CRUK analysis brief

Economic losses due to cancer mortality

June 2025

CANCER RESEARCH UK

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Contents

About this document

Reference

This report should be referred to as follows: Cancer Research UK, 2025. CRUK analysis brief: Economic Losses due to Cancer Mortality.

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About Cancer Research UK

We're the world's leading cancer charity dedicated to saving and improving lives through research. We fund research into the prevention, detection and treatment of more than 200 types of cancer through the work of over 4,000 scientists, doctors and nurses. In the last 50 years, we've helped double cancer survival in the UK and our research has played a role in more than half of the world's essential cancer drugs. Our vision is a world where everybody lives longer, better lives, free from the fear of cancer.

List of acronyms

ASHE	Annual Survey of Hours and Earnings
GBP	British pounds
NRS	National Records of Scotland
NISRA	Northern Ireland Statistics and Research Agency
ONS	Office for National Statistics
PVFLP	Present value of future lost productivity
PYLL	Productive years of life lost
YLL	Years of life lost

Abstract and key insights

Introduction: Cancer is the leading cause of death in the UK, accounting for a quarter of all deaths each year. While cancer epidemiology is relatively well studied, cancer's economic implications are less well understood. This study employs a human capital approach to estimate the cost of lost labour productivity due to cancer-related premature mortality in the UK in 2023.

Methodology: In this study, we use high quality national epidemiological data on deaths, and Office for National Statistics labour market data to estimate productive years of life lost and the present value of future lost productivity. Our dataset is disaggregated by cancer site, age, sex, and nation of the UK. We compare all cancers combined to other causes of death and also break down by cancer site.

Results: An estimated 350,000 productive years of life were lost due to cancer deaths occurring in 2023. The present value of future lost productivity for those deaths in 2023 is estimated to be £10.3 billion. 68% of this loss (£7.04bn) will occur before the end of 2030. Cancer deaths cause the biggest loss of productivity among comparable causes of death in the UK, using either productive life years or future productivity as a measure. Lung, bowel, and breast cancers are associated with the largest productivity loss when comparing cancer sites.

Conclusion: Cancer causes considerable ill-health and premature mortality in the UK; this premature mortality has large implications for productivity, with deaths from 2023 alone leading to productivity losses of £10.3 billion. Further work should seek to contextualise these lost productivity costs in wider economic costs attributable to cancer. Policy makers looking to improve the performance of the UK economy should consider the impact of cancer-related lost productivity when allocating funding for cancer prevention, early detection, diagnosis, and treatment.

Introduction

Cancer is the largest cause of premature mortality in the UK.[1] However, relatively less is known about the cost cancer imposes on the economy. This economic evidence is essential to galvanise action by governments to prevent and control cancer, by demonstrating the economic return for this investment.

The economic cost of cancer includes both direct costs to the health system (e.g. cost of treatments) as well as to patients and families (e.g. out of pocket expenditures) and lost productivity. Lost productivity includes cancer patients and their carers being unable to participate in work and other activities due to having the disease or dying from it.
All health conditions present some economic cost, and comparing those costs is one way for governments to consider where to allocate funding and plan for the future.

This study focuses on the productivity loss from cancer mortality providing valuable economic evidence for the UK. This study extends on previous work by estimating this cost by age group, by nation of the UK, and by cancer site. Advantages in the UK's data are exploited, as more granular data is used here than when analysis for the UK is done in the context of a wider international study.

While this study is a valuable additional piece of evidence, it represents only a partial view of the overall economic cost of cancer for society. This is explored more in the Discussion section, along with comparisons to other studies.

Aims and objectives

1. To estimate the productive years of life lost due to premature cancer mortality in the four nations of the UK in 2023.
2. To estimate the present value of future lost productivity due to premature cancer mortality in the UK in 2023.
3. To assess how this economic cost compares between different cancer sites and between cancer and other causes of death.

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[1] Data is for UK, 2023, at ICD-10 chapter level for ICD10 A00-R99, U00-U85, and V01-Y98 except for ICD-10 C00-D48 (neoplasms) which is split into C00-C97 (malignant neoplasms) and D00-D48 (in situ and benign neoplasms, and neoplasms of uncertain or unknown behaviour). "Cancer" refers to ICD-10 C00-C97 throughout, unless otherwise specified.

Methods

Overall method

This analysis estimates the economic cost of cancer deaths employing a Human Capital approach. This method quantifies the economic value of productivity loss due to cancer deaths. A similar methodology to Brandtmuller et al [1] and Bencina et al [2, 3] was followed, focusing on estimating productive years of life lost (PYLL) and the present value of future lost productivity (PVFLP). The analysis is conducted for the "adult population" which includes the age group of 15-19 years old or older.

Epidemiological data sources

The epidemiological analysis in this paper follows the methodology outlined by Ahmad et al [4]. Life expectancy estimates were obtained from Office for National Statistics (ONS) for England [5], Wales [6], Scotland [7], and Northern Ireland [8].

Counts of the total number of deaths by underlying cause, age, and sex for 2023 were obtained from national statistical agencies for England, Wales, Scotland, and Northern Ireland:

- ONS for England and Wales [9]
- National Records of Scotland (NRS) [10]
- Northern Ireland Statistics and Research Agency (NISRA) [11]

Cause of death classifications were standardised across all four UK countries to ensure consistency between them at chapter level of the International Classification of Diseases, 10th revision coding system (chapter level for ICD-10 A00-R99, U00-U85, and V01-Y98, except C00-D48 split into C00-C97 (malignant neoplasms) and D00-D48 (in-situ, benign and uncertain neoplasms)). Age ranges were recoded into 5-year age bands (15-19, 20-24..., 85-89, 90+) for uniformity across datasets. Counts of total number of deaths were obtained for all cancers combined (ICD-10 C00-C97), all other causes of death at ICD-10 chapter level, and individual cancer sites. A full list of ICD-10 codes included in the analysis by cancer site is available in Table 7 in the Appendix.

Economic data sources

Labour market employment rates (self-employed and salaried employees) were obtained from the ONS Nomis labour market database [12], providing data for the four nations of the UK in 4- or 5-year age bands (16-19, 20-24, 25-29, ..., 75-79, 80+). These data are shown in Figure 8 in the Appendix The only adjustment made to the employment data, is that the ONS data did not provide an estimate for employment for females in Northern Ireland aged 75-79 or 80+ (presumably due to small sample size), therefore the trend by age in decreases in economic activity for females in older age groups in Scotland was used to extrapolate these two datapoints.

