



# Prevalence of subsequent primary tumours with demographic variation for those living with cancer in London



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## BACKGROUND

People diagnosed with multiple tumours may be more likely to be on complex management and end of life pathways.

This study presents proportions of people in London with more than one cancer diagnosis segmented by London sub geography. The relationship between cancer sites was also investigated.

## METHODS

- Data on people in London diagnosed with more than one primary cancer (ICD-10 C00-C97 excluding C44) from 1995-2015, alive on 31/12/15, was extracted from Public Health England's cancer registry.
- Those with two tumours recorded at the same cancer site within 30 days were excluded
- The earliest and most recent diagnoses were used for cancer site analysis.

## RESULTS

- 10,414 people living in London have more than one primary cancer (5% of prevalent cases) (table 1).
- 721 people (>1% of those living with cancer) had three or more primary cancers diagnosed
- 40% of females with a breast tumour had a subsequent breast tumour, and 35% of those with a colorectal tumour had a subsequent breast tumour (figure 1)
- 59% of males with a bladder tumour had a subsequent prostate tumour, and 25% of those first diagnosed with prostate tumour had a subsequent colorectal tumour (figure 1).

Table 1: Counts and rates of those with more than one cancer diagnosis as a proportion of all people alive in London with a cancer diagnosis

Geography		Count	Crude Rate (per 100,000)	Proportion of prevalence
Region	London	10,414	120.06	5.0%
Cancer Alliance	National Cancer Vanguard: North Central and North East London	3,565	105.64	4.8%
	National Cancer Vanguard: North West and South West London	4,709	133.53	5.2%
	South East London	2,140	120.74	4.8%
STP	North Central London	1,764	121.68	5.0%
	North East London	1,801	93.57	4.6%
	North West London	2,388	115.92	4.9%
	South East London	2,140	120.74	4.8%
	South West London	2,321	158.26	5.6%

## DISCUSSION AND CONCLUSION

This work allows for insight in understanding patterns first and most recent cancer site

It also provides commissioners with data to further understanding of people who have multiple occurrences of cancer in London.

Cases where the first and last tumour are the same site could be due to recurrences or metastases recorded as primary tumours and these may require further investigation.

Prior cancers increase the risk of subsequent tumours<sup>1</sup>. Primary care stratified follow up pathways may help identify and manage those patients at higher risk after their first tumour.

## ACKNOWLEDGEMENTS

Data for this study is based on patient-level information collected by the NHS. The data is collated, maintained and quality assured by PHE's NCRAS.

The authors would like to thank Jason Petit, and Andy McMeeking, TCST; and Dr Susan Harden, NCRAS. This work is based on previous work by NCRAS and Macmillan<sup>2</sup>. We would also like to thank the patients for the use of their data.

## REFERENCES

- <http://www.qcancer.org/10yr/male/Hippisley-Cox-2015-Development-and-validation.pdf>
- <http://www.macmillan.org.uk/documents/aboutus/research/researchandevaluationreports/ourresearchpartners/20yearcancerprevalenceposter.pdf>

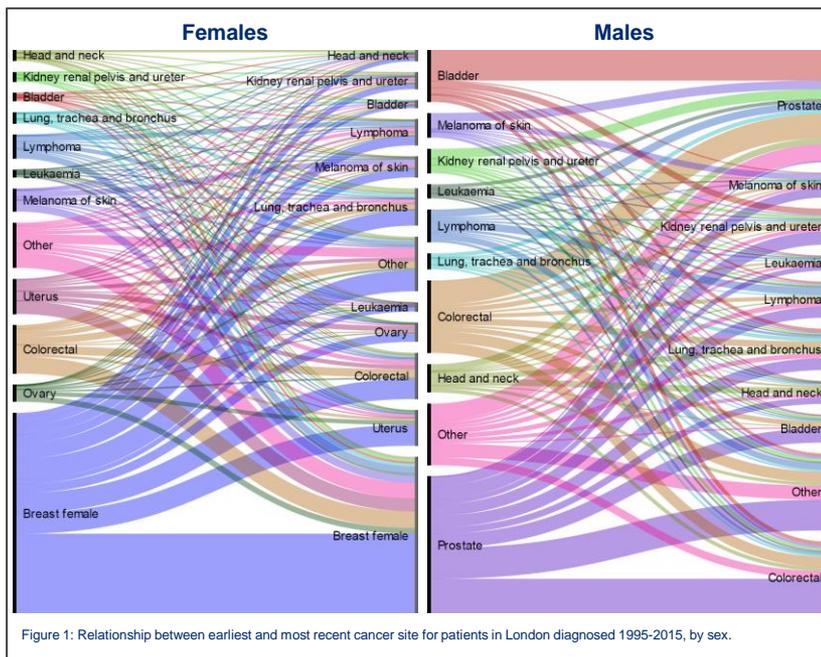


Figure 1: Relationship between earliest and most recent cancer site for patients in London diagnosed 1995-2015, by sex.