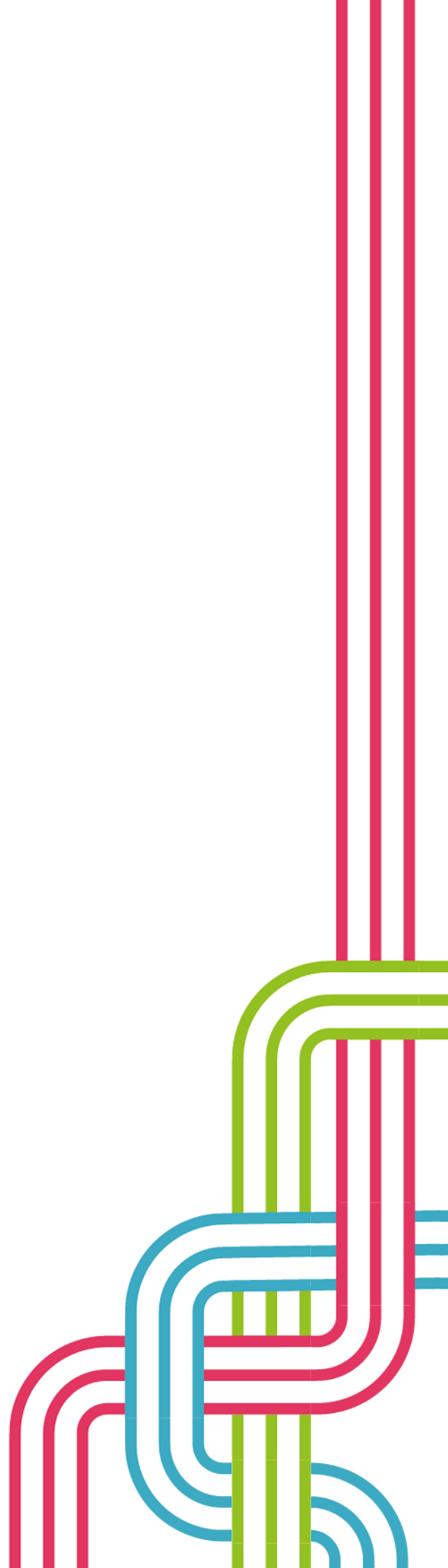


# Prostate Cancer Suffolk 2023



# Contents

Key points.....	1
An introduction to prostate cancer .....	1
Prostate cancer incidence.....	2
Prostate cancer incidence variation by ICB .....	3
Prostate cancer incidence variation by age .....	4
Prostate cancer incidence trend.....	5
Prostate cancer survival.....	5
Prostate cancer mortality.....	6
Prostate cancer mortality variation by age.....	7
Prostate cancer mortality trend .....	8
Routes to diagnosis.....	9
Stage of diagnosis .....	9
Prostate cancer screening.....	10
References.....	11

## Key points

1. Suffolk and North East Essex (SNEE) ICB residents had a statistically significantly higher incidence rate of prostate cancers, compared to the England average for 2018-20.
2. Prostate cancer incidence is highest for males between the ages of 70-79 for SNEE ICB and England in 2020. Over 9 in 10 prostate cancer cases between 2018-20 occurred in individuals aged 60 and over.
3. Prostate cancer incidence statistically significantly decreased in 2020, however this is likely due to fewer presentations and urgent referrals during the pandemic<sup>1,2</sup>.
4. More prostate cancers are being diagnosed by two-week waits in England. The proportion of prostate cancers diagnosed by two-week waits has increased from 1 in 3 (35.7%) in 2011, to over 1 in 2 (57.3%) in 2018.
5. Prostate cancer survival is typically higher than other tumour types. 87.3% of men survive their prostate cancer at least 5 years after diagnosis in England between 2015-19.
6. The UK National Screening Committee does not recommend the prostate-specific antigen (PSA) blood test to diagnose prostate cancers due to inaccuracy in diagnosis. Research in August 2023 found MRI screening may have value independent of the PSA test for screening prostate cancers; however, larger studies are required to assess effectiveness.

## An introduction to prostate cancer

The prostate is a small gland in the pelvis and is part of the male reproductive system. It is located between the penis and the bladder, surrounding the urethra<sup>3</sup>.