Mean yearly earnings data by age band were obtained from the ONS Annual Survey of Hours and Earnings (ASHE) dataset (age bands: 16-17, 18-21, 22-29, 30-39, 40-49, 50-59, 60+) [13]. These data are shown in Figure 9 in the Appendix. Mean wages were used rather than median because the mean multiplied by the number of people is the total wages for that age group. Wage data was not available by both age and nation, so the UK age distribution of wages was assumed to hold for all four nations. This age distribution was increased (or decreased) by the difference in average earnings (for all ages) observed between the nations in the ASHE dataset. In the interests of conservatism, no increases in real wages due to productivity growth are assumed for years of life lost in the future.

Wages were used as a proxy for labour productivity in this analysis, as is underpinned by established economics theory and practice [14]; however, assuming workers' marginal revenue product equals their employment costs, total employment costs would be a more appropriate measure. As such, wages could be uplifted by 18% to account for non-wage employment costs quantified by the ONS Index of Labour Costs per Hour [15]. This approach has been used in UK government economics ([16]) and health economics ([17]-[19]). However, because this adjustment is not standard in the cancer PVFLP literature, this adjustment was not made in our main estimate but added as sensitivity.

Recent data shows that employment rates for older individuals have been increasing, with many people continuing to work beyond the traditional retirement age [20]. Additionally, a significant number of people expect to work beyond the state pension age, with some planning to work into their 70s [21]. Therefore, our analysis avoids additional assumptions about retirement at a given age, and instead directly applies ONS observed activity rates to their respective age groups (including those above state pension age).

The economic data are more uncertain for older age groups, the earnings estimate is for a wide range (60+) and the employment rates are estimated based on smaller sample sizes. Therefore, two sensitivity analyses are performed to demonstrate how curtailing observed employment in these older age groups affects the results. One sensitivity is setting employment to 0 for 65+ year olds and another is setting it to 0 for 75+ year olds. This aligns with other parts of the literature where a retirement age is modelled as a hard cut off on economic activity [1-3].

Analysis

Years of Life Lost (YLL) quantifies premature mortality by weighting deaths by both their frequency and the age at which they occur, assigning greater weight to deaths at younger ages, because more expected life is lost. YLL were calculated using equation 1.

$$YLL = \sum_{a_d} D_{a_d} \times e_{a_d} \qquad (1)$$

Where:

- a_d is the age group at death, in five-year age bands from 15-19 to 90+.
- D_{a_d} is the number of deaths in this age group.
- e_{a_d} is the conditional life expectancy for this age group, for each UK nation.
- The same equation was calculated for cancer site, gender, and nation of the UK.

This follows the approach used in Ahmad et al [4].

Productive Years of Life Lost (PYLL) quantify premature mortality's impact on economic productivity by weighting deaths at younger ages more heavily, because younger people are expected to work for more years. The equation used to estimate PYLL is shown in (2). In words, it shows how a counterfactual expectation of an individual's employment over their conditional life expectancy was constructed. This expected employment was multiplied by the number of deaths and summed over all age groups.

$$PYLL = \sum_{a_d} D_{a_d} \times \sum_{a_c=a_d}^{a_c=a_d+e_{a_d}} E_{a_c} \qquad (2)$$

Where:

- a_c is the counterfactual age someone would have been had they not died. This is single year of age rather than an age group.
- E_{a_c} is the employment rate expected for the counterfactual age a_c which is based on ONS data.
- The same equation was calculated for cancer site, gender and nation of the UK.

In order to create these counterfactual years of expected employment, the age of death was assumed to be the mid-point of the five-year age band, also if conditional life expectancy is not an integer, only the fraction of the final year (multiplied by the employment rate) was added.
The economic value of lost productivity was estimated using PYLL and mean annual earnings per age group. Earnings were adjusted to present value using discounting. The Present Value of Future Lost Productivity (PVFLP) was calculated using equation (3).

$$PVFLP = \sum_{a_d} D_{a_d} \times \sum_{a_c=a_d}^{a_c=a_d+e_{a_d}} E_{a_c} \times \frac{W_{a_c}}{(1+d)^{a_c-a_d}} \quad (3)$$

Where:

- W_{a_c} are the wages from someone aged a_c. In the relevant sensitivity, at this stage wages would be uplifted by 18% based on [15].
- d is the 3.5% discount rate as set by the HM Treasury Green Book guidelines. The formula here implicitly shows earnings being discounted back to the death year, which is the same as our price year. It would be possible to have a different price year and death year, particularly if this value was estimated for deaths over time, while the price year was held constant.

This approach is broadly consistent with the literature like Brandtmuller et al [1] and Bencina et al [2,3]; however, it appears that Brandtmuller may use economic data from age of death rather than economic data related to counterfactual ages. They then set a cut off for economic activity at assumed retirement age (65 in most cases) and so stop any activity in ages older than this. This is potentially necessitated by the available data for these studies that are international comparisons. However, our method is a more direct application of the ONS's data, as we apply the observed activity rates for older age groups. This is likely to yield similar results in practice.

There has also been historical contention about whether it is necessary to net out future consumption of individuals and assess the surplus economic value produced by individuals rather than purely their production. However, we also do not include monetised value of utility individuals gain from being alive, which is the monetisable benefit associated with the cost of consumption. No other studies in the cancer literature have subtracted estimated consumption.

Results

Headline

The overall number of PYLLs for all cancers combined in the UK in 2023 is 350,000, this is 2.06 PYLL per adult cancer death in 2023. This relates to a PVFLP of £10.27 billion, this is £61,000 per adult cancer death. Table 1 shows this broken down by the four nations. It shows that England accounts for the majority of this total cost. While PVFLP per cancer death is higher in England than the other nations, on a per capita basis, figures for Scotland and England are very similar. This reflects the fact that Scotland has the highest mortality rate for all cancer combined across the four UK nations.

