



National end of life care
INTELLIGENCE NETWORK

NHS

*National End of Life
Care Programme*

Improving end of life care



Deaths from urological cancers in England, 2001–10

Revised November 2012

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Foreword

Urological cancers are a significant cause of death in England. In the last decade about 1 in 30 deaths were attributable to a urological cancer, and at least 1 in 23 died with a urological cancer. More men, about 1 in 17, die from urological cancers than women, at 1 in 100. However, it is already known that the survival from certain urological cancers, for example bladder, is worse in women.

The urological cancers present a number of challenges for end of life care as they comprise a group of cancers which are disparate in their presentation and prognosis, and as such have a variety of complications and special needs. Two of the cancers, testicular and penile, are often managed at specialist centres which may be geographically remote from a person's place of residence. Testicular cancer in particular primarily affects younger men, and their support network is likely to be different from those who die at an old age.

On the whole, people dying from urological cancer are less likely to die in hospital than people dying from other causes, but this masks large variation: from 35% to 65% of deaths depending on age and type of cancer. Most people express a preference to die at home but it is clear that the chances of this happening are variable.

Hospital usage in the last year of life varies widely in terms of number of admissions and length of stay. Emergency admissions tend to be longer than planned admissions hence more time is spent away from home and family. They are also more expensive to the NHS. From the patient's and their family's perspective, spending precious days in hospital in the last months of life is undesirable if it can be avoided. This study highlights the fact that many patients with urological cancers will have emergency admissions to hospital in their last months and days of life due to complications of advanced disease.

I look forward to the next phase of work, which will focus on trying to identify the reasons for these admissions and whether care could be provided in a more effective and compassionate way in the community.



Professor Sir Mike Richards
National Clinical Director for End of Life Care

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Summary

Introduction

This report presents the latest available data on deaths from urological cancers in England. Urological cancers include penile, prostate, testicular, kidney, renal pelvis and ureter, and bladder cancers. The aim of the report is to help end of life care commissioners and providers improve planning and service delivery in line with the needs and wishes of patients.

People dying with a urological cancer will have specific end of life care needs. The report highlights variations by cancer type, age, sex, region, place of death and socioeconomic status, which help us understand those needs better.

The report also includes information on hospital admission costs in the last year of life and how they vary by type of urological cancer.

Key findings

- Nearly 16,000 people die from a urological cancer each year, and about 5,000 more die with a urological cancer as a contributory cause.
- Urological cancers account for 3.3% of all deaths, and over half of these are from prostate cancer.

Variations by age and sex

- When taken as a percentage of all deaths for that sex, more men (5.8%) die from urological cancers than women (1%). This reflects the patterns of incidence.
- 62% of urological cancer deaths occur in those aged 65–84. Testicular cancer shows a different pattern with 79% of deaths in under 65s.
- As a proportion of all deaths in that age group, kidney and testicular cancer deaths are highest in the under 65s. All other urological cancer deaths are highest in the 65–84 age group.

Variations by cause and place of death

- The proportional increase in deaths which mention urological cancer over deaths caused by urological cancer is greatest for prostate cancer. The proportion of all male deaths which have a mention of prostate cancer is 5.2% overall but this increases to 6.9% (2.3% of people) for those men dying aged 85 or older.
- Hospital is the main place of death for those dying from a urological cancer, with 46% of deaths occurring in hospital. This is lower than the average for all deaths which is 54% (2008–10 data). 23% of urological cancer deaths occur in people's own homes.
- There is variation in place of death by urological cancer type, with testicular cancer patients most likely to die in hospital and kidney cancer patients most likely to die at home.
- There is also regional variation in place of death, which mirrors the variation in all-cause place of death. In London, 53% of urological cancer deaths are in hospital. In the South West, 25% of urological cancer deaths are at home.

Variations by time spent in hospital and cost in the last year of life

- The amount of time spent in hospital and the cost of inpatient care in the last year of life varies between the urological cancer types.
- Emergency admissions tend to be longer and more costly. In the three largest groups (prostate, bladder and kidney cancers), emergency admissions are more common than planned admissions.
- The final admission is more costly than the last year of life average, even for those not dying in hospital. Between one-quarter (testicular cancer) and one-half (prostate cancer) of the total cost is accounted for by the final admission.
- The highest inpatient costs in the last year of life are for testicular cancers, at just over £13,000 per person. Prostate cancer has the lowest cost at less than £7,000 per person.

Conclusions and recommendations

The variations presented in this report should inform the local commissioning and delivery of end of life care for urological cancer patients.

The differences, for example, in age profiles are important as they will determine the needs of the individuals affected, along with their families and carers. They also determine where people are likely to receive end of life care at the time of their final illness.

People dying with a urological cancer recorded as either an underlying or contributory cause of death are likely to have specific end of life care needs related to these conditions, which need to be taken into account.

The variation in hospital activity and costs between urological cancers is to some extent due to inherent variation in complications and the profile of people dying from these cancers. However, in all cases emergency admissions are longer and more costly. Services which help avoid emergency admissions should be considered as they will benefit both the patient (in terms of reduced hospital stay) and reduce total expenditure. End of life care needs to be considered within the broader spectrum of 'overall care' for individuals living with a urological cancer. This could be achieved through raising awareness and enhancing skills for clinical staff working in cancer medicine. Appropriate configuration of services and infrastructure may improve patient and family/carer experience with possibly a need for better responsiveness and pre-emptive management.

Feedback

We welcome your feedback about this report. Please send comments to info@swpho.nhs.uk

1 Introduction

1.1 Background

The incidence of urological cancers for the most recently available year, 2010, was 54,231. The most common urological cancer types are prostate and bladder.

Incidence of urological cancers generally follows the trend for all cancers, i.e. it is more common in men and increases with age. The notable exception is testicular cancer, which is most common in men aged under 40.

Survival from urological cancers varies by type and also by sex. One-year survival in 2009 was 98% for men diagnosed with testicular cancer, but only 64% for women diagnosed with bladder cancer.

16,602 people died from a urological cancer in 2010 and the pattern of deaths reflects the patterns of incidence; with prostate and bladder cancer deaths the highest.

Three percent (3.3%) of all deaths in England in the ten-year period 2001–10 were from urological cancers, that is, a urological cancer was recorded as the underlying cause on the death certificate.

The proportion of all deaths in England with a mention of urological cancer on the death certificate, in the same time period, was four percent (4.3%).

1.2 Aims

The aim of this report is to analyse and present the latest data on place of death for those dying from a urological cancer and how this varies with gender, age, socioeconomic deprivation and place. The report is based on Office for National Statistics (ONS) mortality data.

The report was commissioned by the National End of Life Care Intelligence Network to support national end of life care service planning and development.

National strategy and policy supporting this work includes:

- The National End of Life Care Strategy (Department of Health, 2008)
- Public Health Outcomes Framework (Department of Health, 2012).

In addition, a national strategy for urological cancer is currently being produced by the Department of Health.

2 Methodological notes

2.1 Source of data

All data presented in this report are from the Office for National Statistics (ONS) mortality files. The mortality files contain extracts from death certificates. Key data items used for this analysis include place of death, postcode of 'usual' place of residence, date of birth, sex and cause of death. Mortality data are available up to 2010.

2.2 Analysis

Data in this report are presented as absolute numbers and proportions rather than age-specific or age-standardised rates to support service planning.

2.3 Place of death

The ONS describes place of death as one of 84 communal establishment types or 'own residence' or 'elsewhere'. These are categorised further by ONS in their DH1 General Mortality Statistics publication:

- **Hospital:** NHS or non-NHS, acute, community or psychiatric hospitals/units.
- **Own residence:** the death occurred in the place of usual residence where this is not a communal establishment.
- **Old people's home:** Local Authority or private residential home.
- **Nursing home:** NHS or private nursing home.
- **Hospice:** many hospices are 'free standing' but some are found within NHS hospitals. At present ONS classifies the place of death as hospice only when the event occurred in a free standing hospice premises. These data will therefore under-report deaths in hospices as some will be recorded as deaths in hospital.
- **Elsewhere:** other communal establishment or a private address other than usual place of residence or outdoor location or nil recorded.

2.4 Analysis by deprivation quintile

Lower Super Output Areas (LSOAs) are small geographical areas specifically devised to improve the reporting and comparison of local statistics. In England there are 32,482 LSOAs with a minimum population of 1,000, and an average population of 1,500.

LSOAs are grouped into quintiles of deprivation based on the income deprivation score from the 2007 Indices of Deprivation, with each quintile having as close as possible to one-fifth of the English population. The income deprivation score measures the percentage of children and adults living in 'income deprived' households, based on a number of definitions.

The residential postcode recorded on the death certificate was used to place each deceased person in an LSOA and assign that death to the deprivation quintile of the LSOA.

2.5 Cause of death

The single ‘underlying’ cause of death is determined from the death certificate by the ONS and coded using the ICD-10 system (International Classification of Disease, tenth issue). This coding system is used to categorise cause of death in this report as follows:

Type	ICD-10 Code
Penile cancer	C60
Prostate cancer	C61
Testicular cancer	C62
Kidney cancer	C64
Renal pelvis and ureter cancers	C65, C66
Bladder cancer	C67

The underlying cause of death is defined by the World Health Organisation as “*the disease or injury that initiated the train of events directly linked to death; or the circumstances of the accident or violence that produced the fatal injury*” and is the cause of death data recorded on a death certificate.

Death certificates also record ‘contributory cause’ of death, where a disease or condition has contributed to the death but is not part of the causal sequence, and also up to 15 diseases or conditions which were part of the causal sequence of events leading to death. For the purpose of this report, ‘mentions’ refer to those deaths where a urological cancer is recorded as either the underlying or contributory cause of death.

2.6 Hospital activity and costs

Admissions, length of stay and costs of inpatient activity in the last year of life are calculated from a linked dataset of ONS mortality data and hospital activity data from Hospital Episode Statistics. Data are available from 2004–08.

All persons dying from a urological cancer in 2006–08 were selected, and the number of admissions and length of stay in hospital in the year before death calculated. Healthcare Resource Group 3.5 codes are used to calculate the cost of care, taking into account whether admissions were emergency or elective and length of stay. The 2007/08 Department of Health ‘Payment by Results’ tariff was used for costs calculations.