Prostate cancers usually develop slowly, this means that there could be no signs or symptoms for many years. Symptoms usually do not present until the prostate is large enough to affect the tube

that carries urine from the bladder out of the penis. At this point, certain symptoms may present – including an increased need to pee, straining to pee, and a feeling that the bladder has not emptied<sup>3</sup>.

It is important to note that these symptoms do not always mean an individual has prostate cancer, it could be caused by something else, such as prostate enlargement<sup>3</sup>.

Prostate cancer is not linked to any preventable causes – the risk of development depends on several factors, including age and ethnicity. Prostate cancer is more common in Black men than in White men but is less common in Asian men. Furthermore, prostate cancer risk is higher for individuals who have had a close relative (father, brother, grandfather, uncle) who has had prostate cancer. Additionally, as seen with many other cancer types, prostate cancer is more common in older adults. Other risk factors include faulty genes, obesity and weight, hormone levels, and pesticides<sup>4</sup>. For more information, follow the link provided: [Cancer Research UK](#).

This profile outlines the state of prostate cancer in Suffolk covering:

- [Prostate cancer incidence](#)
- [Prostate cancer survival](#)
- [Prostate cancer mortality](#)
- [Routes to diagnosis](#)
- [Stage of diagnosis](#)
- [Prostate cancer screening](#)

## Prostate cancer incidence

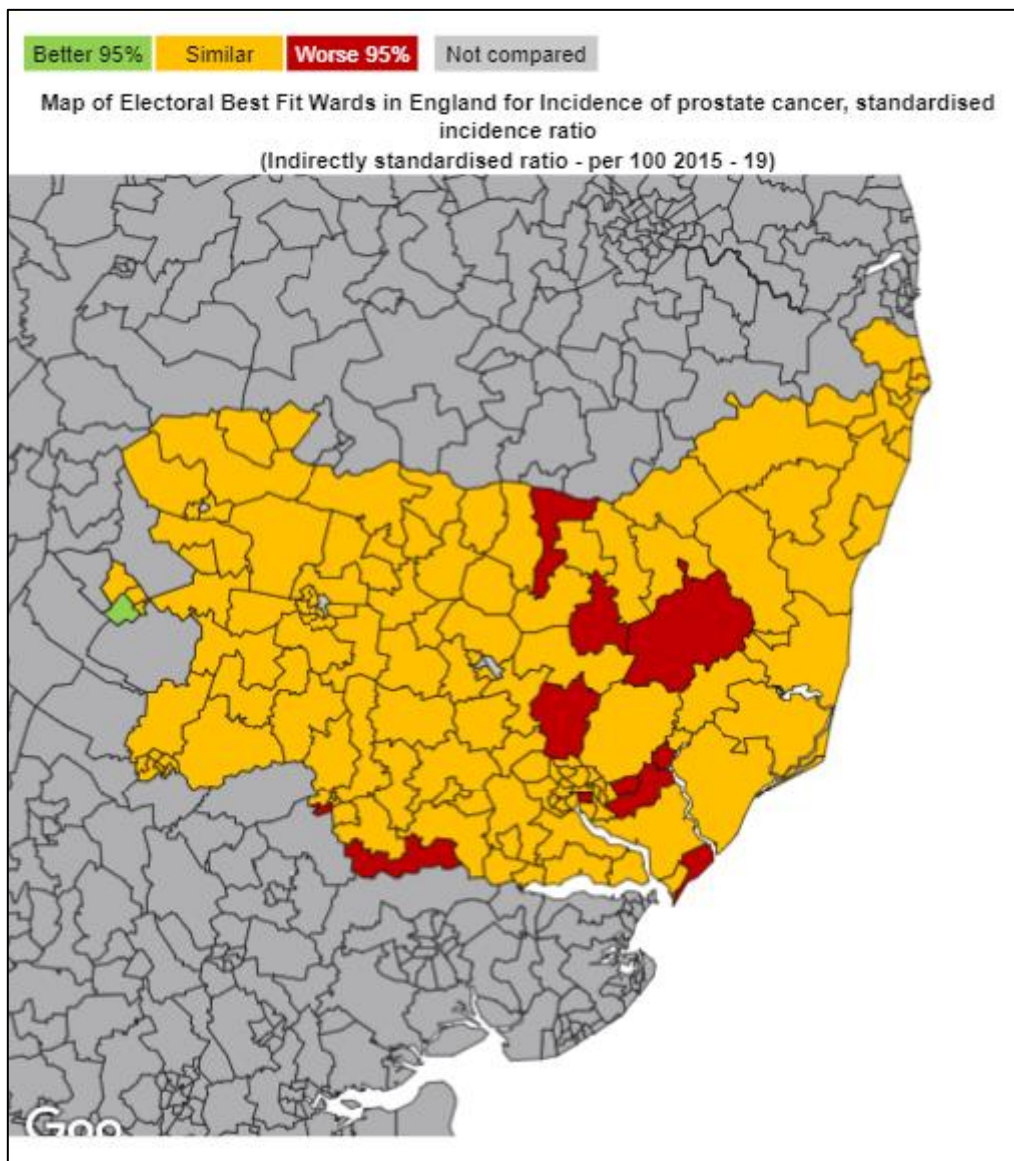
Figure 1 shows the variation in prostate cancer incidence using the standardised incidence ratio for data between 2015-19, at ward level in Suffolk. Some wards in Suffolk are not compared to the England average due to low counts and values being suppressed for disclosure control.