Table 1: Headline result by nation

Nation	PYLL	PVFLP (£bn)	PYLL per cancer death	PVFLP per cancer death (£)	PVFLP per capita (£)
England	294,000	8.77	2.11	63,000	152
Scotland	30,000	0.84	1.81	51,000	153
Wales	16,000	0.40	1.73	44,000	128
Northern Ireland	10,000	0.26	2.18	56,000	135
United Kingdom	**350,000**	**10.27**	**2.06**	**61,000**	**150**

Cost over time and age

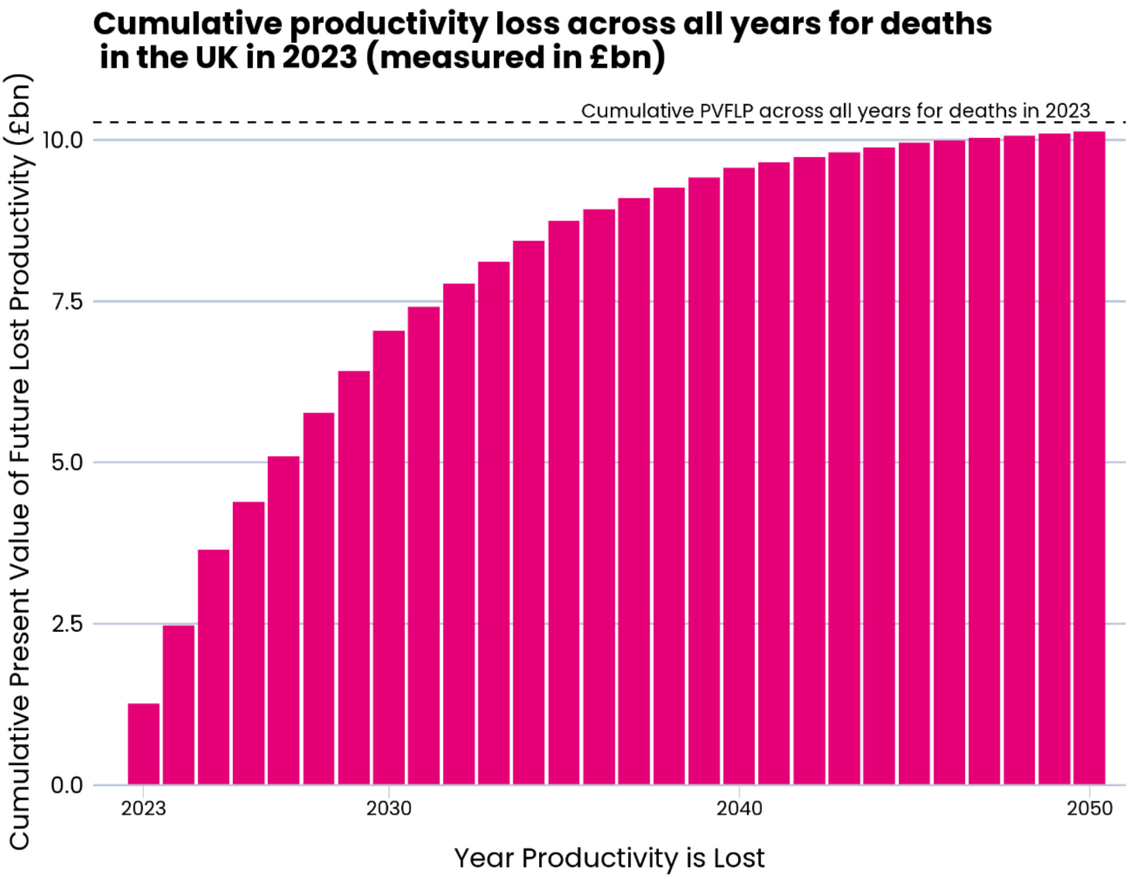
Table 2 shows that most of the PYLLs and PVFLPs are due to deaths in those aged under 65 as economic activity is much higher for those age groups.

Table 2: Breakdown of PYLL and PVFLP by age of death

Age at death	PYLL	PVFLP (£bn)
15-49	119,000	3.17
50-64	167,000	5.11
65-74	45,000	1.41
75+	18,000	0.59

Figure 1 shows the cumulative PVFLP over time. It shows that most of the loss in productivity arising from premature deaths from cancer happens soon after those deaths. For those dying prematurely from cancer in 2023, we estimate a productivity loss of over £1 billion in 2023 alone, with £7.04 billion by the end of 2030, and £9.57 billion occurring by the end of 2040.

Figure 1:



Here the year is curtailed to 2050 to improve legibility, the final productivity loss from people dying from cancer in 2023 would happen further in the future. The final cumulative value is shown by the dashed line.

Comparison with other causes of death

Figures 2 and 3 show that in 2023 cancer (ICD-10 C00-C97, malignant neoplasms) is the cause of death that leads to the most productivity loss when using either the PYLL or PVFLP measures. Table 5 in the Appendix contains the exact figures.

Figure 2:

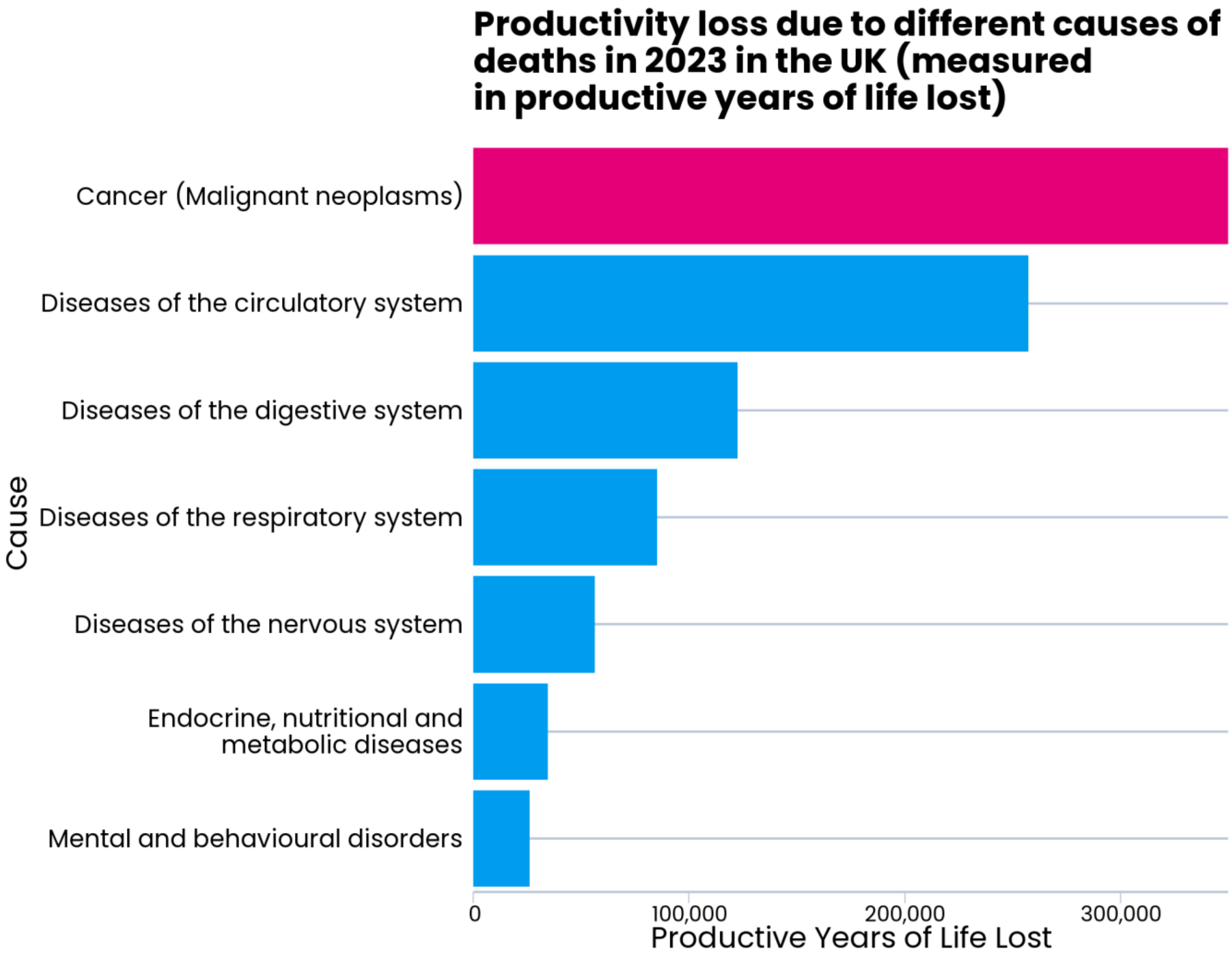
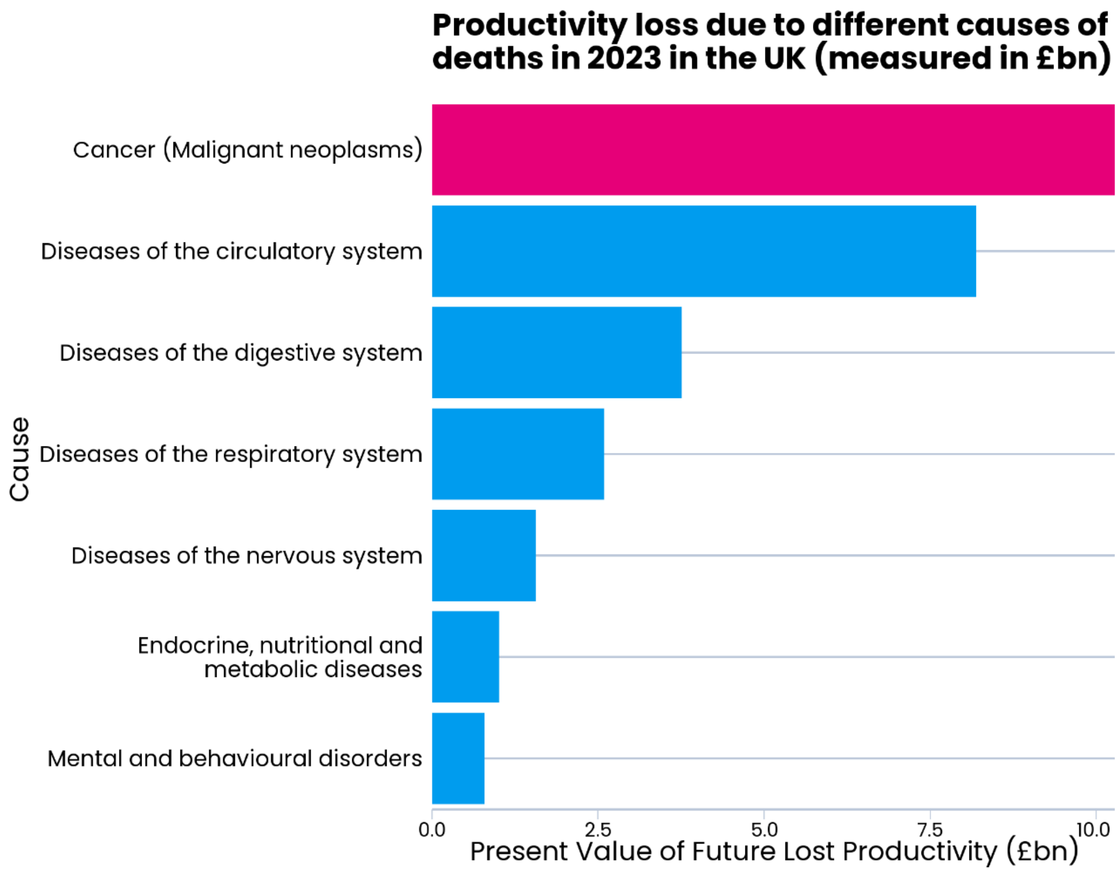


Figure 3:



Injuries (ICD-10 U509, V01-Y89) are the second-biggest cause of productivity loss from deaths in 2023, but are not included in this figure as they are less comparable with the other causes of death included in the analysis.

Breakdown by cancer site

Figures 4 and 5 show that for both the PYLL and PVFLP measures of productivity loss from cancer deaths in 2023, the same 10 cancer sites are the biggest contributors. The order of which cancer sites contribute most to productivity loss is almost unchanged for both measures, with lung, then bowel, and then breast cancer the biggest contributors. Table 6 in the Appendix contains the exact numbers.

Figure 4:

Productivity loss by different cancer sites in 2023 in the UK (measured in productive years of life lost)