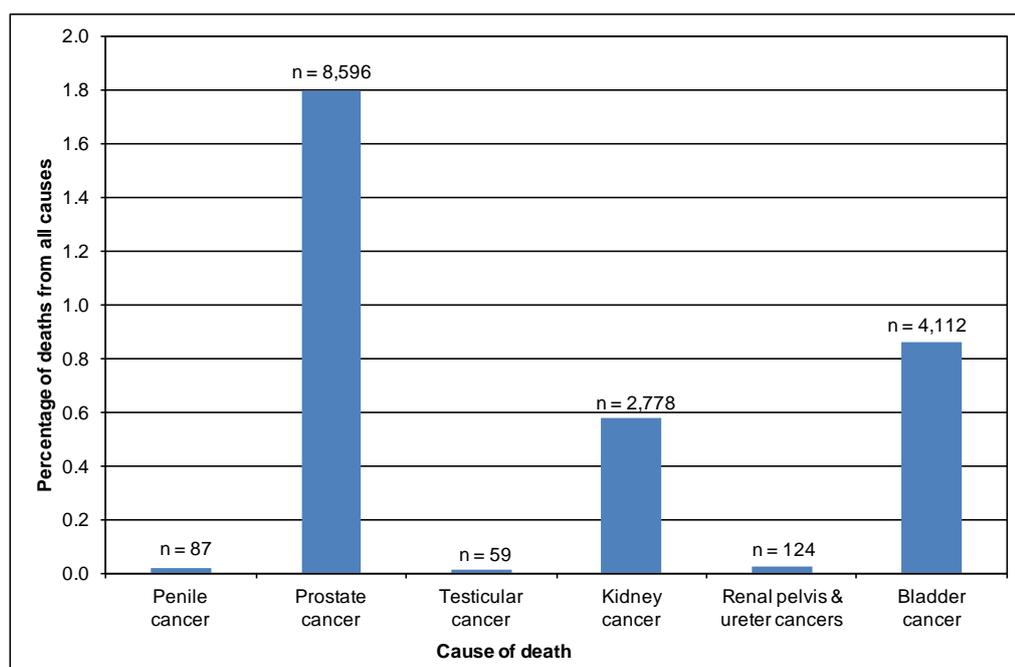
No costs for outpatient or home care are included, as data for these are not available. Depending on the complications caused by particular cancers, and the management of the disease, outpatient/home care may make up different proportions of the cost of care.

3 Results

3.1 Underlying cause of death

- Three percent (3.3%) of all deaths in England for the period 2001–10 are recorded as having an underlying cause of urological cancer.
- Figure 1 shows urological cancer causes of death in absolute numbers and proportions respectively.
- The most common cause of urological cancer death is prostate cancer (approximately 1.8% of all deaths in England and 55% of urological cancer deaths; 8,596 deaths annually).
- Bladder cancer accounts for about 0.9% of all deaths in England and 26% of urological cancer deaths (4,112 deaths annually).
- Kidney cancer accounts for approximately 0.6% of all deaths in England and 18% of urological cancer deaths (2,778 deaths annually).

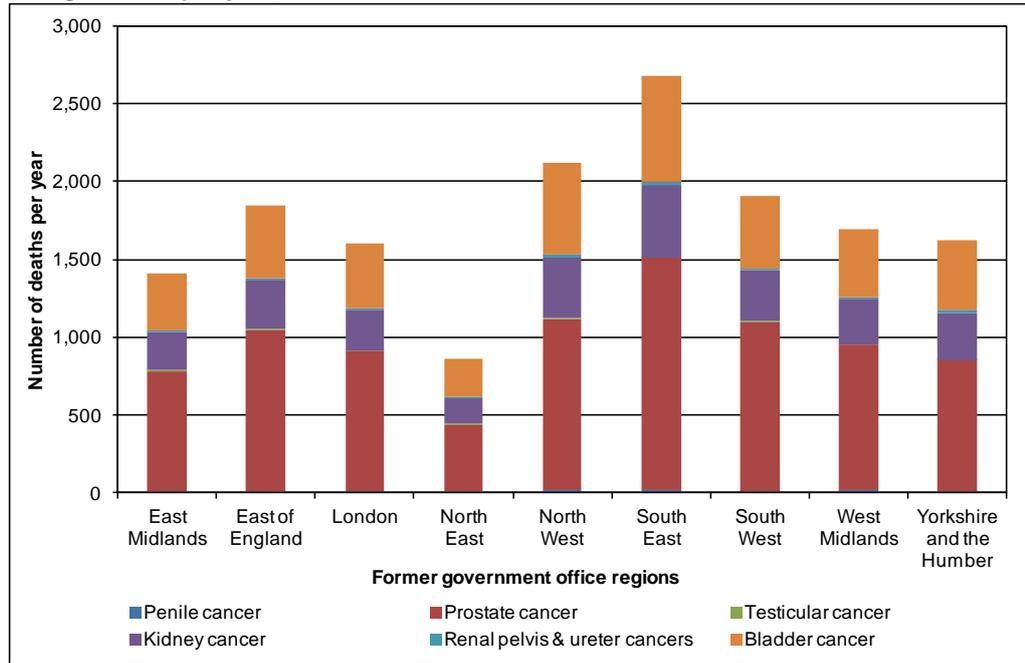
Figure 1: Deaths from urological cancer, as a percentage of deaths from all causes, 2001–10 (with average deaths per year)



Source: ONS mortality data

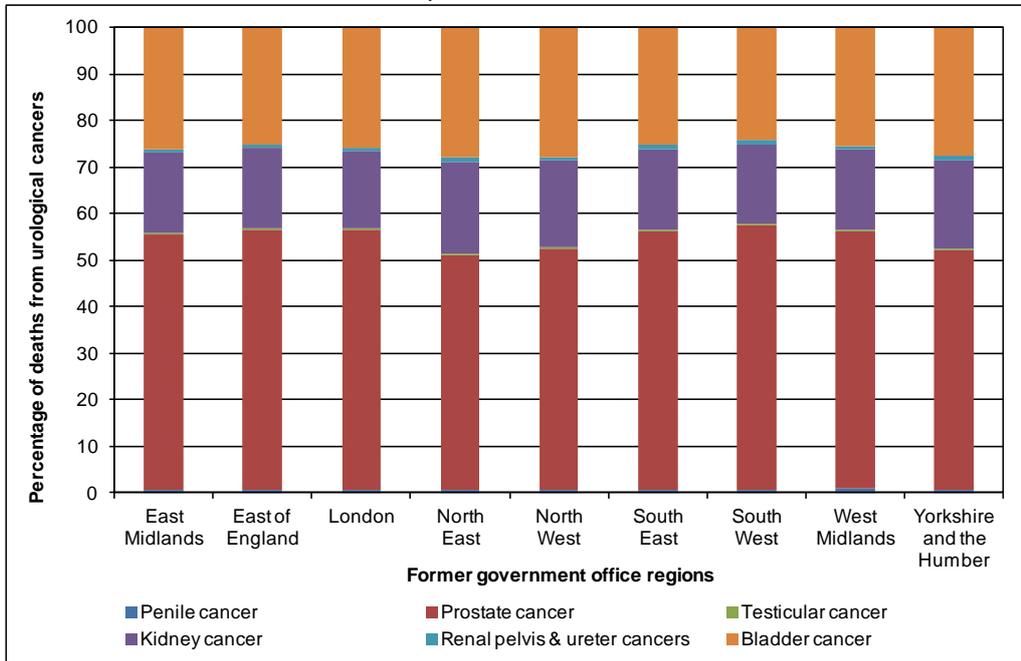
- Figures 2 and 3 show that although absolute numbers of deaths from urological cancers vary by region (due to differing population size), the proportion of deaths from each cause is similar.
- The South East has the greatest number of deaths from urological cancers with 2,683 deaths per year on average. The South West has the greatest proportion of deaths from prostate cancer (57% of all urological cancer deaths).

Figure 2: Deaths from urological cancers, by former Government Office region and cause, average deaths per year, 2001–10



Source: ONS mortality data

Figure 3: Deaths from urological cancers by former Government Office region and cause, contribution to total from each cause, 2001–10

