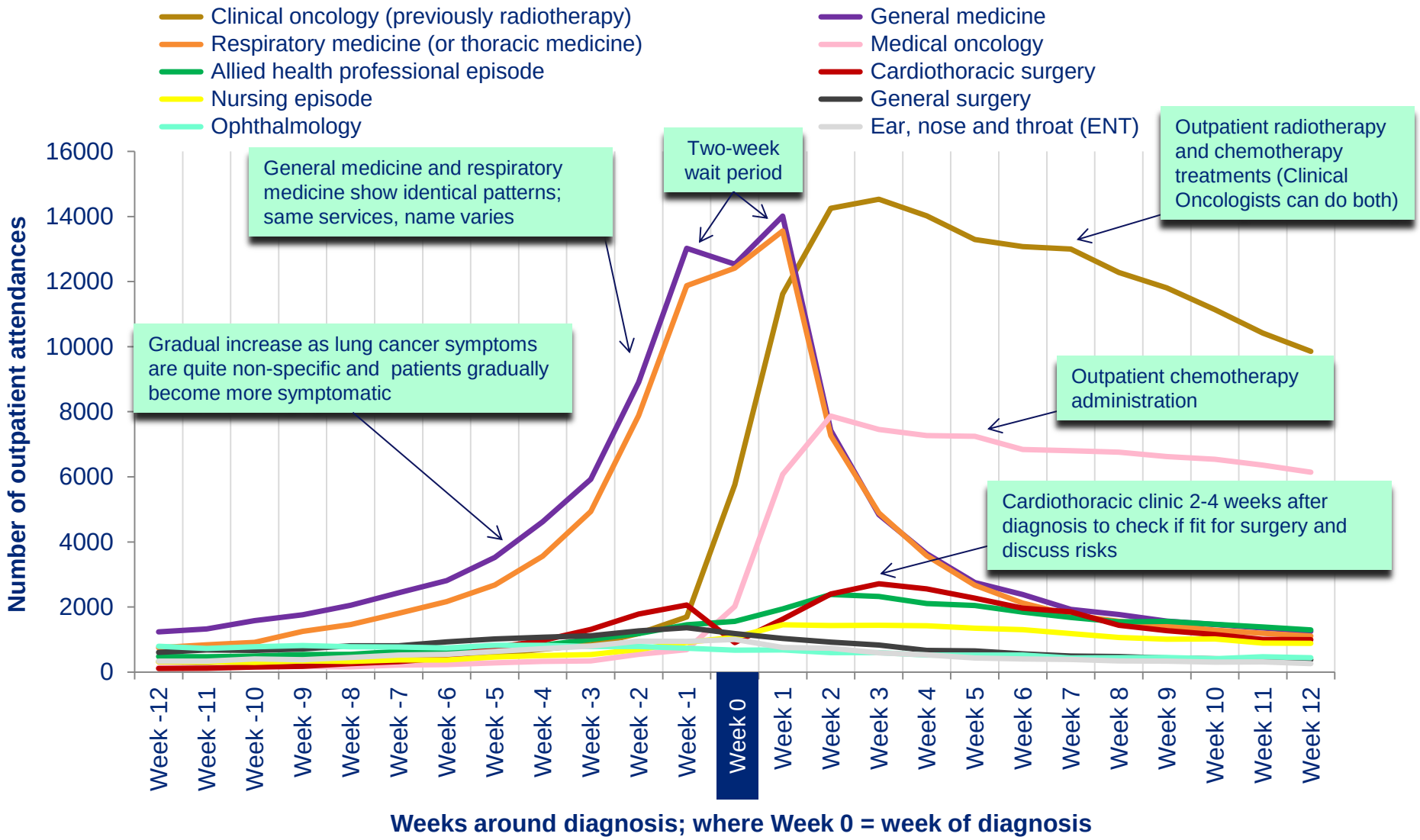
by week and cancer type for 24-week peri-diagnostic period