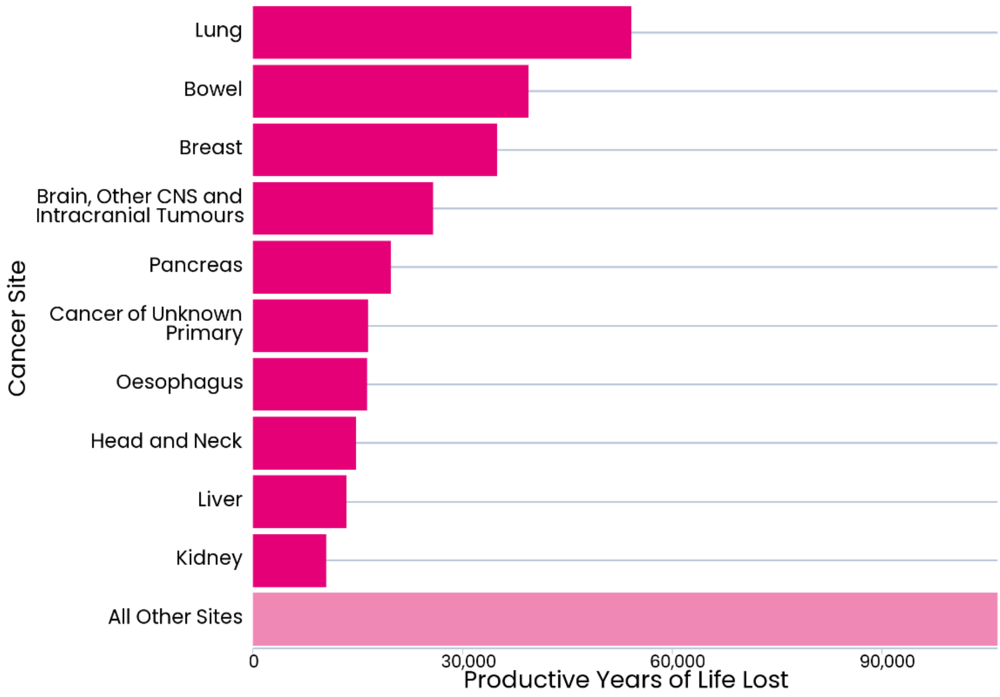
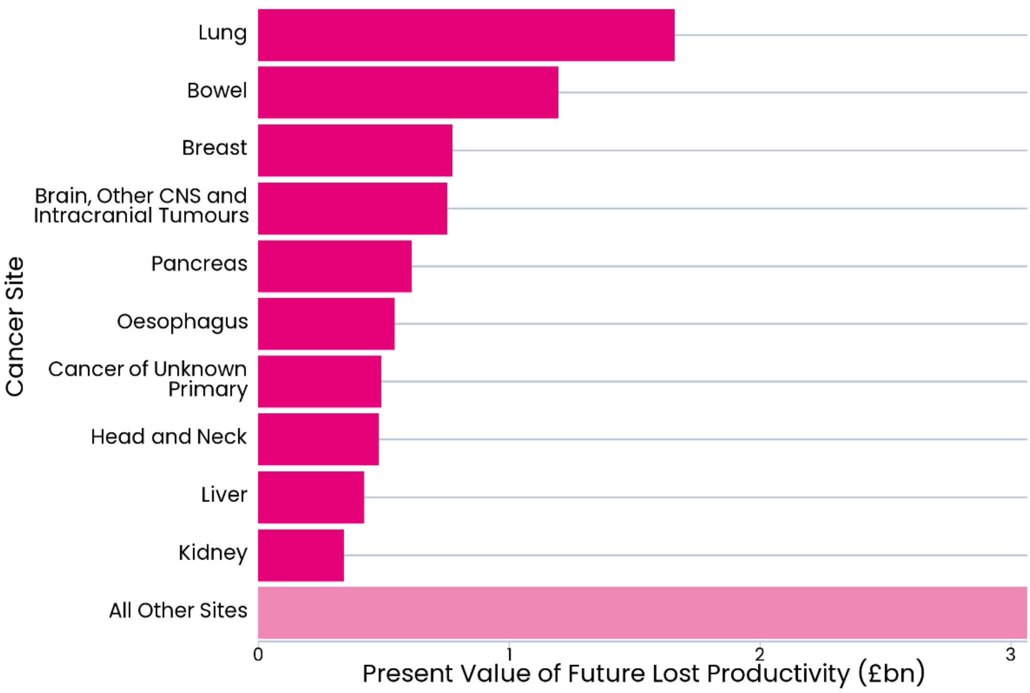


Figure 5:

Productivity loss due to cancer death by different cancer sites in 2023 in the UK (measured in £bn)



In Figures 4 and 5, *Brain, other CNS and intracranial tumours* includes both malignant and non-malignant tumours, but non-malignant tumours are not included in the all cancers combined total (ICD-10 C00-C97)

Impact of the uplift in wages

Table 3 shows the impact that uplifting wages to full employment cost would have had on our results. The uplifted figures are always 18% higher than the non-uplifted figures. This adjustment is not included in our headline figures for consistency with the literature; however, it is included here because several studies have suggested it is an appropriate (and even necessary) adjustment.

Table 3: Impact of the wage uplift to reflect full cost of employment

Nation	PVFLP (£bn)	PVFLP (£bn) uplifted	PVFLP per cancer death (£)	PVFLP per cancer death (£) uplifted
England	8.77	10.35	63,000	74,000
Scotland	0.84	0.99	51,000	60,000
Wales	0.40	0.48	44,000	52,000
Northern Ireland	0.26	0.31	56,000	66,000
United Kingdom	**10.27**	**12.12**	**61,000**	**71,000**

Impact of different economic activity cut-offs

Figure 6 and Figure 7 show the impact of applying an economic activity cut-off on PYLL and PVFLP respectively. Applying an economic activity cut-off at age 65 leads to an 35.4% reduction in PYLL and a 32.3% reduction in PVFLP. Similarly, applying this cut-off at 75 instead leads to an 11.8% reduction in PYLL and a 10.9% reduction in PVFLP.

Figure 6:

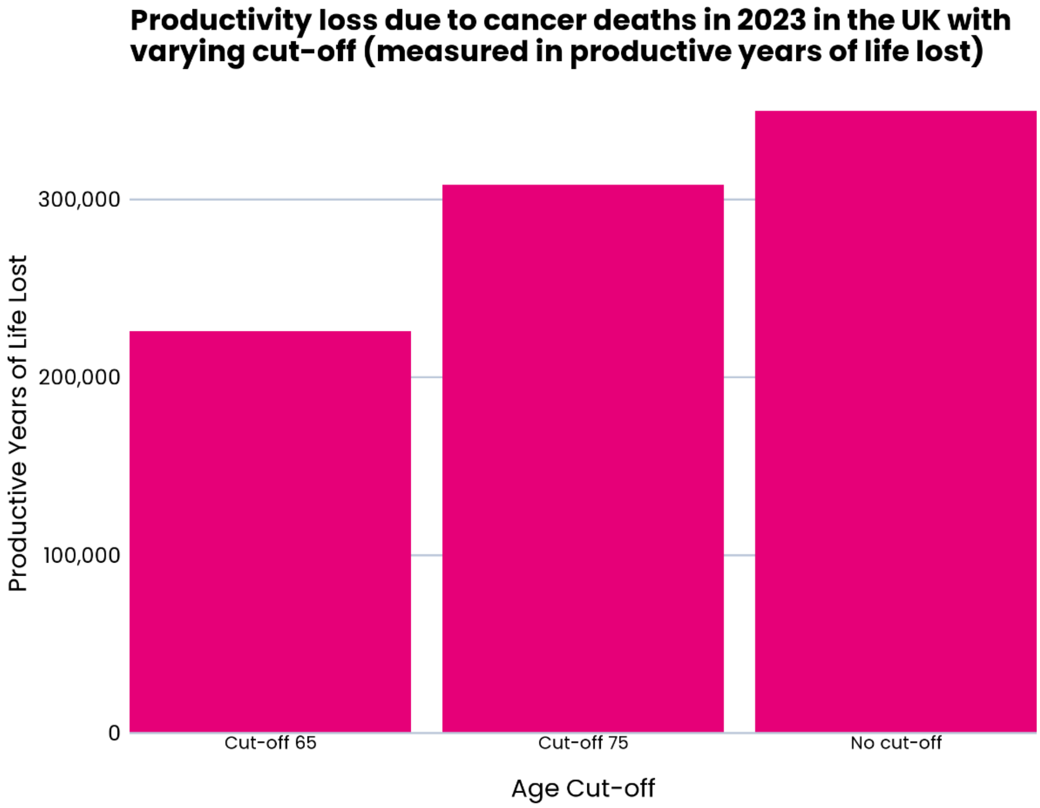
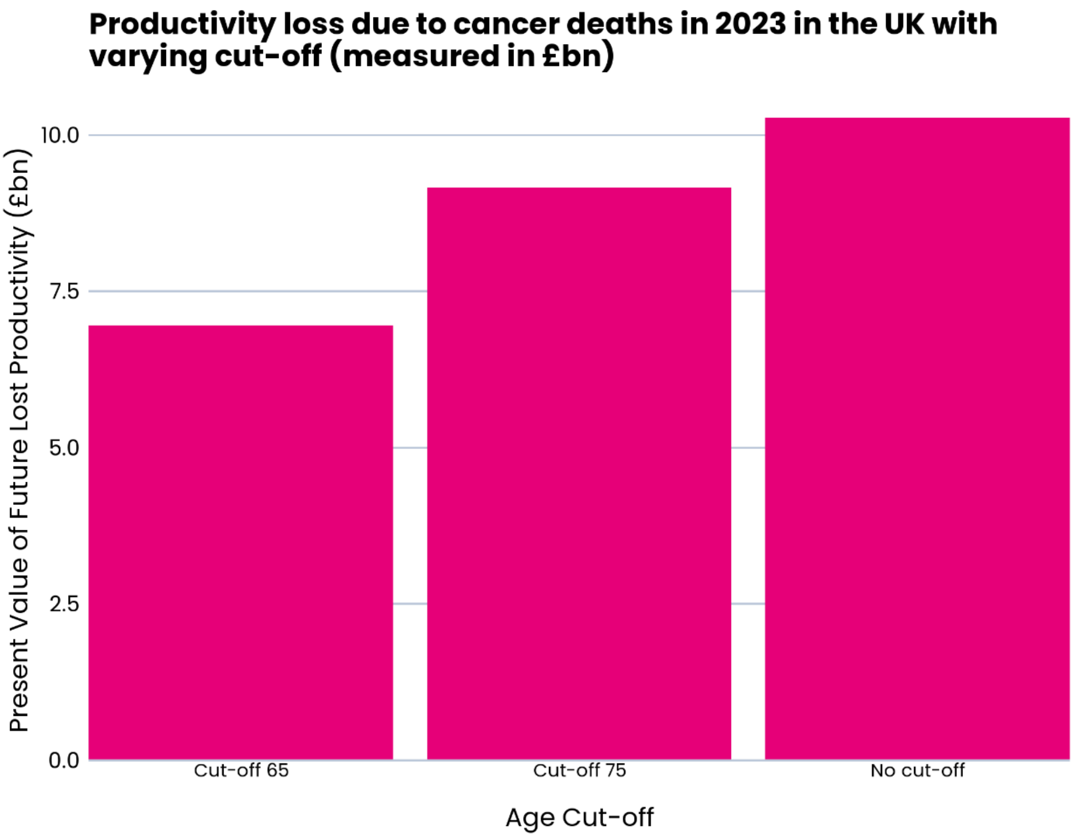


Figure 7:



Discussion

Overall results

The overall results for this study show that the expected loss in future productivity due to cancer deaths in 2023 is £10.27 billion. This is divided roughly proportionately between the four nations according to their population. This lost productivity is the result of 350,000 fewer years expected to be worked because of deaths caused by cancer in 2023. This means that cancer has the largest impact on productivity due to premature mortality of any of the other causes of death. Also, we demonstrate that the cancer sites that cause the biggest productivity losses are lung, bowel, and breast cancers.

The causes of death with the highest PYLL and PVFLP at the population level, are those which cause the largest number of deaths at the youngest ages (resulting in the largest number of productive life-years lost), and which cause more deaths in men than women (resulting in the largest PVFLP because employment rates and mean earnings are higher in males than females). Our analysis is focused on employment productivity therefore the analysis by age and cancer site should be interpreted with caution as the additional productivity loss from unpaid work (such as domestic work, caring or volunteering) may affect some groups more than others, similarly for the comparison with other diseases. The focus on paid productivity is consistent with the literature as there is less consensus on how to account for unpaid productivity loss. However, this could be an area of further development for a more comprehensive assessment of productivity losses due to cancer.

Comparison to results from other studies

Our study's methodology and findings align closely with existing literature [14]. The main difference between our study and others in the literature is that we use published economic activity rates instead of a blunt cut-off to indicate retirement age and age-gender specific mean earnings. The application of a cut-off may be necessary in some geographies that do not have disaggregated data on working patterns in older people, but is unnecessary in a UK context, so is not applied in our headline specification. Other analytical decisions like discount rates, use of economic statistics on activity rates and mean earnings and use of administrative cancer deaths data are largely aligned across studies. We do not uplift wages to full employment costs in our headline specification, because this is not done routinely by comparable studies and so our results are more comparable with the literature and more conservative. Finally, our results include more recent epidemiological data than older studies, so our results will vary due to variation in the same dataset over time. The similarities and differences are set out in Table 4.

The following results reported from other studies are adjusted (for inflation, and other factors) to make them more comparable to the results of our study, so results here will vary from results reported by other authors. These adjustments are set out in Table 4.