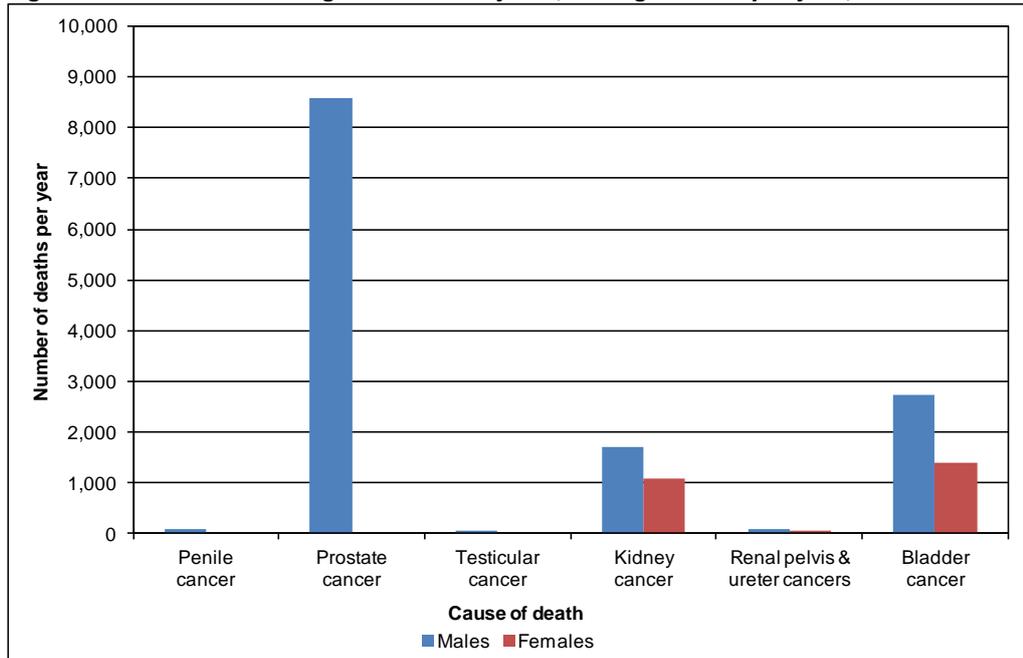


Source: ONS mortality data

3.2 Underlying cause of death by sex

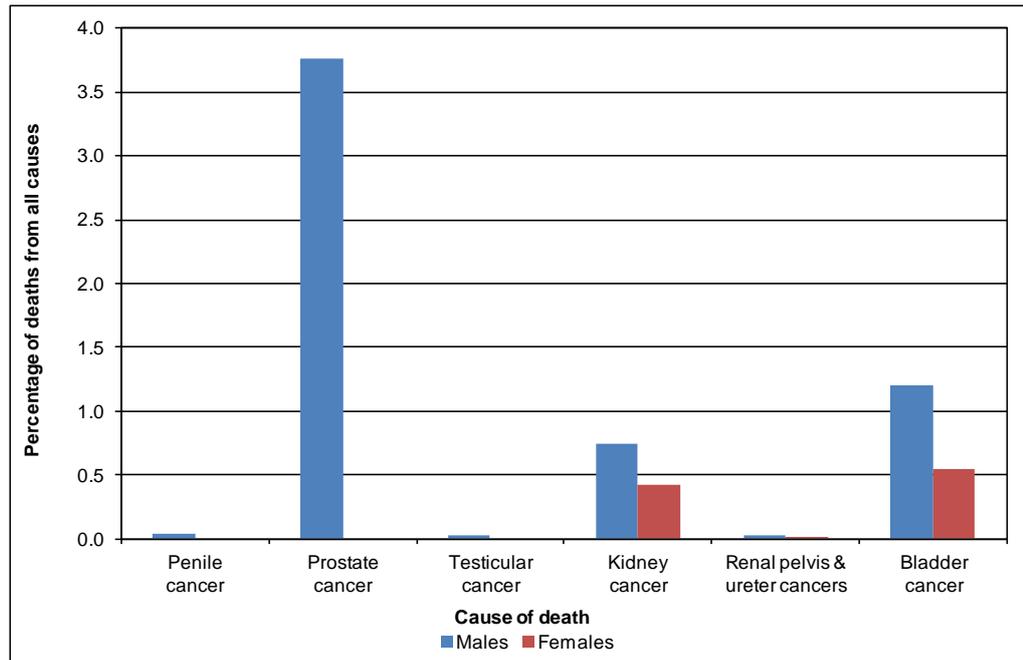
- Figures 4 and 5 indicate that more deaths from bladder cancer and kidney cancer occurred amongst males (2,736 deaths per year, 1.2% of all male deaths and 1,710 deaths per year, 0.7% of all male deaths respectively) compared to females (1,376 deaths per year, 0.5% of all female deaths and 1,067 deaths per year, 0.4% of all female deaths respectively). There were 72 deaths per year in males from cancer of renal pelvis and ureter, compared to 52 per year in women.
- The greater number of deaths in males is reflective of patterns of incidence, as all urological cancers are more common in males.

Figure 4: Deaths from urological cancers by sex, average deaths per year, 2001–10



Source: ONS mortality data

Figure 5: Deaths from urological cancers by sex, as a percentage of deaths from all causes, 2001–10

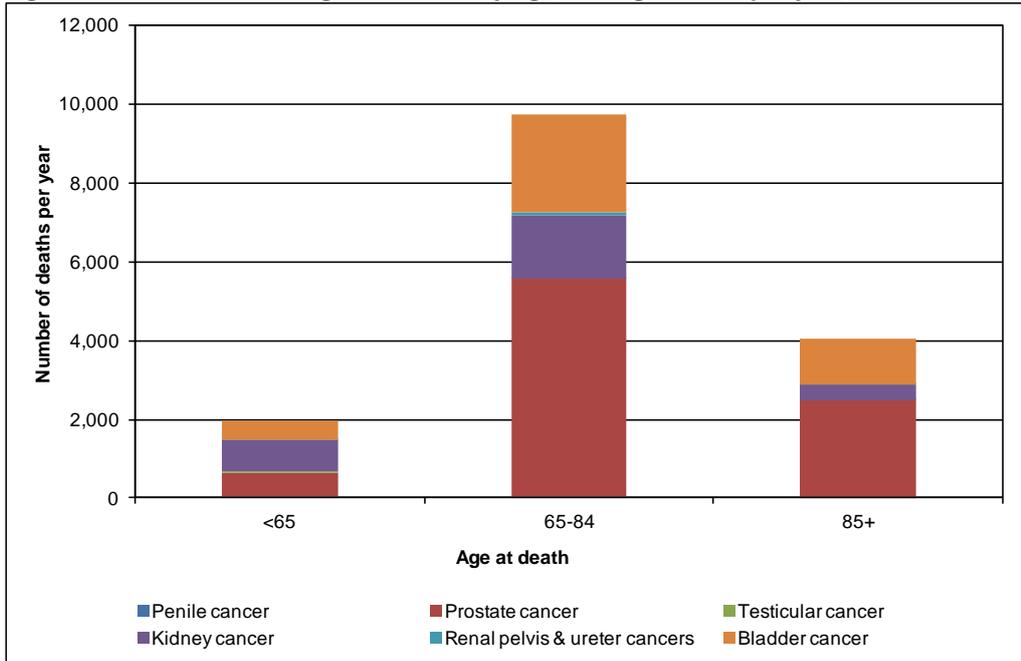


Source: ONS mortality data

3.3 Underlying cause of death by age

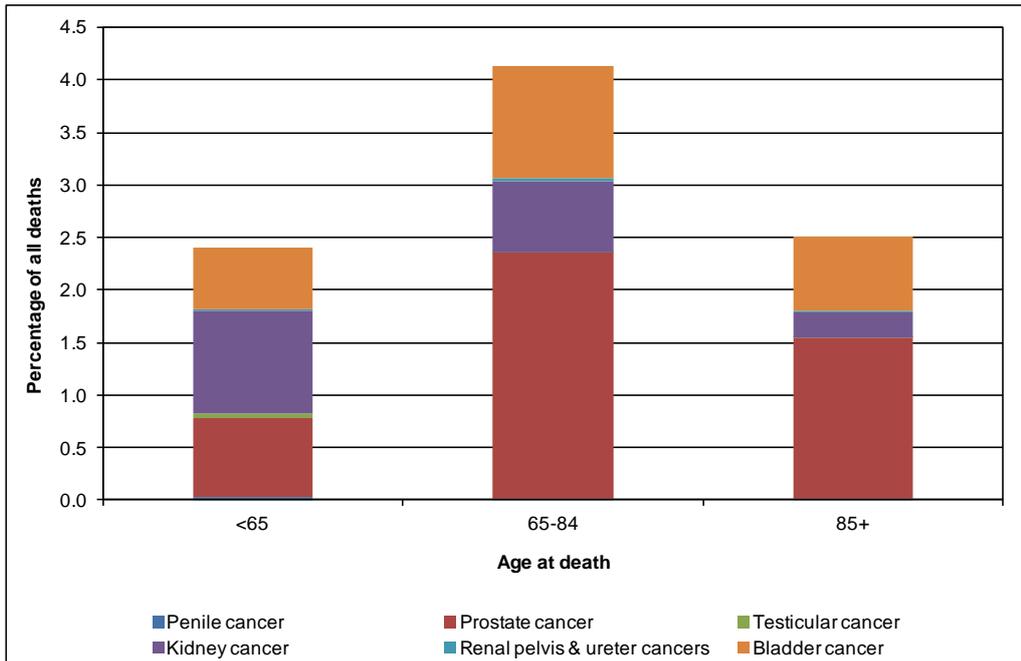
- Figure 6 shows that the total number of deaths from urological cancers is greatest in the 65–84 age group (9,757 deaths per year), followed by the 85+ age group (4,043 deaths per year) and those aged <65 (1,956 deaths per year).
- The number of prostate cancer deaths is highest for those aged 65–84 (5,514 deaths per year).
- Deaths from urological cancers as a proportion of deaths from all causes is highest in the 65–84 age group. In this age group, 1 in 25 deaths is from a urological cancer, most of them from prostate cancer (Figure 7).
- Table 1 presents the proportion of deaths from all urological cancer causes (also shown in Figure 7). These proportions vary considerably by age group for each cause of death and are lowest for deaths at <65 years for every cause, except kidney cancer and testicular cancer.

Figure 6: Deaths from urological cancers by age, average deaths per year, 2001–10



Source: ONS mortality data

Figure 7: Deaths from urological cancers by age, as a percentage of deaths from all causes, 2001–10



Source: ONS mortality data

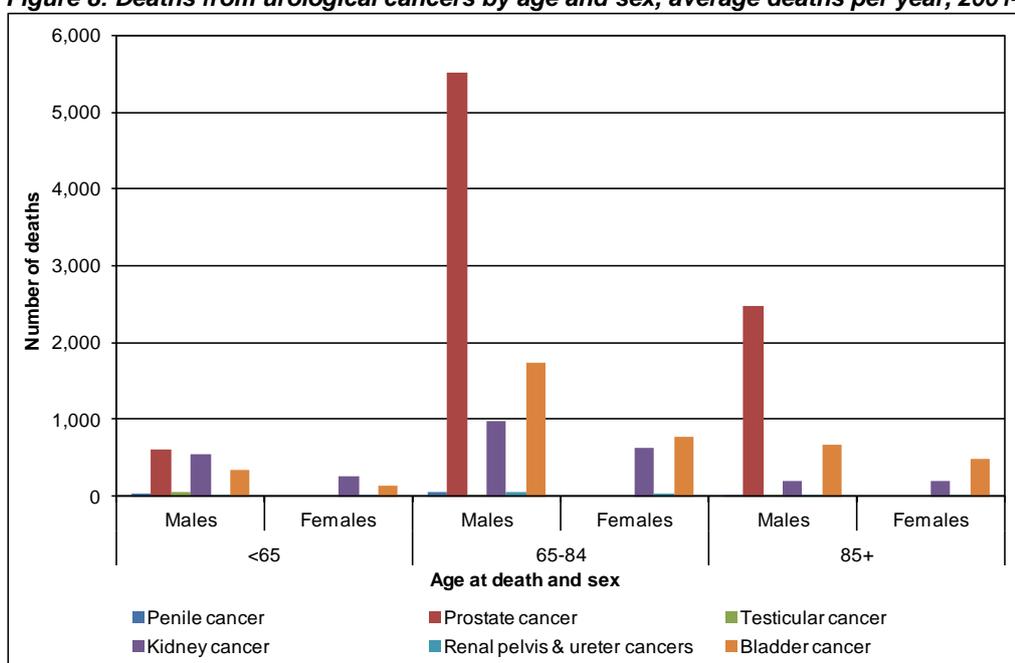
Table 1: Deaths from urological cancers by age, as a percentage of deaths from all causes, 2001–10

Underlying cause	Age at death		
	<65 %	65–84 %	85+ %
Penile cancer	0.0	0.0	0.0
Prostate cancer	0.7	2.3	1.5
Testicular cancer	0.1	0.0	0.0
Kidney cancer	1.0	0.7	0.2
Renal pelvis & ureter cancers	0.0	0.0	0.0
Bladder cancer	0.6	1.1	0.7