Public Health England

Lung cancer: top 10 outpatient specialties

by week for 24-week peri-diagnostic period

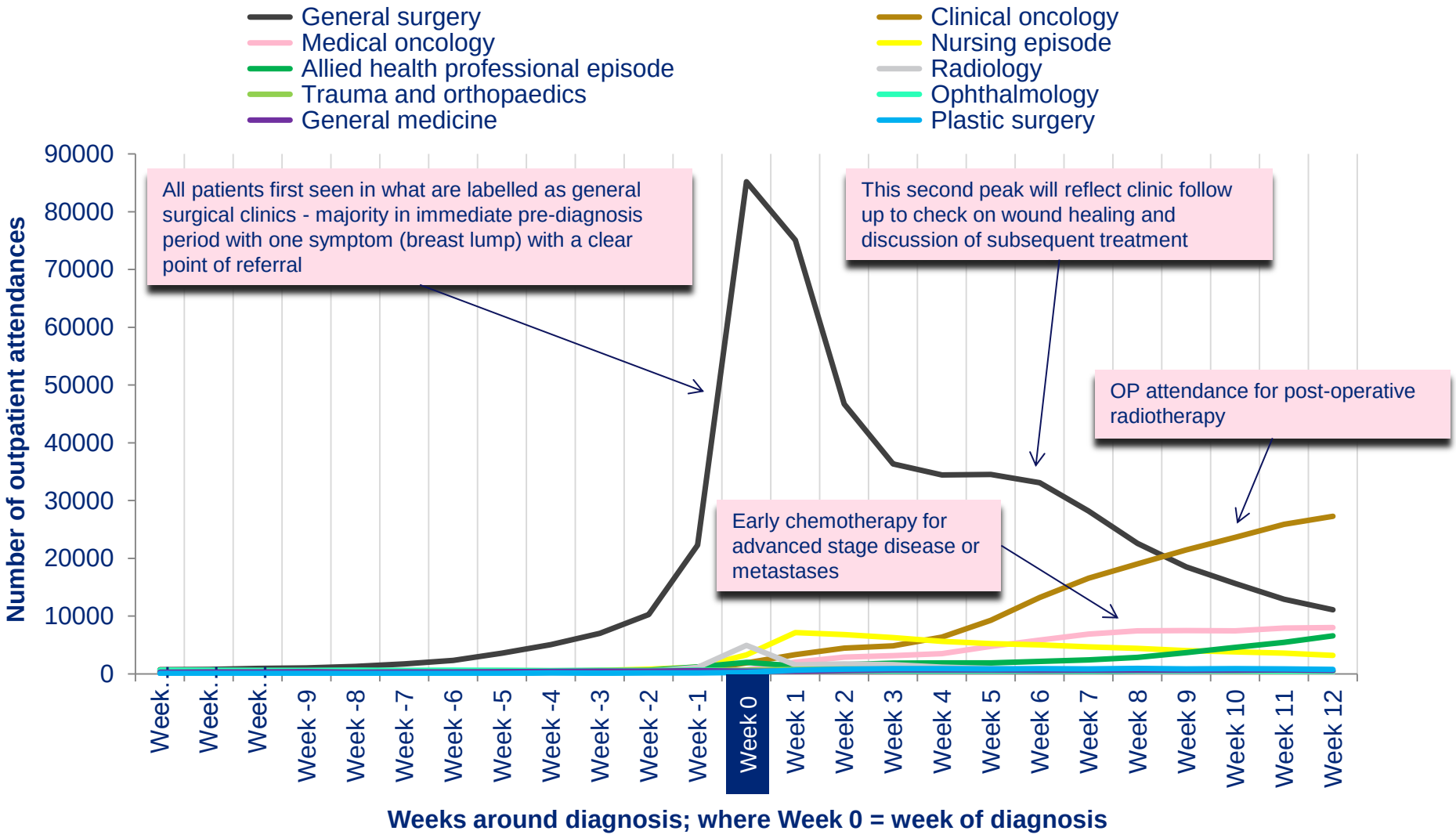


Frequency and characterisation of outpatient attendances before and after cancer diagnosis

Public Health England

Breast cancer: top 10 outpatient specialties

by week for 24-week peri-diagnostic period



Public Health England

Top 3 outpatient procedures

by cancer type and by OPCS chapter and procedure group

		Breast	Prostate	Lung	Colorectal	Melanoma	Ovary
% N/A		83%	86%	88%	87%	88%	87%
3 most common OPCS chapters (out of 25 chapters)	1	Miscellaneous Operations	Miscellaneous Operations	Miscellaneous Operations	Miscellaneous Operations	Miscellaneous Operations	Miscellaneous Operations
	2	Diagnostic Imaging, Testing and Rehabilitation	Diagnostic Imaging, Testing and Rehabilitation	Diagnostic Imaging, Testing and Rehabilitation	Diagnostic Imaging, Testing and Rehabilitation	Skin	Diagnostic Imaging, Testing and Rehabilitation
	3	Endocrine System and Breast	Urinary	Respiratory Tract	Lower Digestive Tract	Diagnostic Imaging, Testing and Rehabilitation	Upper Female Genital Tract
3 most common OPCS procedure groups (out of 900+ groups)	1	Radiotherapy Delivery	Radiotherapy Delivery	Radiotherapy Delivery	Assessment	Assessment	Assessment
	2	Assessment	Assessment	Assessment	Radiotherapy Delivery	Exploration Of Other Skin Of Other Site	Diagnostic Blood Tests
	3	Diagnostic Imaging Procedures	Other Operations On Outlet Of Male Bladder	Diagnostic Blood Tests	Diagnostic Blood Tests	Other Excision Of Lesion Of Skin	Diagnostic Imaging Procedures

Public Health England

Future potential

- HES Outpatients data linked with cancer registrations → richer picture.
- With more time:

- In combination with other datasets e.g. SACT (chemotherapy), RTDS (radiotherapy), DIDs (imaging), HES inpatients, HES A&E = huge potential.
- Inform other projects e.g. Routes to Diagnosis, Routes from Diagnosis, Macmillan-NCIN progressive cancers project.