Most Suffolk wards have statistically similar prostate cancer incidence to the England average. However, pockets of the county had statistically significantly higher rates of prostate cancer compared to England. These wards included:

- East Suffolk: Kesgrave, Martlesham & Purdis Farm, Woodbridge, Framlingham, Eastern Felixstowe
- Mid Suffolk: Debenham, Claydon & Barham, Palgrave
- Ipswich: Holywells
- Babergh: Bures St Mary & Nayland, Sudbury South West

One ward area in Suffolk had statistically significantly lower prostate cancer incidence compared to the England average between 2015-19; Newmarket West in West Suffolk.

Figure 1: Map of prostate cancer incidence in Suffolk at ward level, using a standardised incidence ratio between 2015-19, compared to England for statistical significance.

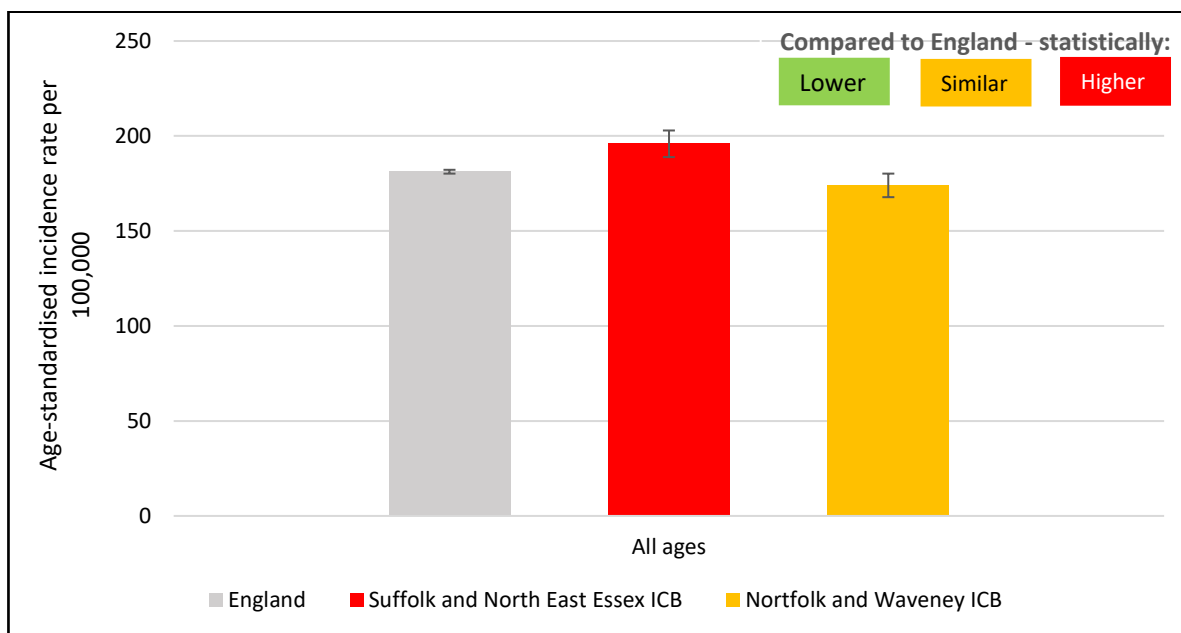


Source: [Fingertips Public Health Data](#)

### Prostate cancer incidence variation by ICB

Figure 2 shows the prostate cancer incidence rates for SNEE ICB and Norfolk and Waveney ICB, compared to England, across all ages, in males, in 2018-2020. Between 2018-20, SNEE ICB had a statistically significantly higher incidence of prostate cancers for all ages compared to the England average, with rates of 195.8 per 100,000 (3,057 cases diagnosed) and 181.2 per 100,000 (134,353 cases diagnosed), respectively. Norfolk and Waveney ICB had a statistically similar incidence rate of prostate cancers to the England average, at 173.9 per 100,000.