Source: ONS mortality data

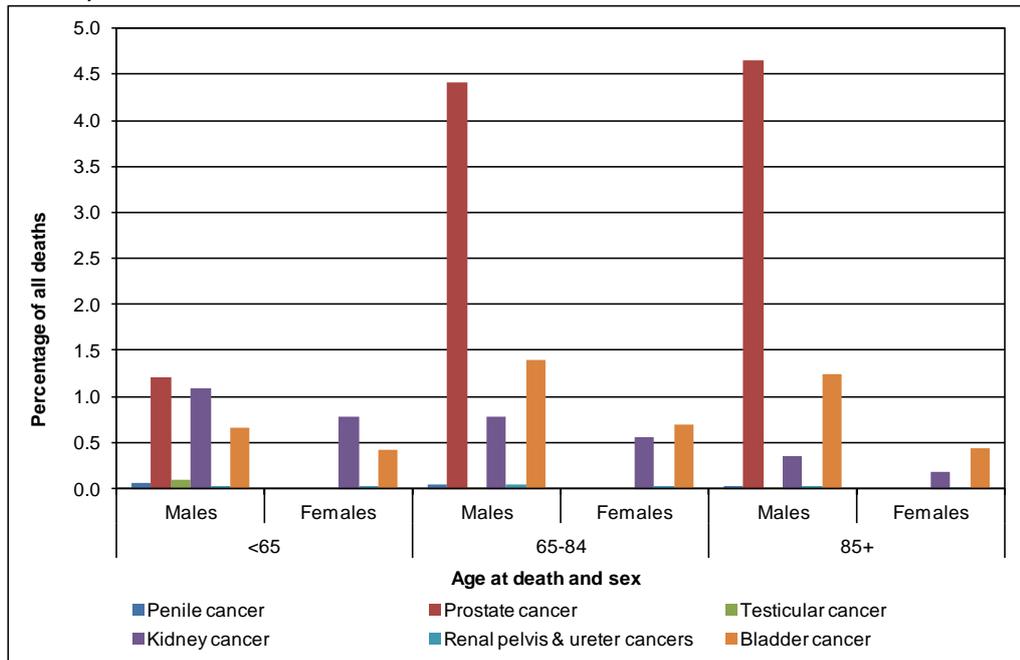
3.4 Underlying cause of death by age and sex

- Figures 8 and 9 show that both the number and percentage of deaths from urological cancers is higher in males than females for all age groups.
- The percentage of deaths from prostate cancer is highest in those aged 65–84 and 85+ (4.4% of males aged 65–84 and 4.6% of males aged 85+).
- Deaths from bladder cancer is highest in the 65–84 and 85+ age groups for both males (1.4% of males aged 65–84 and 1.2% of males aged 85+) and females (0.7% of females aged 65–84 and 0.4% of females aged 85+).
- The percentage of deaths from kidney cancer is highest in those aged <65. This is true for both males (1.1%) and females (0.8%).

Figure 8: Deaths from urological cancers by age and sex, average deaths per year, 2001–10

Source: ONS mortality data

Figure 9: Deaths from urological cancers by age and sex, as a percentage of deaths from all causes, 2001–10

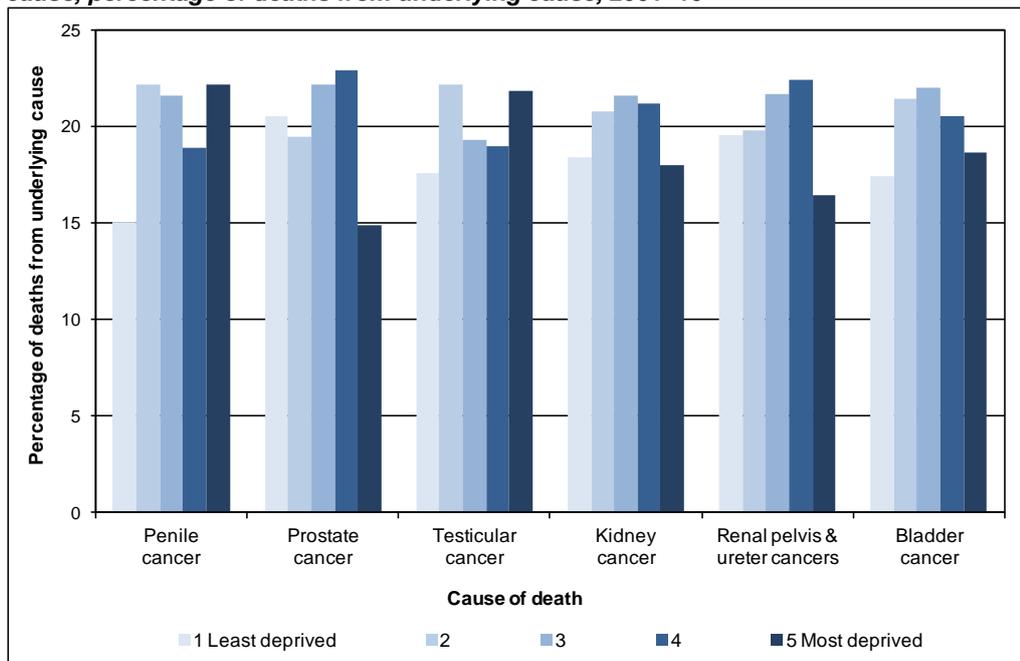


Source: ONS mortality data

3.5 Underlying cause of death by deprivation

- There are more deaths in the middle quintile of deprivation than the other quintiles (Figure 10). The lower number of deaths in the most deprived quintile is probably due to an overall younger population, as most deaths occur in those aged 65+. The lower number of deaths in the least deprived quintile is reflective of lower incidence in this population (prostate cancer excepted).

Figure 10: Deaths from urological cancers by quintile of income deprivation and underlying cause, percentage of deaths from underlying cause, 2001–10



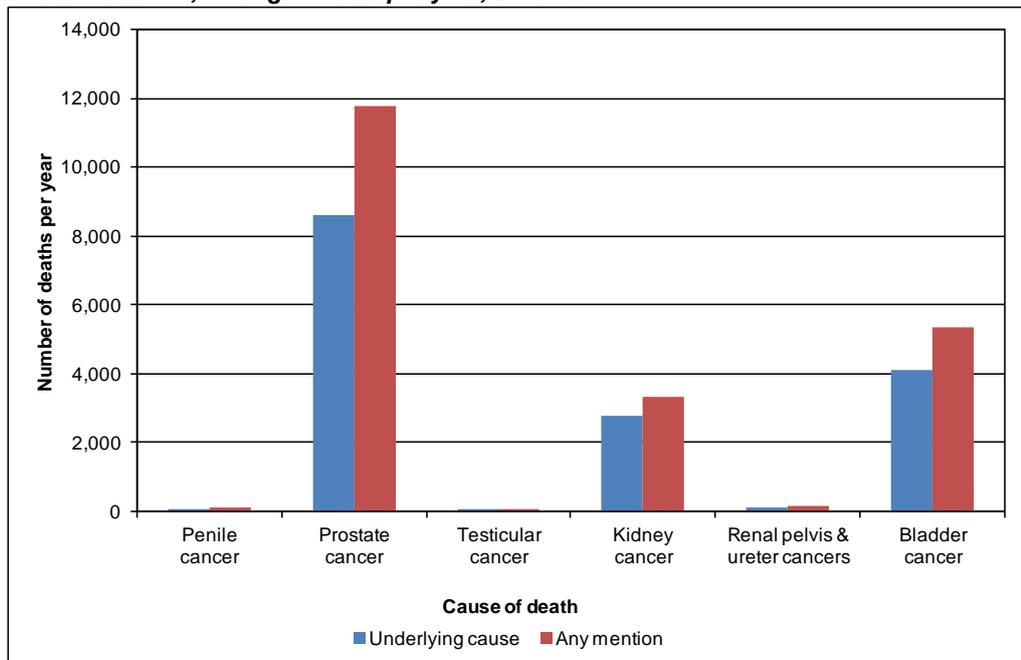
Source: ONS mortality data

3.6 Cause of death – any mention on the death certificate

In this section, we examine the number and proportion of deaths for which a urological cancer is recorded as either the underlying cause of death or as a contributory cause, defined here as 'mentions' (see Section 2.5). The proportion of all deaths in England with a mention of urological cancer on the death certificate in 2001–10 is 4.3%.

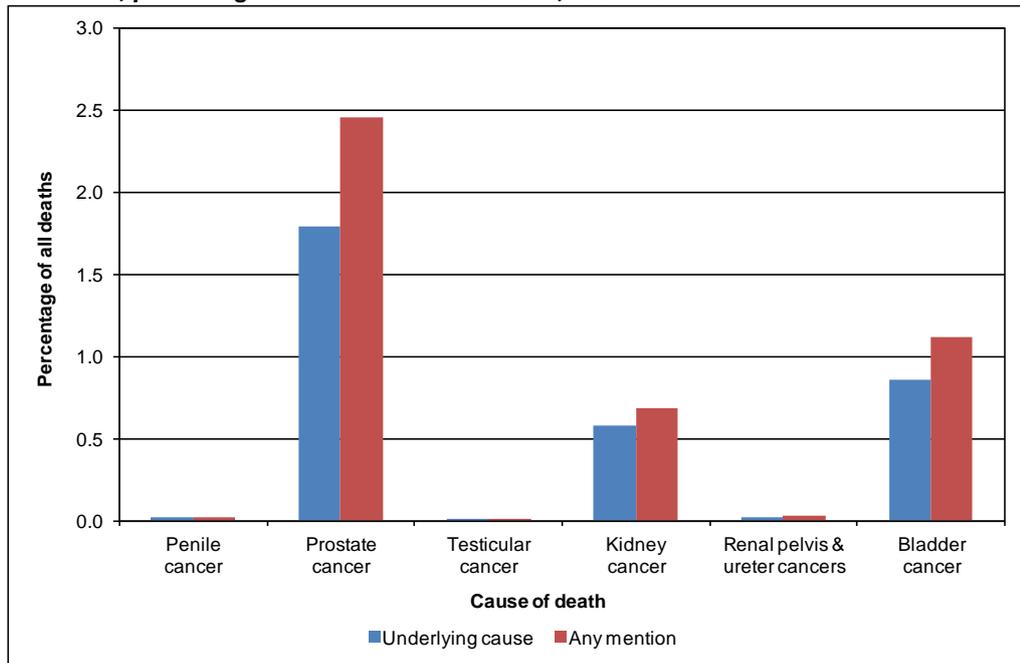
- Figures 11 and 12 show the number and proportion of deaths where a urological cancer is mentioned on the death certificate, compared to the underlying cause of death alone. Counting mentions makes the biggest difference for prostate cancer, increasing the number of deaths per year to 11,768, approximately 2.5% of all deaths in England.
- Figures 13 and 14 show that, for each cause, the number and proportion of deaths with a mention of urological cancer on the death certificate is greatest in males.

