



Understanding the current cancer population in England: detailed prevalence estimates

Molly Loughran^{1,2}, Lucy Young^{1,2}, Pawan Randev², Liz Price², Rachel White³, James Charnock^{1,3}

¹ National Cancer Registration and Analysis Service (NCRAS), Public Health England (PHE)

² Transforming Cancer Services Team for London (TCST), National Health Service (NHS)

³ Macmillan Cancer Support



INTRODUCTION

With more people than ever being diagnosed with cancer, there is a need to understand the current population of those living with and beyond cancer. Previous work has looked in detail at the prevalent cancer population alive at the end of 2010¹; however, with the increase of both incidence and survival, this population is increasing rapidly. National Health Service (NHS) cancer-specific health geographies, including Cancer Alliances and National Vanguards, have been introduced to help transform cancer services in England by introducing accountability for the whole patient pathway². This work aims to provide a detailed update of cancer prevalence in England at the end of 2015 and present the data by additional demographics and sub-national geographies.

METHODS

- Data on people diagnosed with cancer (ICD-10 C00-C97 excluding C44) from 1995-2015, alive on 31/12/15, were extracted from Public Health England's cancer registry to allow calculation of 21 year prevalence estimates.
- Data were stratified by a number of criteria: cancer site, sex, age at diagnosis and age in 2015, deprivation, ethnicity, stage, and granular geographic information including cancer alliance.
- For those with multiple cancers, only the first cancer diagnosis was counted for total figures. When presenting data by cancer site, the first diagnosis for each site was counted.
- Crude rates were calculated by dividing counts by the mid-year population estimates for 2015³.

RESULTS

- There were 1,791,366 people—805,944 (2,981.74 per 100,000) males and 985,422 (3,550.17 per 100,000) females—living with cancer in England at the end of 2015 (figure 1).
- 39% of males and 30% of females living with cancer at the end of 2015 were 75 years or older (figure 1).

- Of females with cancer, 48% have had breast cancer; 10% have had colorectal cancer. Of males with cancer, 40% have had prostate cancer; 15% have had colorectal cancer (figure 2).
- 89% and 1% of those with mesothelioma were diagnosed 0-4 and 15-21 years ago. 28% and 24% of those with cancer of the testis were diagnosed 0-4 and 15-21 years ago (figure 4).