In terms of UK focused studies, Landeiro et al [23] estimate that the PYLLs for cancer in England only are 271,000, this is most comparable to our estimate of 294,000. They estimate PVFLP to be £9.8 billion (2023 prices, adjusted) for England only, this is most comparable to our £8.8 billion estimate. Our methodology is very similar to theirs, except they use an age range of 15-79 years, with an activity cut-off at 80 and do not appear to use age-sex disaggregated earnings. Frontier Economics [24] find a lower estimate of PVFLP of £3.5bn for the UK in 2023, but their analysis includes only preventable cancers. Naively uprating Frontier's headline value to all cancers combined means our estimate aligns much more closely. Demos & Pfizer [25] produce an approximate estimate of PVFLP of £6.2 billion for age 65 and under, based on cancer deaths for 65 and under and average activity rates and earnings. Inflating this value to the same cost year as our study, the value is £7.7 billion which is relatively close considering the methodological differences.

There are also studies that consider UK PVFLPs in the context of other European Countries. All of Ortega-Ortega et al [26], Hanly et al [27] and Hofermarcher et al [28] are cross European studies; once their figures have been adjusted (for inflation and exchange rate), they find that the UK annual PVFLP ranges between £9.0bn - £11.2bn depending on the exact year of the analysis. Hanly et al also estimate PYLLs of 280,000 for the UK. The two most material differences between this study and theirs is that Ortega-Ortega et al and Hanly et al both assume productivity growth for foregone earnings in future years, and these studies use economic activity cut-offs at age 65 rather than applying observed activity rates for older age groups.

In conclusion, there is inconsistency in how productivity loss due to cancer mortality is calculated in the literature and details on methodology and assumptions are not always available. Our estimate of £10.27bn PVFLP for the UK is highly consistent with the range of estimates of the literature.

Table 4: Comparison to other estimates in the literature

Study	Their value of PYLL	Their value of PVFLP	Their value of PVFLP adjusted and inflated to £2023 value	Methodological differences
Landeiro et al [23]	271,000 (England only)	£7.8bn (England only)	£9.8bn	They use average earnings (presumably median earnings based on the citation) for all ages and gender rather than age-gender specific mean earnings (used in this study). They apply an age cut-off at 79, whereas this study allows for a small number of people to work 80+ (based on ONS activity rates). They also estimate this value just for England rather than the whole UK.
Frontier Economics [24]	Not reported	£3.5bn*	£8.8bn	Their estimate is part of a wider study, so they do not set out many methodological details. *The biggest difference in methodology is that they focus on **preventable cancers only** rather than all cancers. They assume 40% of cancers are preventable, and so this figure is used to naively uprate their estimate by the inverse of this proportion to give a more comparable figure to the headline result of this study.
Ortega-Ortega et al [26]	Not reported	€7.8bn	£11.2bn	Their estimate is part of a wider international study. Their average value for 2018-2040 is reported here, rather than the 2023 value which

				they do not report. They assume productivity growth in line with recent GDP growth, whereas our study assumes static productivity. They apply an economic activity cut-off at 65.
Hanley et al [27]	280,000	€7.0bn	£9.0bn	Their estimate is part of a wider international study. Their estimate is for 2020. They assume productivity growth in line with recent GDP growth, whereas static productivity is assumed in our study. They apply an economic activity cut-off at 65.
Hofmarcher et al [28]	Not reported	€6.6bn	£9.2bn	Their estimate is part of a wider international study. Their estimate is for 2018, whereas ours is for 2023. Like our study they do not assume growth productivity. They use average economic statistics for all working age people (disaggregated by sex only) and apply an economic activity cut-off at 65.
Demos & Pfizer [25]	Not reported	£6.2bn	£7.7bn	Their methodology is simpler, based on population averages (not disaggregated by age-sex groups) and an economic activity cut-off at 65. It is unclear whether their values are discounted.

Strengths

Consistency with literature: our study builds on Ahmad et al [4] and a recent review of the literature on the wider economic cost of cancer in the UK (including cost due to premature mortality) [14]. The main deviation between our study and the literature is not imposing an activity cut-off for people past retirement age, which is a methodological improvement because the ONS produces reliable estimates of this activity.

Data quality: the main strength of our study is the fact there is very high-quality data on both cancer epidemiology (across all cancer sites) and the labour market. This leads to highly transparent results, with only relatively straightforward and transparent analysis performed on the data.

Comprehensiveness and comparability: our study demonstrates the breakdown of productivity losses both within cancer, allowing for meaningful comparisons between cancer sites, and also across other causes of death, comparing all cancers combined to other key causes of death.

Reproducibility: this methodology is highly reproducible, so estimates can be updated on a yearly basis, as new data is released.

Limitations

Data availability: some of the age brackets for the economic data are relatively wide, and we assume everyone in that wide age bracket has the mean value. In practice, there is considerable variation within the age brackets. Similarly applying the mean economic data to cancer deaths may not capture the heterogeneity between people who die from cancer and to the wider population; further work could disaggregate this analysis by socio-economic status if data is available.

Focus on paid productivity losses: people's contribution to society goes beyond their labour market productivity, we have a relatively narrow focus in this study on employment productivity, but this work could be extended to include informal unpaid work, the monetised value of life and wider societal costs. Our recent report summarising the findings of a literature review on cost of cancer in the UK demonstrates that costs like unpaid productivity are substantial [14].

Possible future research directions

Disaggregate by socioeconomic status: Our analysis shows how the expected productivity losses from cancer deaths vary by age, sex and nation. Analysing the variation by socioeconomic status would provide a useful indication on the distribution of the economic losses and therefore the opportunity cost of inequalities.

Add the analysis of productivity losses due to morbidity: productivity losses associated with cancer causing disabilities when people are alive were out of scope for our study and not accounted for. Other studies suggest they are relatively smaller than productivity losses due to mortality, ranging from £1.70bn to £1.99bn [14].