Figure 11: Deaths from urological cancers, as underlying cause and as total mentions on death certificate, average deaths per year, 2001–10



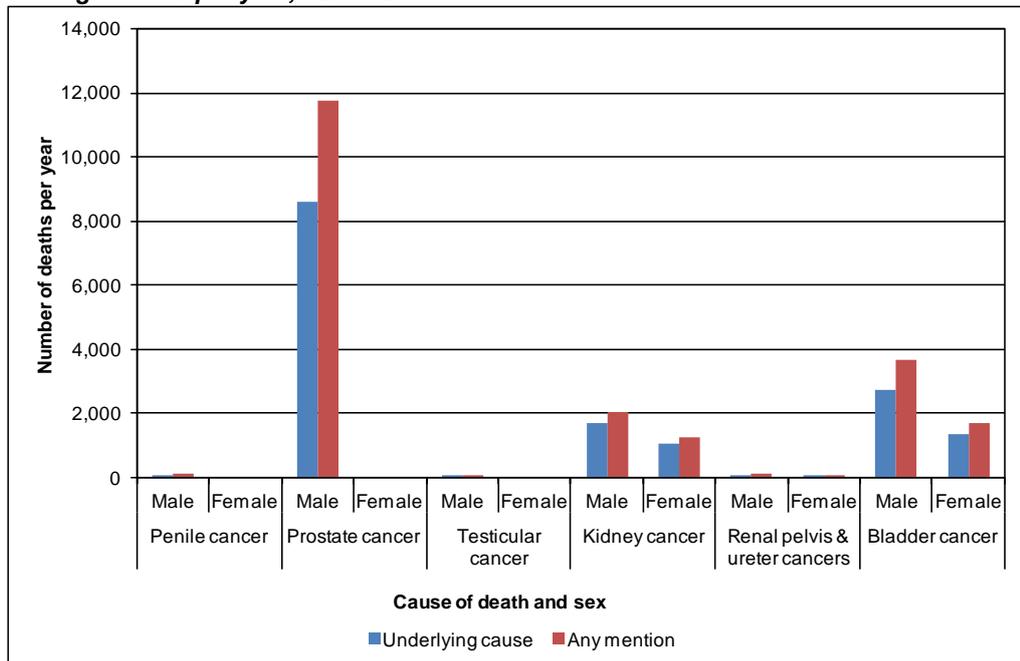
Source: ONS mortality data

Figure 12: Deaths from urological cancers, as underlying cause and total mentions on death certificate, percentage of deaths from all causes, 2001–10



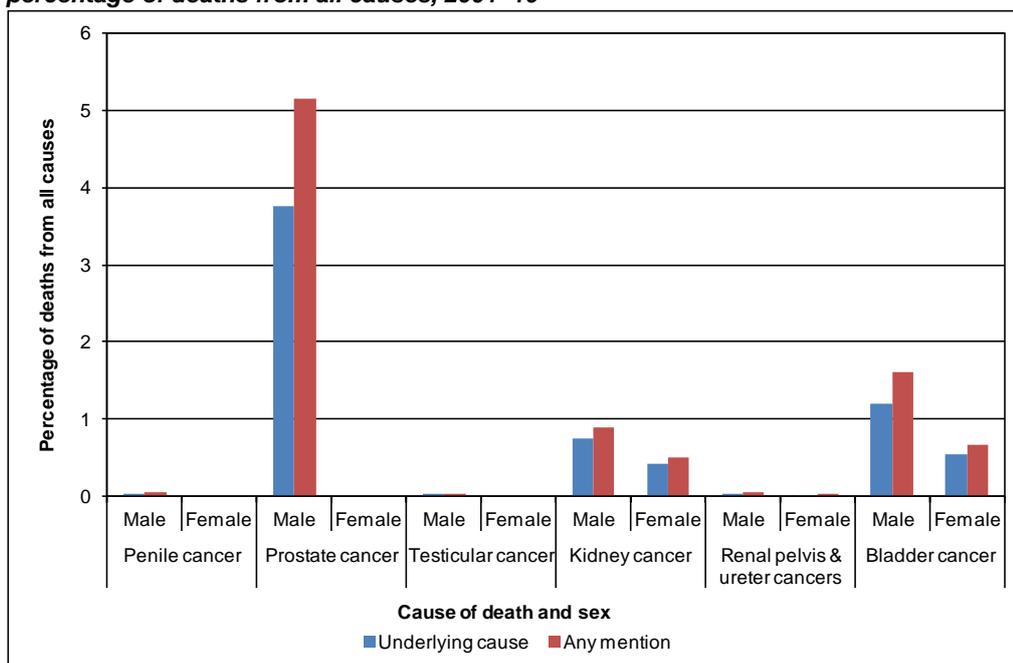
Source: ONS mortality data

Figure 13: Deaths from urological cancers by sex, total mentions on death certificate, average deaths per year, 2001–10



Source: ONS mortality data

Figure 14: Deaths from urological cancers by sex, total mentions on death certificate, percentage of deaths from all causes, 2001–10



Source: ONS mortality data

- Tables 2 and 3a and 3b demonstrate the large difference between deaths from prostate cancer and the deaths of men dying with prostate cancer. This difference is especially apparent in those aged 85 and over, with 1.5 times as many mentions on death certificates as underlying causes of death.
- The highest rate of kidney cancer deaths and mentions, as a proportion of deaths for that age group, is in those aged under 65.
- The highest rate of bladder cancer deaths and mentions, as a proportion of deaths for that age group, is in those aged 65-84.

Table 2: Deaths from urological cancers by sex, underlying cause and total mentions on death certificate, as percentage of deaths from all causes, 2001–10

Cancer type	Males		Females	
	Underlying cause %	Any mention %	Underlying cause %	Any mention %
Penile	0.0	0.0	-	-
Prostate	3.8	5.2	-	-
Testicular	0.0	0.0	-	-
Kidney	0.7	0.9	0.4	0.5
Renal pelvis & ureter	0.0	0.0	0.0	0.0
Bladder	1.2	1.6	0.5	0.7

Table 3a: Deaths from urological cancers by age, underlying cause and total mentions on death certificate, as percentage of all deaths from all causes, 2001-10

Cancer type	<65		65-84		85+	
	Underlying cause %	Any mention %	Underlying cause %	Any mention %	Underlying cause %	Any mention %
Penile	0.0	0.0	0.0	0.0	0.0	0.0
Prostate	0.7	0.8	2.3	3.1	1.5	2.3
Testicular	0.1	0.1	0.0	0.0	0.0	0.0
Kidney	1.0	1.1	0.7	0.8	0.2	0.3
Renal pelvis & ureter	0.0	0.0	0.0	0.0	0.0	0.0
Bladder	0.6	0.6	1.1	1.4	0.7	1.0

Table 3b: Deaths from urological cancers by age, underlying cause and total mentions on death certificate, as percentage of all male deaths from all causes 2001–10

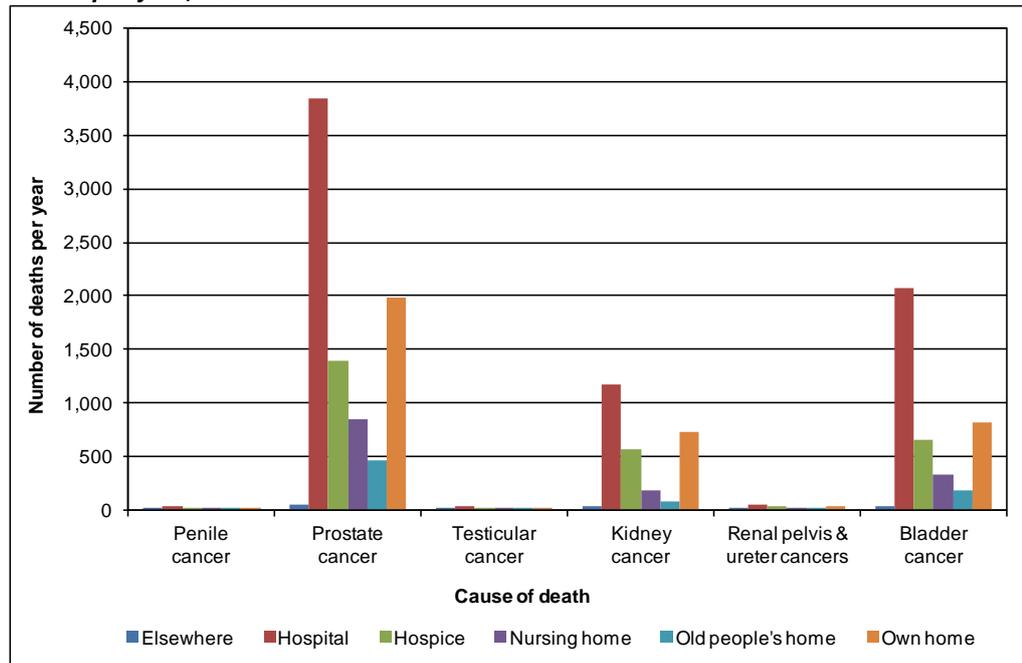
Cancer type	<65		65-84		85+	
	Underlying cause %	Any mention %	Underlying cause %	Any mention %	Underlying cause %	Any mention %
Penile	0.1	0.0	0.0	0.0	0.0	0.0
Prostate	1.2	1.3	4.4	5.9	4.6	6.9
Testicular	0.1	0.1	0.0	0.0	0.0	0.0

3.7 Place of death

Figures 15 and 16 show the number and proportion of deaths for each urological cancer by place of death.