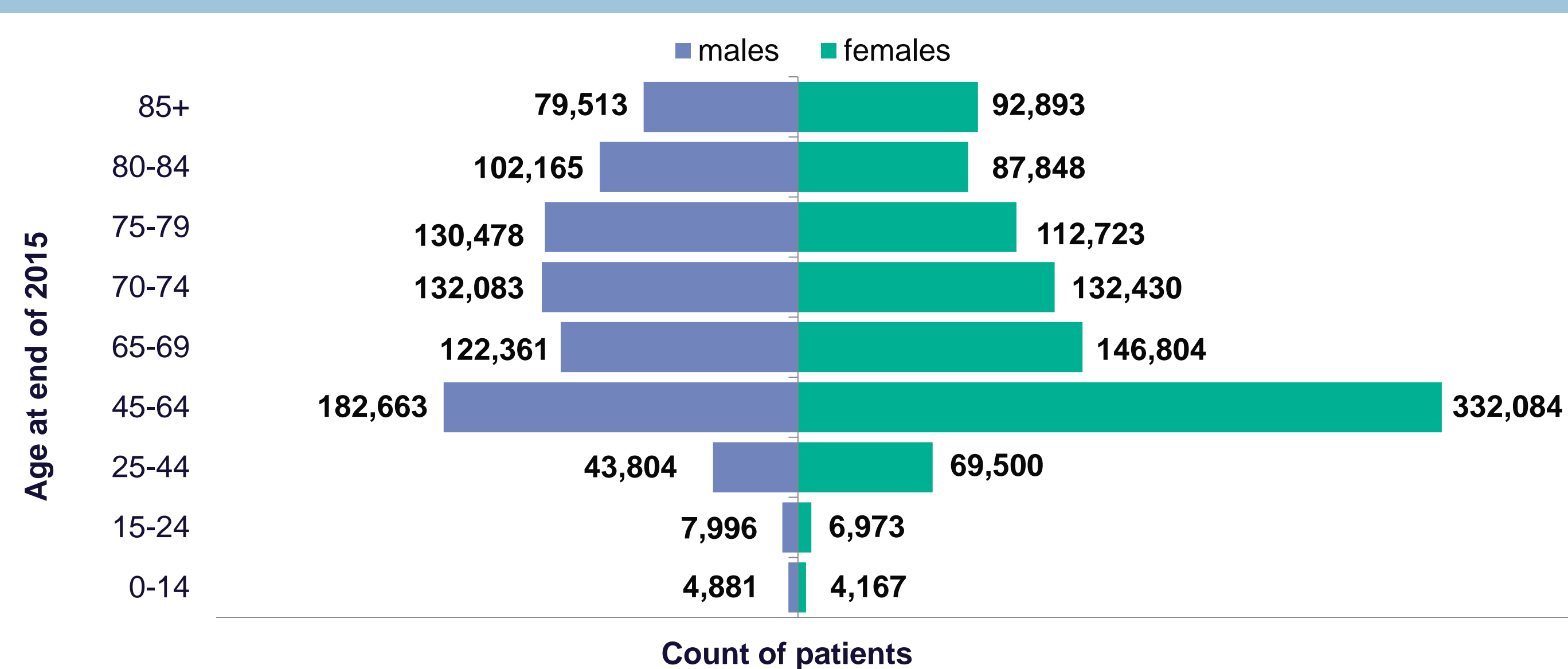


Figure 1. Counts of males and females with cancer alive at the end of 2015, by age in 2015.