**Figure 2. Prostate cancer incidence rates per 100,000 for Suffolk and North East Essex ICB and Norfolk and Waveney ICB, compared to England, all ages, males, 2018-2020.**



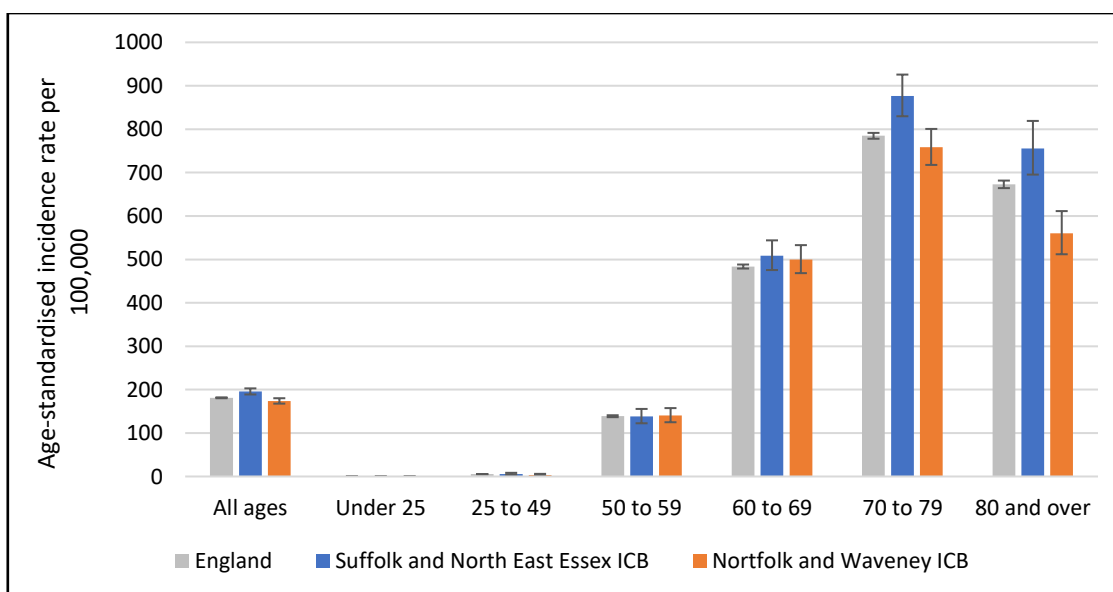
Source: [CancerData](#)

### Prostate cancer incidence variation by age

Figure 3 shows the prostate cancer incidence rates for SNEE and Norfolk and Waveney ICB, and England, for all ages and selected age groupings, males, 2020. Results show that prostate cancer incidence rates increase with age, peaking in the 70 to 79 group (England – 748.7 per 100,000, SNEE ICB – 876.8 per 100,000). Additionally, there is a statistically significant decrease in prostate cancer incidence in individuals aged 80 and over in England and SNEE ICB (England – 672.9 per 100,000, SNEE ICB – 755.3 per 100,000) compared to incidence in individuals aged 70 to 79.

Within SNEE ICB, over 9 in 10 (90.1%) of prostate cancer cases between 2018-20 occurred in individuals aged 60 and over.

**Figure 3. Prostate cancer incidence rates per 100,000 for Suffolk and North East Essex ICB, Norfolk and Waveney ICB, and England, for all ages and selected age groupings, males, 2020.**