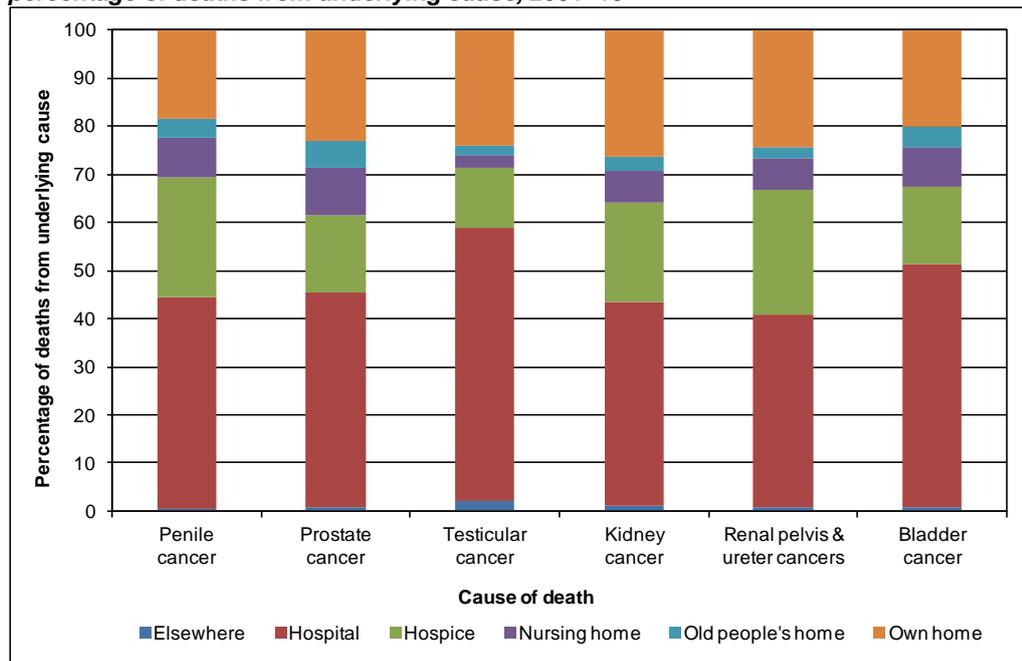
- The most common place of death for urological cancer patients is hospital (46%). This is a lower proportion than for deaths in hospital from any cancer (48%) or of any cause (58%) during 2001–10 (for most recent data, 2008–10, this has fallen to 54%).
- Testicular cancer and bladder cancer have the largest proportion of deaths occurring in hospital, at 57% and 51% of deaths in their individual cause categories respectively (Figure 16).
- The largest proportion of deaths occurring at home is for kidney cancer (26%).
- Prostate, bladder and kidney cancers all have the same pattern, with most deaths occurring in hospital, followed by own home, then hospice.
- However, there are more deaths in hospice than at home for penile cancer, and renal pelvis and ureter cancer patients.

Figure 15: Deaths from urological cancers by place of death and underlying cause, average deaths per year, 2001–10



Source: ONS mortality data

Figure 16: Deaths from urological cancers by place of death and underlying cause, percentage of deaths from underlying cause, 2001–10

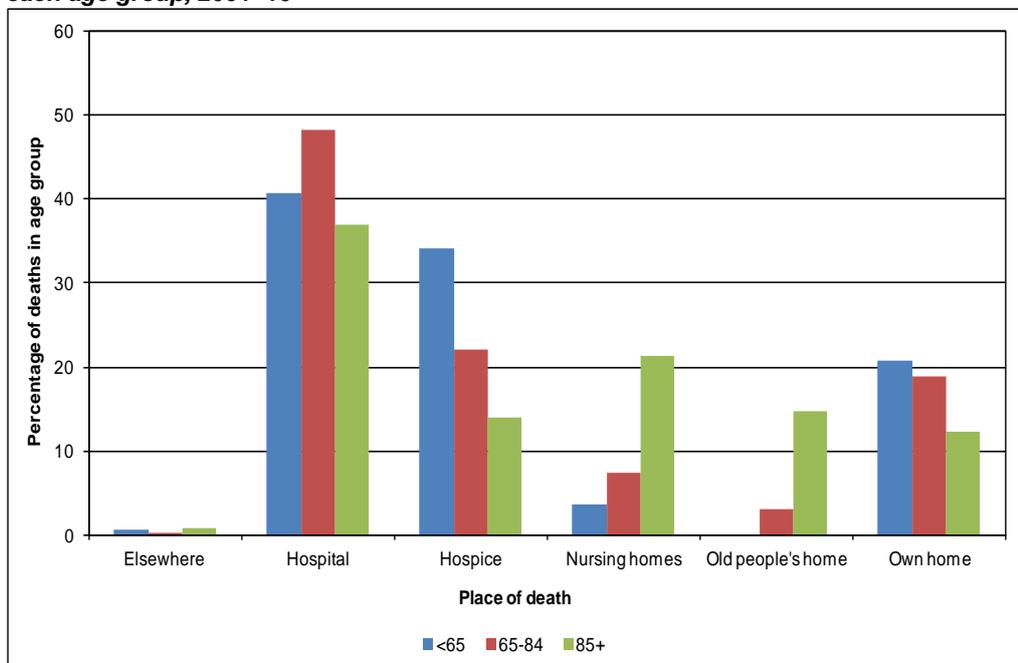


Source: ONS mortality data

- For those dying from penile cancer (Figure 17), the age group with the largest proportion of deaths in hospital is 65–84 (48%). This compares to 37% of those aged 85+.
- Overall, the proportion of deaths from prostate cancer that occur in the person’s own home is higher than for most other urological cancers (Figure 18). Most prostate cancer deaths still occur in hospital, and this increases with age, from 39% in under 65s to 47% in over those aged 85 and over.

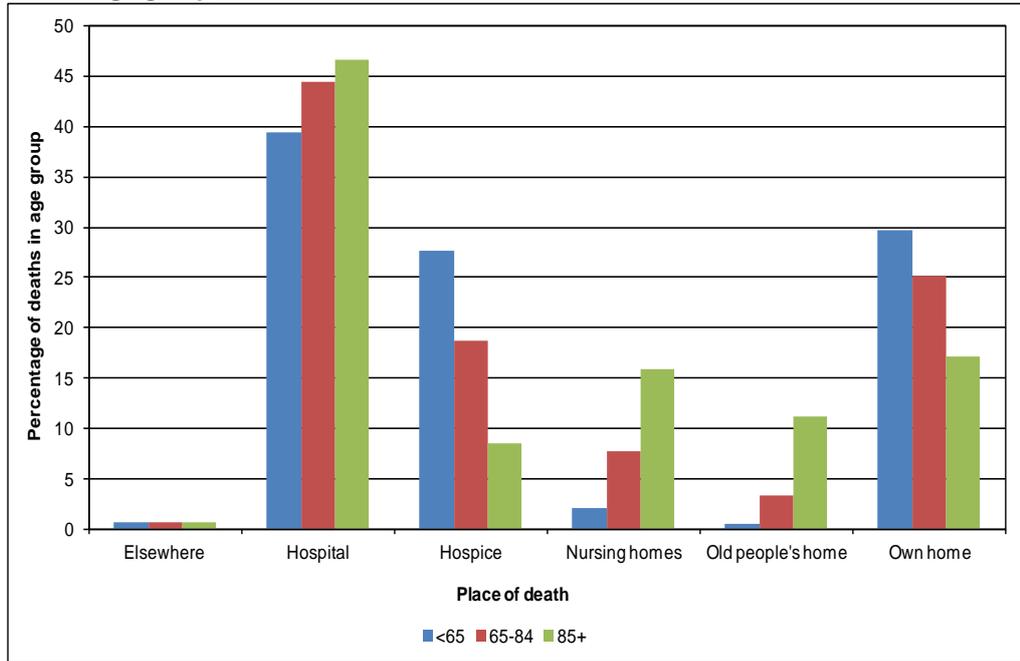
- Figure 19 shows that, of those who die of testicular cancer, a higher proportion of the 65–84 age group die in hospital (64%) than in the other age groups.
- Deaths in hospital from kidney cancer increase with age (Figure 20). There is a corresponding decrease in the proportion of deaths occurring in a hospice or own home.
- Younger people dying from cancers of the renal pelvis and ureter have the highest proportion of deaths at home (Figure 21): a third of those aged <65 die in their own home.
- Figure 22 shows that for bladder cancer, hospital is the most common place of death for all ages. Those aged under 65 have the highest percentage of deaths occurring in a hospice (25%) or in their own home (27%).
- The general trend of younger patients being more likely to die at home is reflective of the increased likelihood of having family to offer support and care.

Figure 17: Deaths from penile cancer by age and place of death, percentage of deaths in each age group, 2001–10



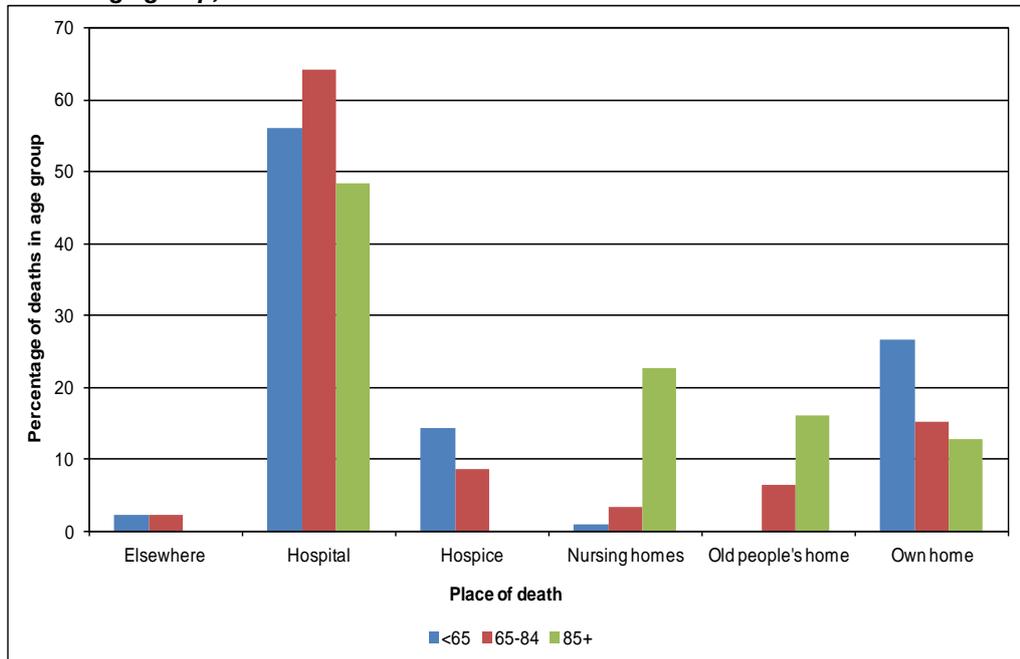
Source: ONS mortality data

Figure 18: Deaths from prostate cancer by age and place of death, percentage of deaths in each age group, 2001–10