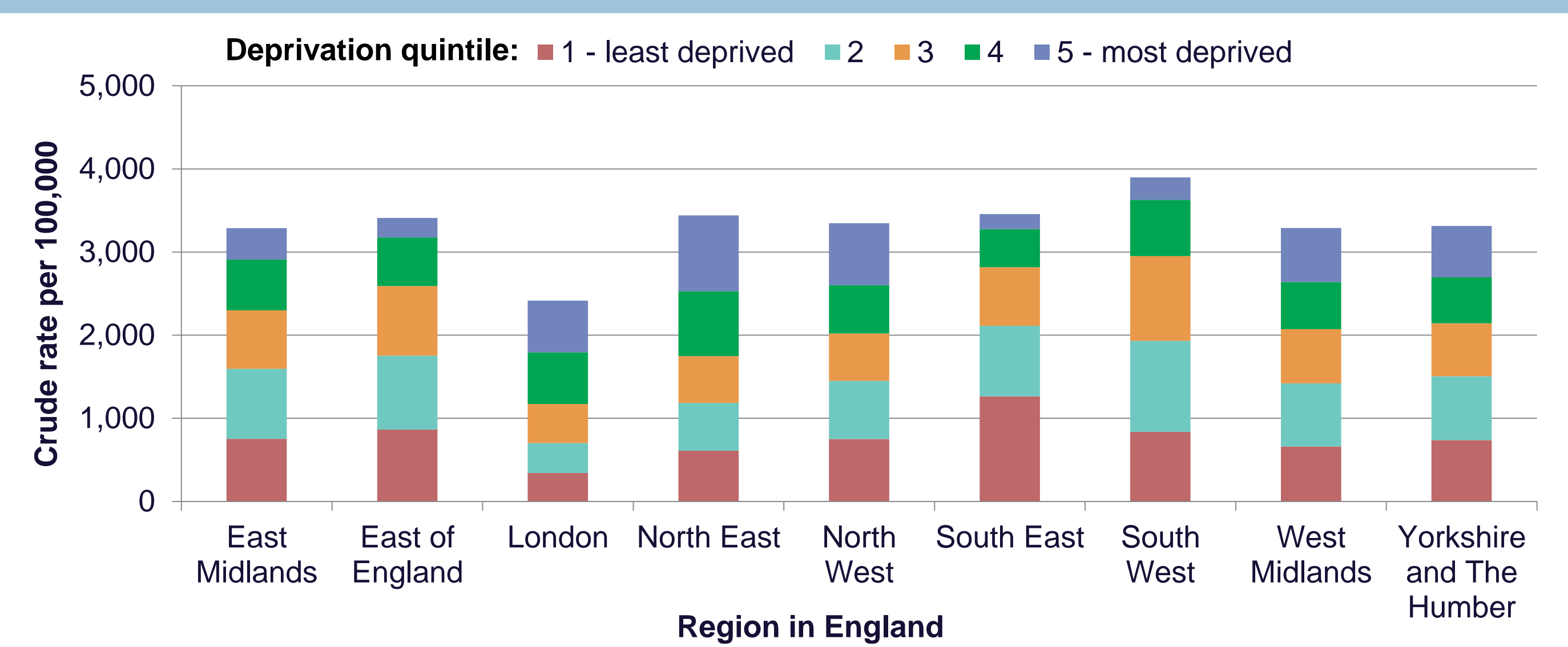


Figure 2. Crude rate per 100,000 people alive with cancer at the end of 2015 shown by region of England and deprivation quintile of residence at the time of cancer diagnosis.

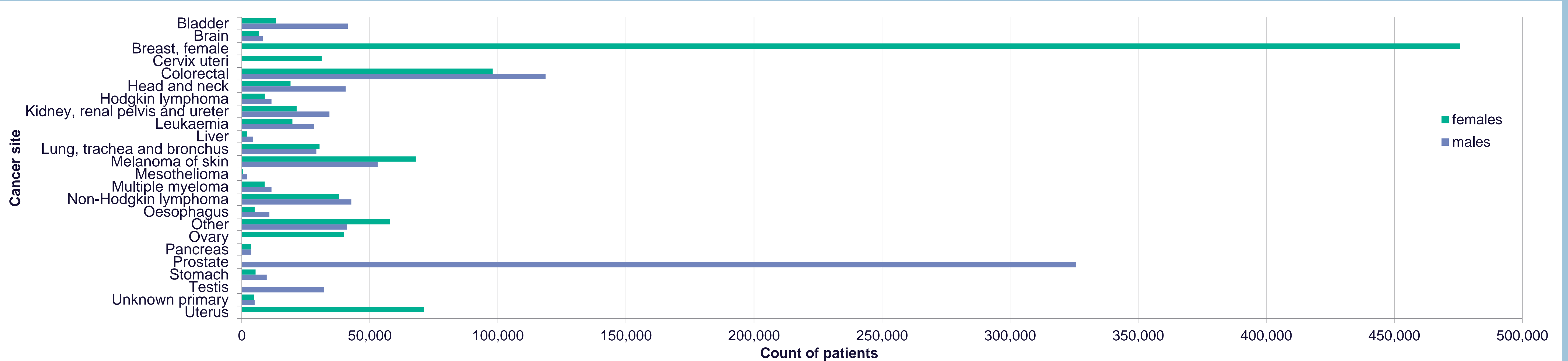


Figure 3. Counts of males and females alive at the end of 2015 by cancer site. Patients with more than one diagnosis will be counted once per cancer site.