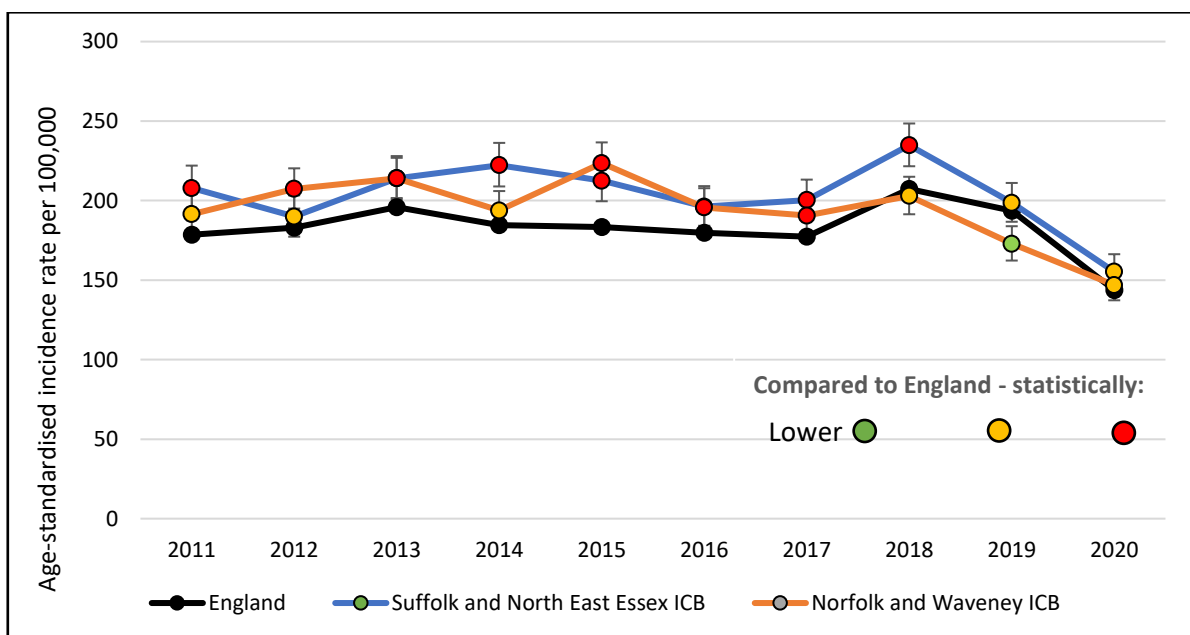
Source: [CancerData](#)

## Prostate cancer incidence trend

Figure 4 shows the prostate age-standardised cancer incidence rates per 100,000 for SNEE and Norfolk and Waveney ICB, males, all ages between 2011-2020 compared to England. Prostate cancer incidence rates have varied significantly between 2011 to 2020. For England and both ICB areas, rates have statistically significantly decreased in 2020. This recent decrease is likely attributed to the pandemic, with fewer cancers diagnosed nationally<sup>2</sup>. Therefore, looking at the prostate cancer incidence between 2011-2019:

- For England statistically significantly increased by 8.4%, from 178.6 per 100,000 in 2011, to 193.6 per 100,000 in 2019.
- For SNEE ICB remained statistically similar from 2011 (207.9 per 100,000) to 2019 (198.6 per 100,000).
- For Norfolk and Waveney also remained statistically similar from 2011 (191.5 per 100,000) to 2019 (172.9 per 100,000).

**Figure 4. Prostate age-standardised cancer incidence rates per 100,000 for Suffolk and North East Essex ICB, Norfolk and Waveney ICB, males, all ages between 2011-2020 compared to England.**



Source: [CancerData](#)