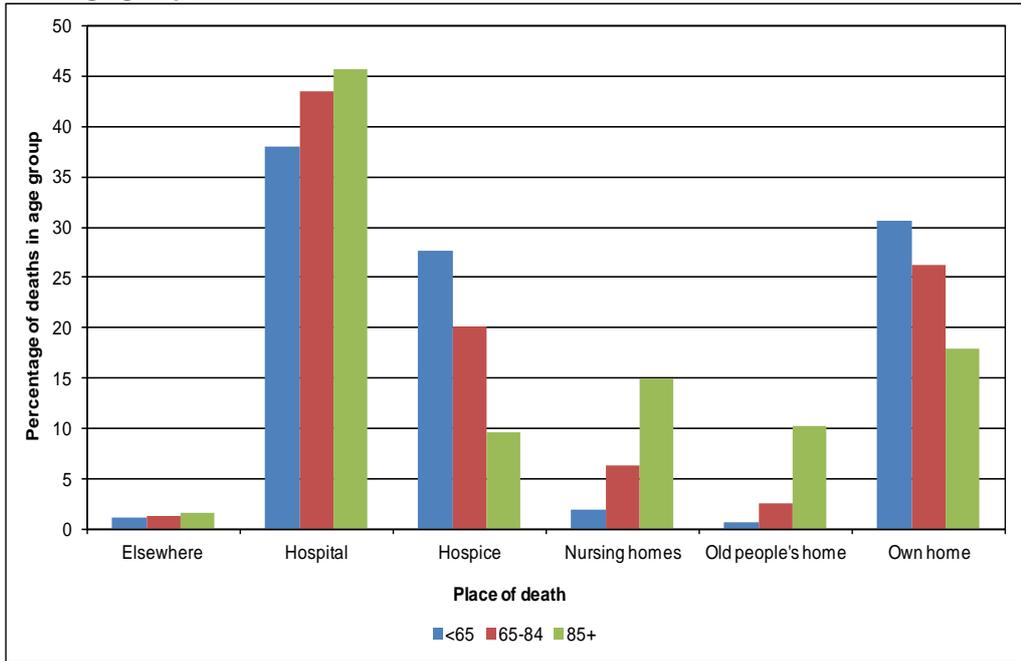
Source: ONS mortality data

Figure 19: Deaths from testicular cancer by age and place of death, percentage of deaths in each age group, 2001–10



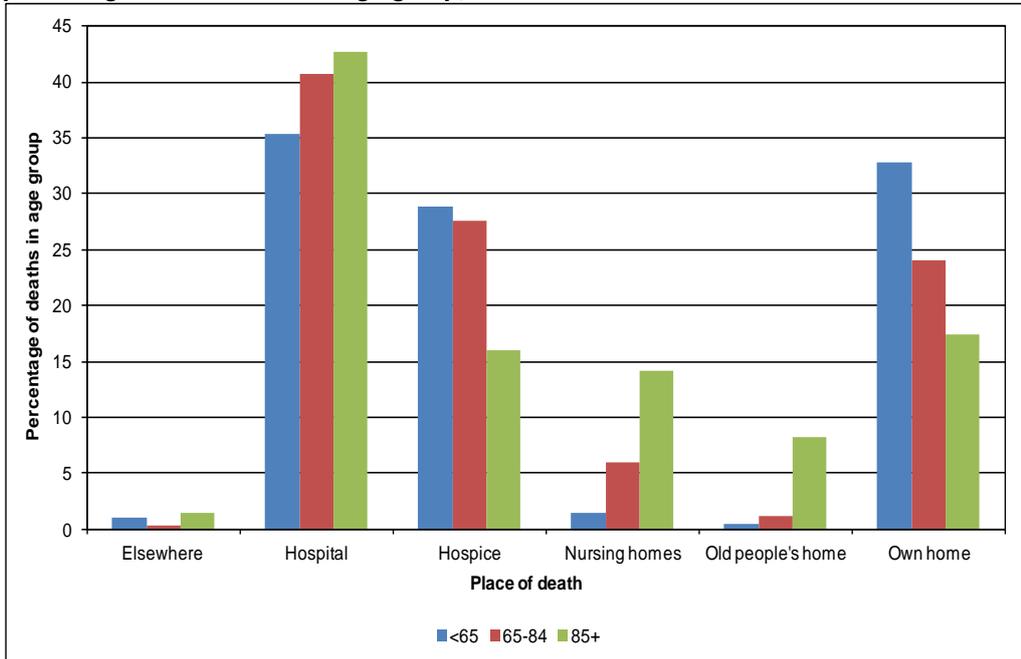
Source: ONS mortality data

Figure 20: Deaths from kidney cancer by age and place of death, percentage of deaths in each age group, 2001–10



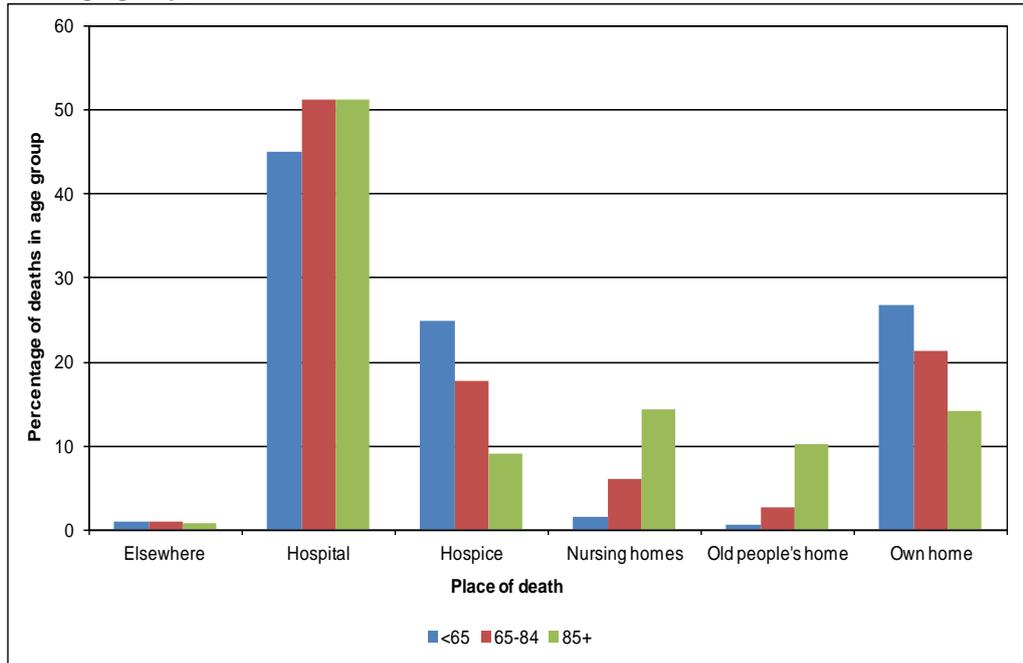
Source: ONS mortality data

Figure 21: Deaths from cancer of the renal pelvis and ureter by age and place of death, percentage of deaths in each age group, 2001–10



Source: ONS mortality data

Figure 22: Deaths from bladder cancer by age and place of death, percentage of deaths in each age group, 2001–10

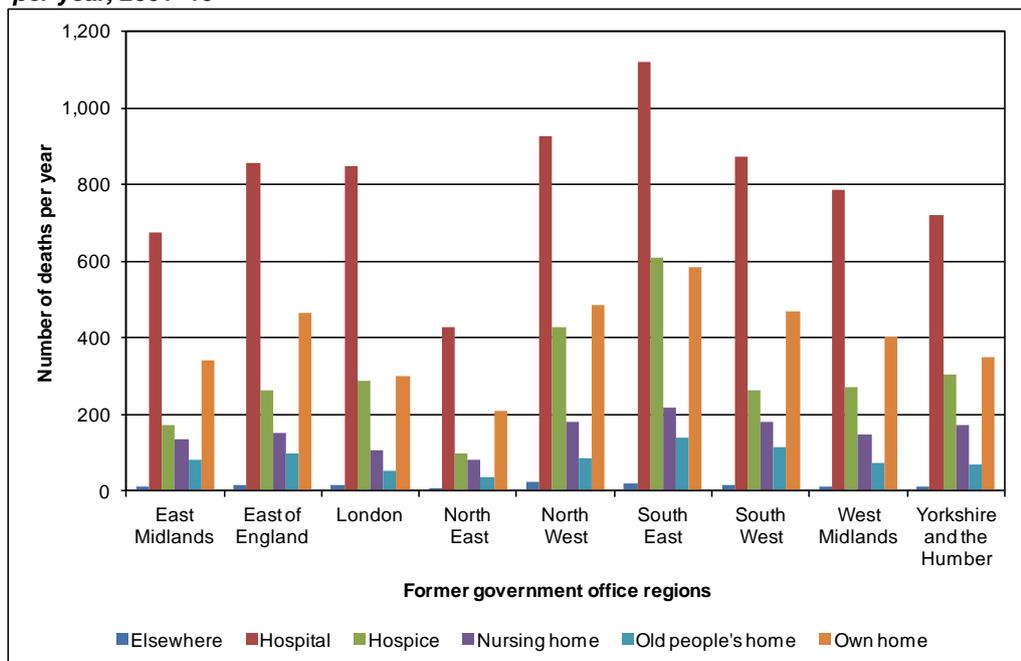


Source: ONS mortality data

3.8 Place of death by region

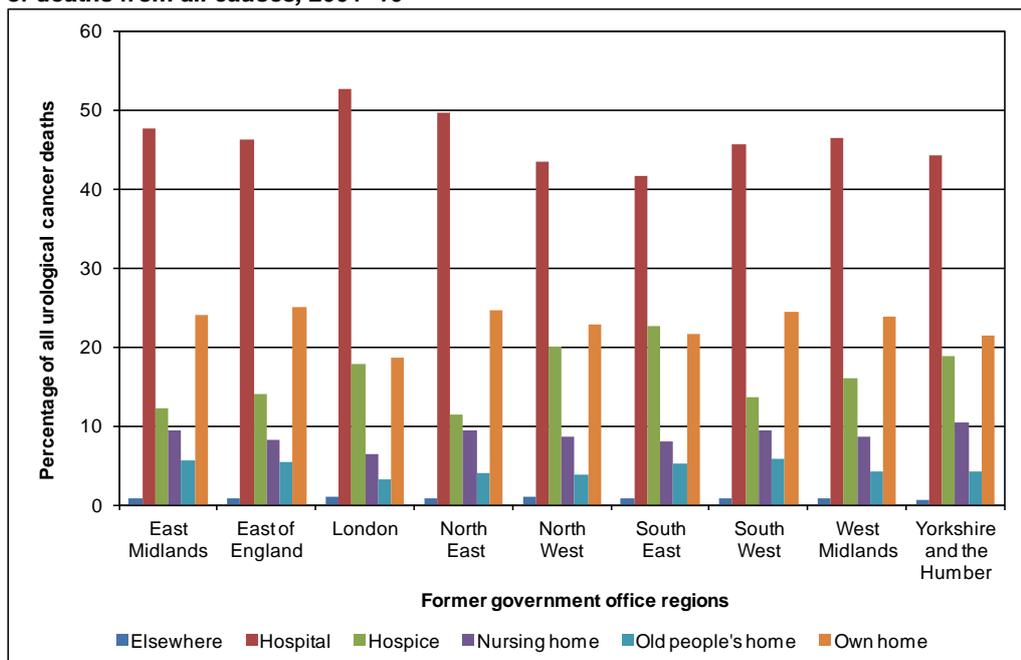
- The general pattern of place of death, i.e. the largest group being hospital deaths, is the same across all regions. However, Figures 23 and 24 show that the percentage of deaths occurring in each place varies. Deaths in hospital range from 42% in the South East to 53% in London, while deaths in the person's own home, varies from 19% in London to 25% in the South West.