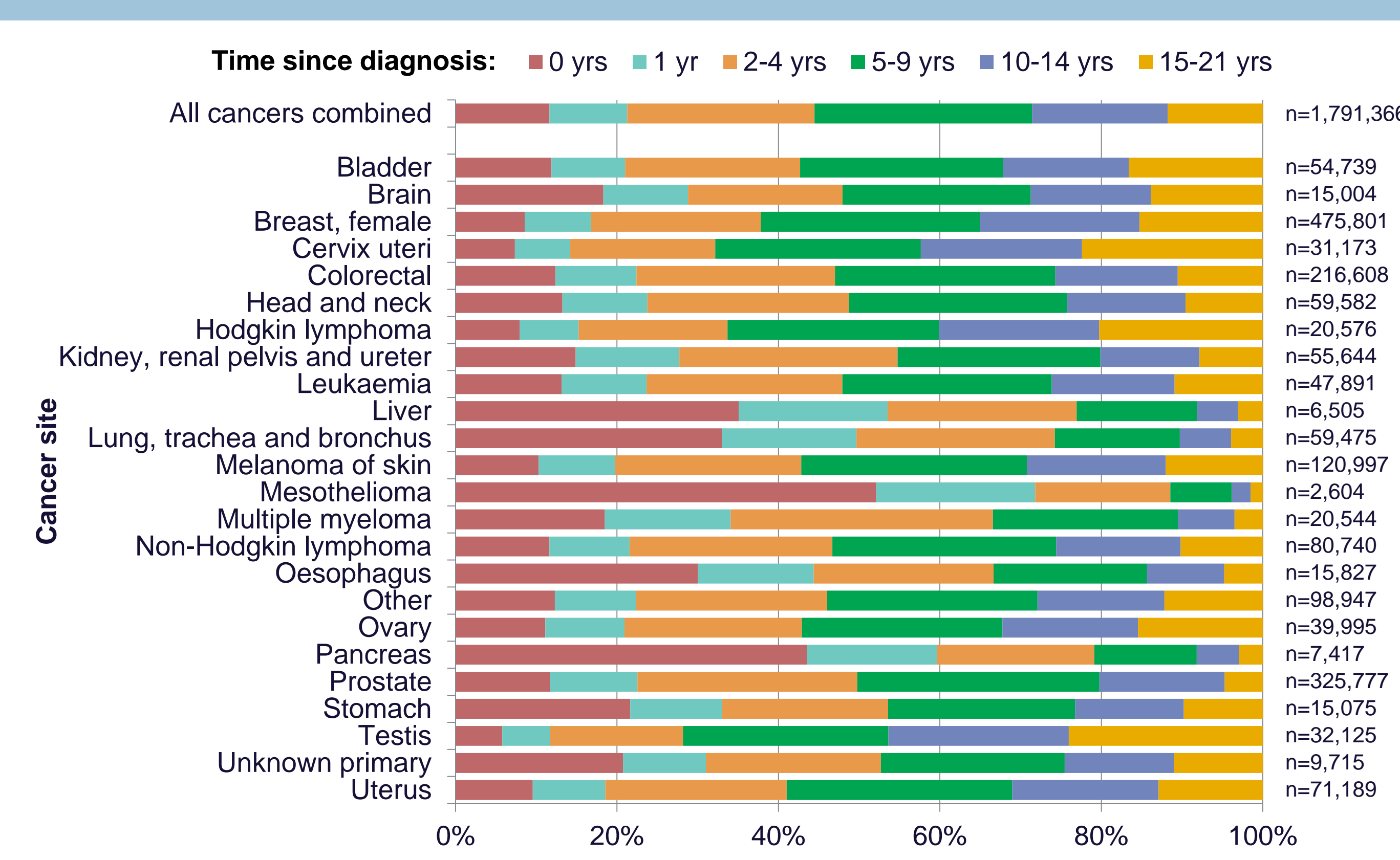


Figure 4. Proportion (%) of people alive with cancer at the end of 2015 by time since diagnosis shown by cancer site. Patients with more than one diagnosis will be counted once per cancer site.