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Appendix

Figure 8: Proportion Employed by Age, Sex and Nation

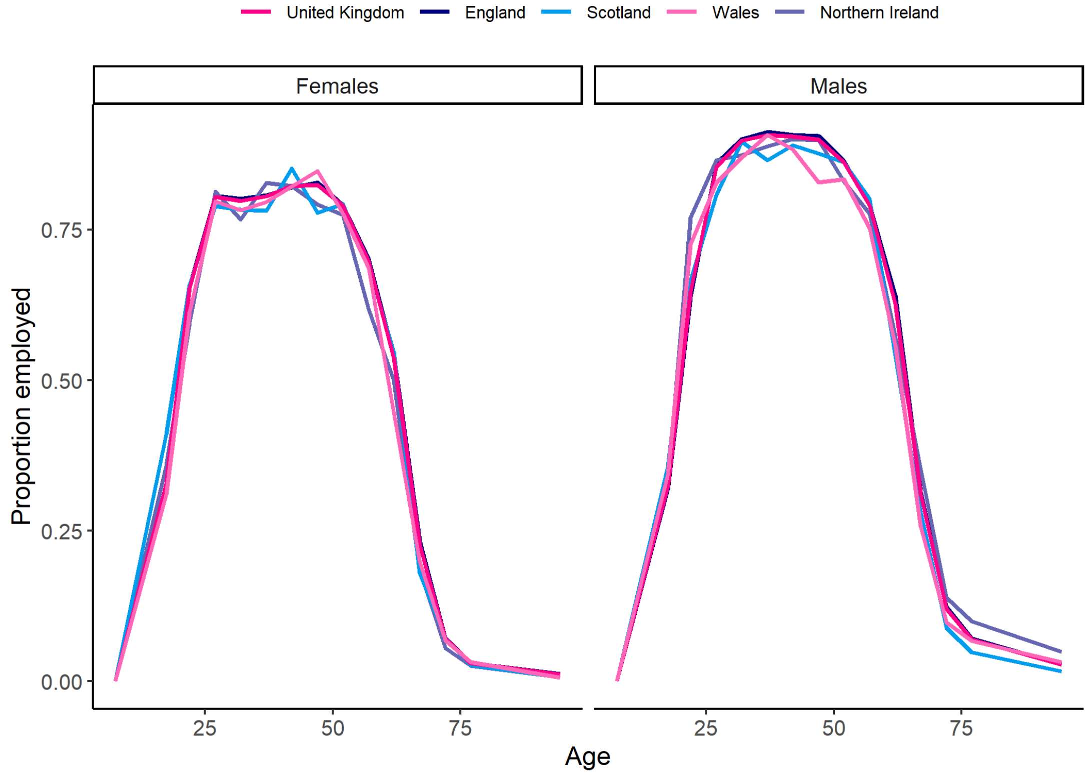

Figure 9: Mean Earning by Age, Sex and Nation

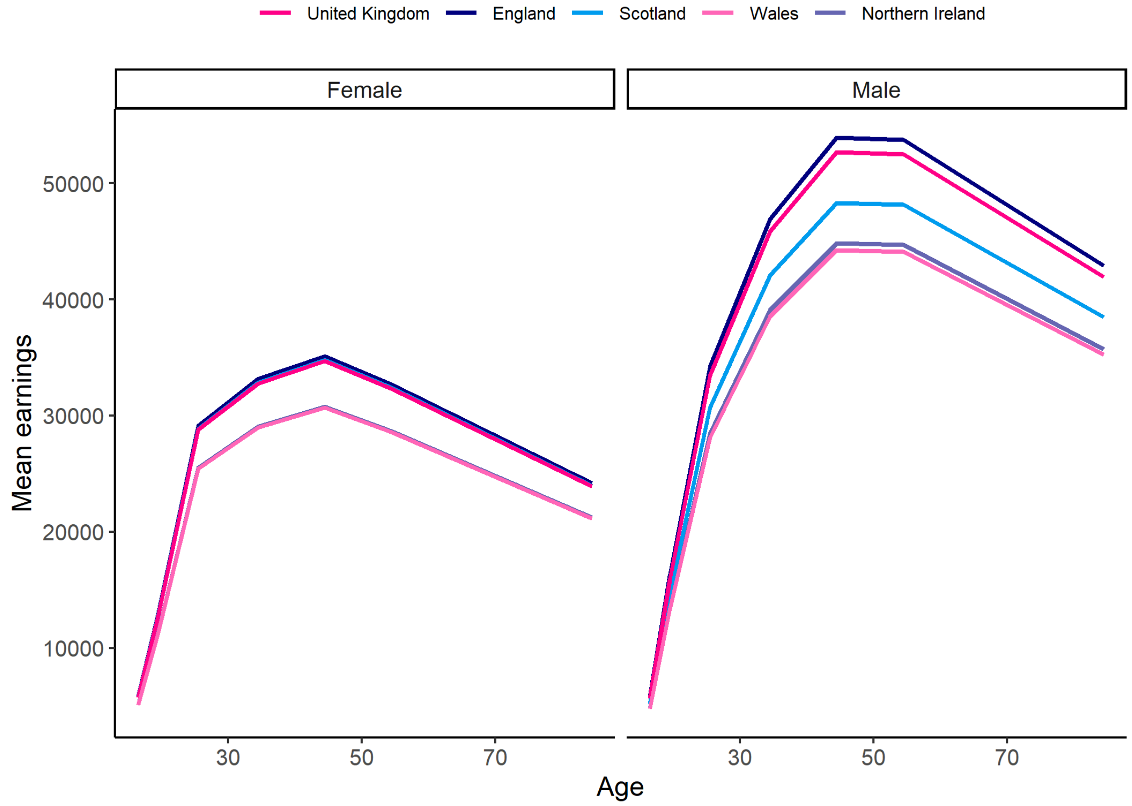

Table 5: Comparison between ICD-10 Chapters (causes of death)

ICD-10 Chapter	PVFLP (£bn)	PYLL
Cancer (malignant neoplasms)	10.27	350,000
Diseases of the circulatory system	8.19	257,000
Diseases of the digestive system	3.76	123,000
Diseases of the respiratory system	2.60	85,000
Diseases of the nervous system	1.56	56,000
Endocrine, nutritional and metabolic diseases	1.01	35,000
Mental and behavioural disorders	0.79	26,000

Table 6: Comparison between cancer sites

Cancer Site	PVFLP (£bn)	PYLL
Lung	1.66	54,000
Bowel	1.20	39,000
Breast	0.77	35,000
Brain, Other CNS and Intracranial Tumours*	0.75	26,000
Pancreas	0.61	20,000
Oesophagus	0.54	16,000
Cancer of Unknown Primary	0.49	16,000
Head and Neck	0.48	15,000
Liver	0.42	13,000
Kidney	0.34	10,000
All Other Sites	3.06	107,000

*Brain, Other CNS and Intracranial Tumours includes benign tumours as well as malignant. See Table 7 for further information.

Table 7: Cancer site definitions by ICD-10 code

Cancer site	ICD-10 code
All Cancers Combined	C00-C97
Bowel	C18-C20
Brain, Other CNS and Intracranial Tumours	C70-72, C75.1-C75.3, D32-D33, D35.2-D35.4, D42-D43, D44.3-D44.5*
Breast	C50
Cancer of Unknown Primary	C77-C80
Head and Neck	C00-C14, C30-C32
Kidney	C64-C66, C68
Liver	C22
Lung	C33-C34
Pancreas	C25
Oesophagus	C15

*Brain, other Central Nervous System (CNS), and intracranial tumours data for Scotland and for Northern Ireland only: ICD-10 C70-C72, D32-D33, D42-D43