Figure 23: Deaths from urological cancers by place of death and region, average number per year, 2001–10



Source: ONS mortality data

Figure 24: Deaths from urological cancers by place of death and region, as percentage of deaths from all causes, 2001–10



Source: ONS mortality data

4 Hospital activity and costs in the last year of life

Tables 4–9 show a breakdown of hospital length of stay and cost in the last year of life, by urological cancer type, between 2006 and 2008 in England.

- The total number of bed days and total cost varies by urological cancer type. The two biggest causes of urological cancer deaths are prostate cancer (55%) and bladder cancer (26%). However, proportionally fewer bed days are accounted for by prostate cancer (49%) and proportionally more (32%) by bladder cancer.
- Overall, emergency admissions are longer and more costly. Bladder and renal pelvis and ureter cancer patients admitted as emergencies have almost double the length of stay in hospital of those admitted electively – the biggest difference in length of stay of all the urological cancer types. This may be due to complications of stomata, urinary diversions and catheters, which are often required in the treatment of urological cancer patients, but especially in these groups. Complications include severe pain and intractable bleeding.
- For the three main urological cancers (prostate, bladder and kidney), patients have more emergency than elective admissions in the last year of life. In the less common urological cancers, the pattern is reversed.
- Total cost of inpatient care per person in the last year of life varies from £6,931 for patients who die of prostate cancer to £13,304 for those who die of testicular cancer. The markedly higher costs for penile (£10,310) and testicular cancer deaths may reflect the fact that these cancers are often dealt with in tertiary care settings. In the case of testicular cancer, the younger age profile may mean that patients are more suitable for aggressive treatment. Also, the perception of a greater benefit of survival may make clinicians more willing to persist with all treatment options.
- The final admission, even for those not dying in hospital, is more expensive than the average admission cost for urological cancers in the last year of life. In those dying from prostate cancer, the average final admission cost is nearly half (47%) of the average total last year of life cost. In contrast, in those dying from testicular cancer the final admission is about one-quarter (23%) of the last year of life cost.

Table 4: Admissions, length of stay and cost in the last year of life, for men dying from penile cancer in 2006–08

	Elective	Emergency	Total
Admissions in last year of life	467	441	908
Beddays in last year of life	3,751	5,728	9,479
Average length of stay per admission	8.0	13.0	10.4
Average admissions per person	2.7	2.2	3.8
Length of stay of final admission	14.3	16.1	15.7
Total cost £	1,141,232	1,333,078	2,474,310
Cost per admission £	2,444	3,023	2,725
Cost per person £	6,521	6,567	10,310
Cost of final admission £	3,025	3,387	3,294

Source: ONS mortality data

Table 5: Admissions, length of stay and cost in the last year of life, for men dying from prostate cancer in 2006–08

	Elective	Emergency	Total
Admissions in last year of life	8,181	41,829	50,010
Beddays in last year of life	69,482	530,288	599,770
Average length of stay per admission	8.5	12.7	12.0
Average admissions per person	1.4	2.1	2.4
Length of stay of final admission	13.3	15.7	15.5
Total cost £	15,553,710	126,574,654	142,128,364
Cost per admission £	1,901	3,026	2,842
Cost per person £	2,691	6,448	6,931
Cost of final admission £	2,409	3,323	3,223

Source: ONS mortality data

Table 6: Admissions, length of stay and cost in the last year of life, for men dying from testicular cancer in 2006–08

	Elective	Emergency	Total
Admissions in last year of life	420	327	747
Beddays in last year of life	2,621	3,200	5,821
Average length of stay per admission	6.2	9.8	7.8
Average admissions per person	4.3	2.5	5.3
Length of stay of final admission	13.4	12.0	12.3
Total cost £	1,029,714	859,428	1,889,142
Cost per admission £	2,452	2,628	2,529
Cost per person £	10,507	6,561	13,304
Cost of final admission £	3,132	3,008	3,034

Source: ONS mortality data

Table 7: Admissions, length of stay and cost in the last year of life, for people dying from kidney cancer in 2006–08

	Elective	Emergency	Total
Admissions in last year of life	4,352	14,568	18,920
Beddays in last year of life	35,794	171,599	207,393
Average length of stay per admission	8.2	11.8	11.0
Average admissions per person	1.6	2.2	2.6
Length of stay of final admission	12.5	14.7	14.4
Total cost £	10,315,988	43,472,671	53,788,659
Cost per admission £	2,370	2,984	2,843
Cost per person £	3,691	6,448	7,501
Cost of final admission £	2,967	3,277	3,234

Source: ONS mortality data

Table 8: Admissions, length of stay and cost in the last year of life, for people dying from renal pelvis & ureter cancer in 2006–08

	Elective	Emergency	Total
Admissions in last year of life	431	636	1,067
Beddays in last year of life	2,687	8,197	10,884
Average length of stay per admission	6.2	12.9	10.2
Average admissions per person	2.1	1.3	3.1
Length of stay of final admission	11.9	17.0	15.8
Total cost £	1,030,179	1,941,249	2,971,428
Cost per admission £	2,390	3,052	2,785
Cost per person £	4,837	6,386	8,588
Cost of final admission £	3,127	3,475	3,394

Source: ONS mortality data

Table 9: Admissions, length of stay and cost in the last year of life, for people dying from bladder cancer in 2006–08

	Elective	Emergency	Total
Admissions in last year of life	12,159	21,859	34,018
Beddays in last year of life	88,896	297,660	386,556
Average length of stay per admission	7.3	13.6	11.4
Average admissions per person	1.8	2.2	3.1
Length of stay of final admission	13.4	17.5	16.7
Total cost £	23,989,511	69,467,965	93,457,476
Cost per admission £	1,973	3,178	2,747
Cost per person £	3,592	7,041	8,502
Cost of final admission £	2,962	3,581	3,464

Source: ONS mortality data

5 Conclusions and recommendations

This report is the first to provide a high-level overview of mortality data from urological cancers in England. It shows the absolute numbers of deaths, where these are mentioned as the underlying and contributory causes of deaths.

The report also illustrates the different age profiles of people dying from urological cancers. These differences in age profiles are important as they will determine the needs of the individuals affected, along with their families and carers, and also determine where people are likely to receive end of life care at the time of their final illness.

People dying with a urological cancer recorded as either an underlying or contributory cause of death are likely to have specific end of life care needs related to these conditions. This report should be used by policy makers, providers and commissioners of care to the elderly and patients with urological cancers and to the non-statutory bodies who support them and their carers.

The variation in hospital activity and costs between urological cancers is to some extent due to inherent variation in complications and the profile of people dying from these cancers. However, in all cases, emergency admissions are longer and more costly. Services which help avoid emergency admissions should be considered as they will benefit both the patient (in terms of reduced hospital stay) and reduce total expenditure.

End of life care needs to be considered within the broader spectrum of 'overall care' for individuals living with a urological cancer. This could be achieved through raising awareness and enhancing skills for clinical staff working in cancer medicine. Appropriate configuration of services and infrastructure may improve patient and family/carer experience with possibly a need for better responsiveness and pre-emptive management.

Further reading

For contextual and supplementary information, we recommend reading this report alongside:

National Cancer Intelligence Network, (2012). Urological cancer profiles, from: http://www.ncin.org.uk/cancer_type_and_topic_specific_work/cancer_type_specific_work/urological_cancer/urological_cancer_hub/profiles.aspx

National End of Life Care Intelligence Network. (2010). Deaths from Renal Diseases in England, 2001 to 2008, from: http://www.endoflifecare-intelligence.org.uk/resources/publications/deaths_from_renal_diseases.aspx

National End of Life Care Intelligence Network. (2012). Deprivation and death: Variation in place and cause of death, from: http://www.endoflifecare-intelligence.org.uk/resources/publications/deprivation_and_death.aspx

National Institute for Health and Clinical Excellence. (2002). Improving outcomes in urological cancers, from: <http://www.nice.org.uk/CSGUC>

Norman, R, W., & Currow, D, C. (2005). Supportive Care for the Urology Patient: Oxford University Press.

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Department of Health (2008). End of Life Care Strategy: promoting high quality care for all adults at the end of life, from:
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_118810

Department of Health (2012). Healthy Lives, Healthy People: Improving outcomes and supporting transparency, from:
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_132358

November 2012 revision

The average number of urological cancer deaths per year in the 85+ age group was 4,043 in 2001–10 and not 3,452 as previously reported. This has resulted in adjustments to the following tables and charts and associated text:

- Figures 6–9
- Figures 17–22
- Table 3 (now Tables 3a and 3b)

The changes do not affect the overall findings and key messages of the report and are limited to a small number of analyses relating to variations by age group.

We apologise for this error and any inconvenience caused.

If you would like to give feedback on this report or any other National End of Life Care Intelligence Network output, please contact information@neolcin.nhs.uk



National end of life care INTELLIGENCE NETWORK

NHS

National End of Life
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Improving end of life care

If you would like to know more about the National End of Life Care Intelligence Network:

- Visit the website - www.endoflifecare-intelligence.org.uk
- Keep up to date with the latest news
- Sign up to receive email alerts
- Browse end of life care resources
- View end of life care data
- Read our reports.



Further information

This report is available online at:
www.endoflifecare-intelligence.org.uk

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About the National End of Life Care Intelligence Network

The Department of Health's National End of Life Care Strategy, published in 2008, pledged to commission a National End of Life Care Intelligence Network (NEoLCIN). The Network was launched in May 2010. It is tasked with collating existing data and information on end of life care for adults in England. This is with the aim of helping the NHS and its partners commission and deliver high quality end of life care, in a way that makes the most efficient use of resources and responds to the wishes of dying people and their families.

Key partners include the National Cancer Intelligence Network (NCIN), which will work closely with the Network to improve end of life care intelligence; and the South West Public Health Observatory, lead public health observatory for end of life care, which hosts the NEoLCIN website. The SWPHO has been commissioned to produce key outputs and analyses for the Network, including the national End of Life Care Profiles.

See www.endoflifecare-intelligence.org.uk
for more information about the Network and its
partners.