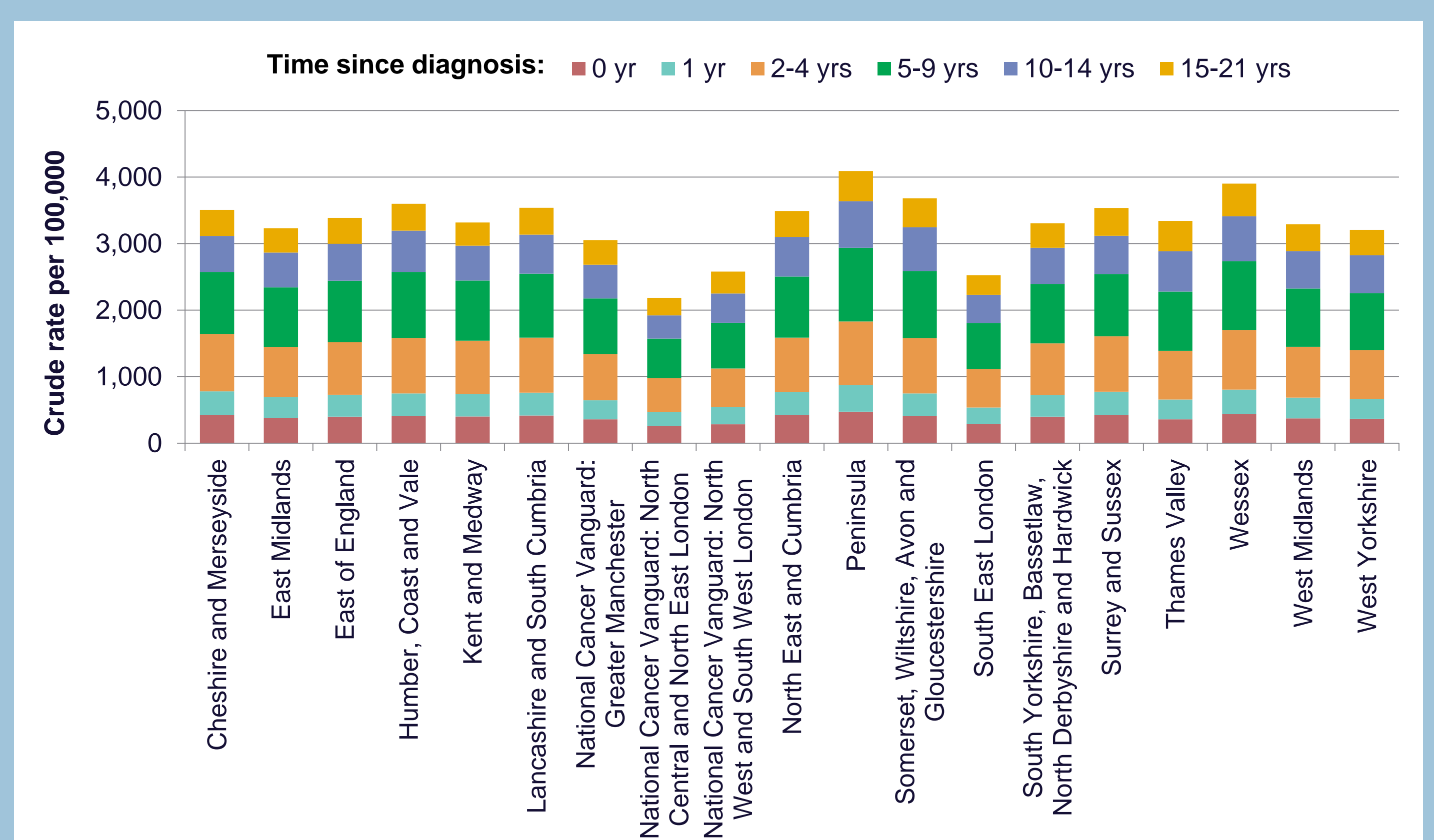


Figure 5. Crude rate per 100,000 of people alive with cancer shown by Cancer Alliance and time since diagnosis from the end of 2015.

DISCUSSION

- Prevalence was found to be lower for cancer types that have a low survival rate and a high incidence rate, for example lung cancer.
- Rates are not age standardised so will be affected by regional demographic variation.
- The crude incidence rates for the regions in England have a similar distribution to the crude prevalence rates shown in Figure 2.

CONCLUSIONS

- Utilisation of more recent cancer registration data has allowed for a more accurate depiction of the current population of people living with and beyond cancer.
- These granular results allow for an in-depth understanding of this population at both national and sub-national levels, including cancer-specific health geographies. This work supports the provision of health and social care services for people living with cancer.

ACKNOWLEDGEMENTS & REFERENCES

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1. Macmillan Cancer Support and National Cancer Registration and Analysis Service. 2015. Available from http://www.ncin.org.uk/about_ncin/segmentation
2. <https://www.england.nhs.uk/cancer/strategy/alliance-guidance/>
3. <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/lowersuperoutputareamidyearpopulationestimates>