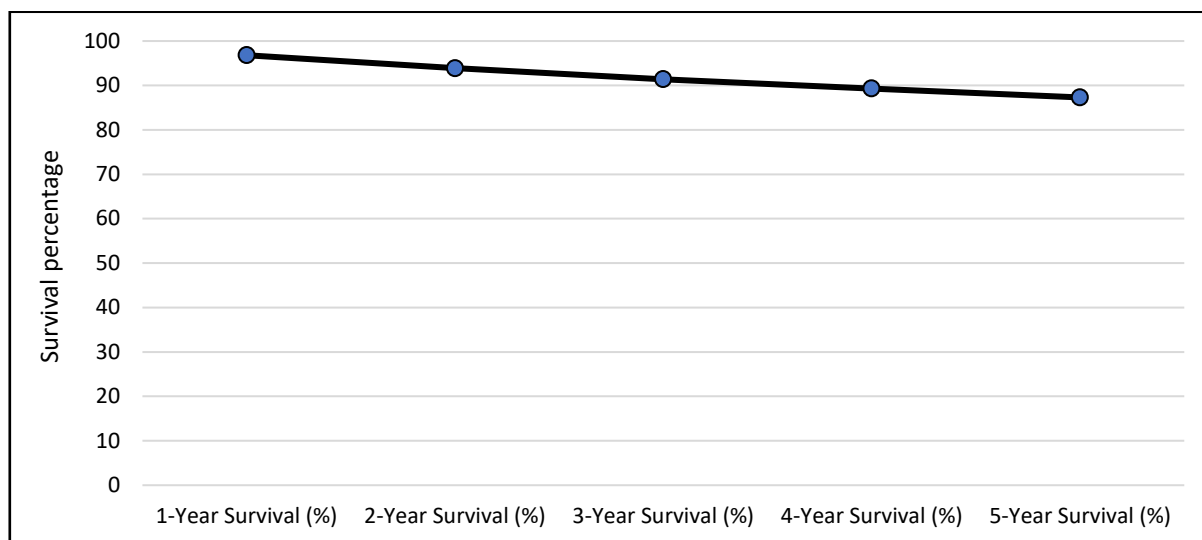
## Prostate cancer survival

NHS digital's index of cancer survival provides 1-year survival estimates for all cancers for England, and sub-ICB areas. Survival estimates are also provided for colorectal, lung, and female breast cancers, but not for prostate cancers<sup>5</sup>

Data from the cancer survival by stage at diagnosis for England, 2019 provides statistics for net survival. This estimates the number of people who survive their cancer. This measure is the survival of cancer patients, after accounting for background mortality that they would have experienced if they had not had cancer<sup>6</sup>

Figure 5 shows the 1-to-5-year prostate cancer survival estimates for all ages in England between 2015 and 2019. Results show that prostate cancer has higher survival percentages than other types of cancer, with over 8 in 10 people in England surviving for at least 5 years after diagnosis. Between 2015 and 2019, 96.8% of individuals survived for at least 1 year after their prostate cancer diagnosis. 87.3% of individuals survived for five years after their prostate cancer diagnosis.

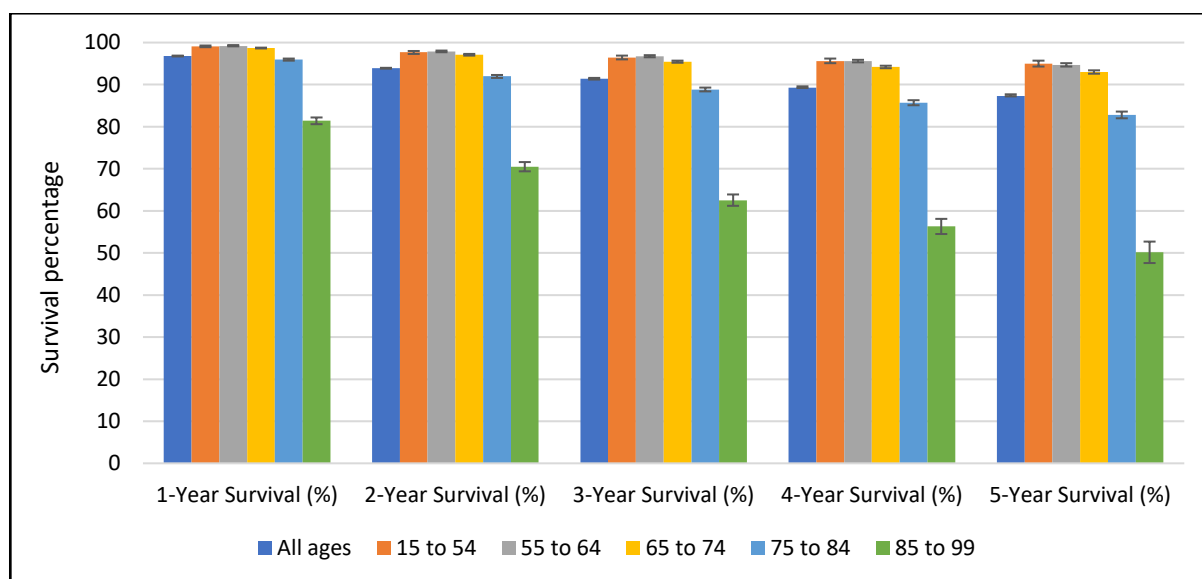
**Figure 5. 1-to-5-year prostate cancer survival estimates for all ages in England, 2015-19.**



Source: [NHS Digital: Cancer Survival 2015-19](#)

Figure 6 shows the 1-to-5 year prostate cancer survival percentages by age groups, for England between 2015 and 2019. These survival estimates are compared with the expected survival of the general population (background mortality). While survival outcomes are positive for all persons in England, there is variation in survival outcomes based on age. For 5-year survival, both the 75 to 84 (82.8%) and 85 to 99 (50.2%) age categories have statistically significantly lower prostate cancer survival than all other age groups.