Public Health England

Thank you for listening

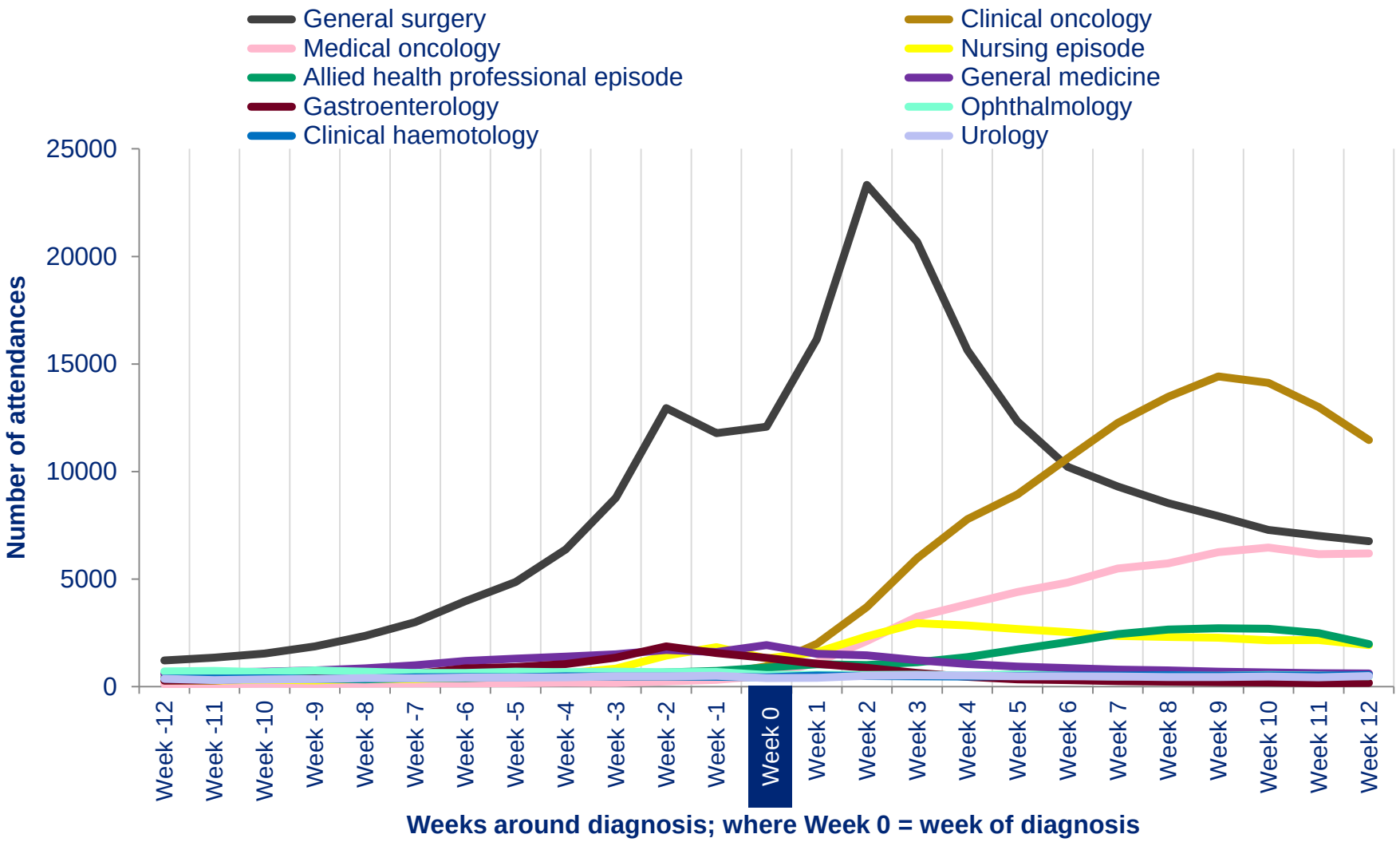
and to co-authors and Analysts at NCIN

National Cancer Intelligence Network

analysts@ncin.org.uk

www.ncin.org.uk

Public Health England

Colorectal cancer: top 10 specialties by week

for 24-week peri-diagnostic period