**Figure 6. 1-to-5 year prostate cancer survival percentages by age groups, for England, 2015-19.**



Source: [NHS Digital: Cancer Survival 2015-19](#)

## Prostate cancer mortality

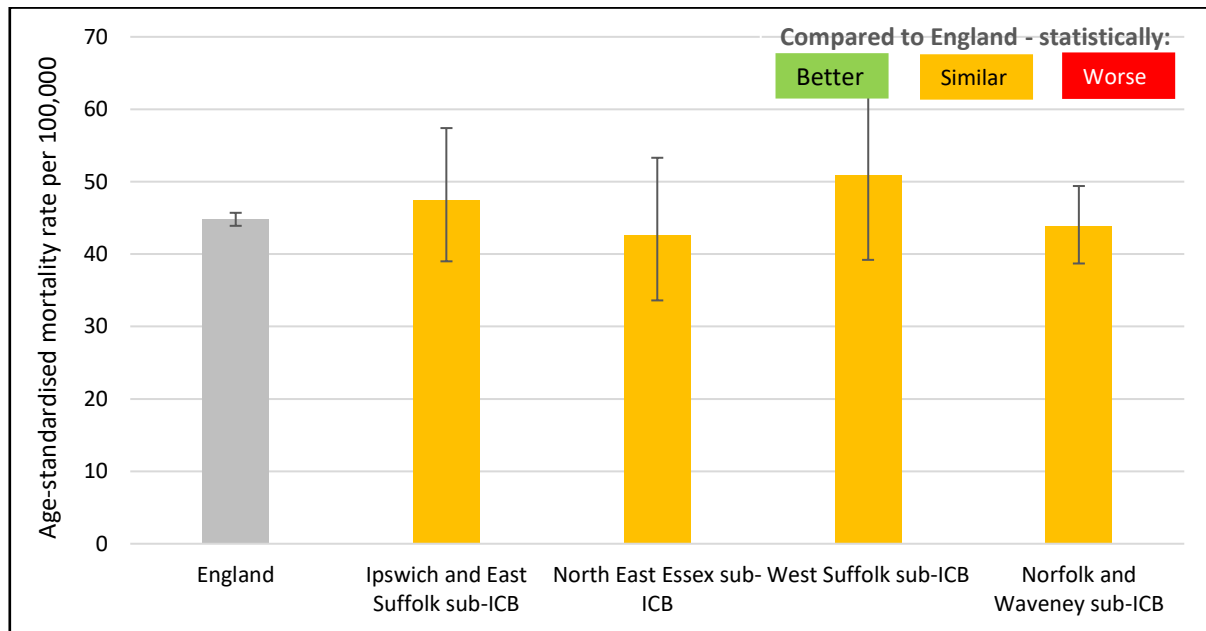
In 2020, the England age-standardised mortality rate for male prostate cancer was 44.8 per 100,000. This rate accounted for 10,268 deaths. For SNEE ICB, there were 249 prostate cancer deaths in 2020. The age standardised rate of 46.7 prostate cancer deaths per 100,000 was statistically similar to the England average. Norfolk and Waveney ICB had 268 prostate cancer deaths in 2020, also statistically similar to the England average with a rate of 43.8 per 100,000.

Figure 7 shows the prostate cancer age-standardised mortality rates for all persons, all ages, for Suffolk sub-ICB locations, compared to England. Results show that sub-ICB areas in Suffolk in 2020

had a statistically similar prostate cancer mortality rate to the England average of 44.8 per 100,000. SNEE ICB's 249 prostate cancer deaths were distributed across these sub-ICB areas:

- Ipswich and East Suffolk sub-ICB – 108 deaths, rate of 47.5 per 100,000.
- North East Essex sub-ICB – 77 deaths, rate of 42.6 per 100,000.
- West Suffolk sub-ICB – 64 deaths, rate of 50.9 per 100,000.

**Figure 7. Prostate cancer age-standardised mortality rates per 100,000 for all persons, all ages, for Suffolk sub-ICB locations, 2020.**



Source: [CancerData](#)

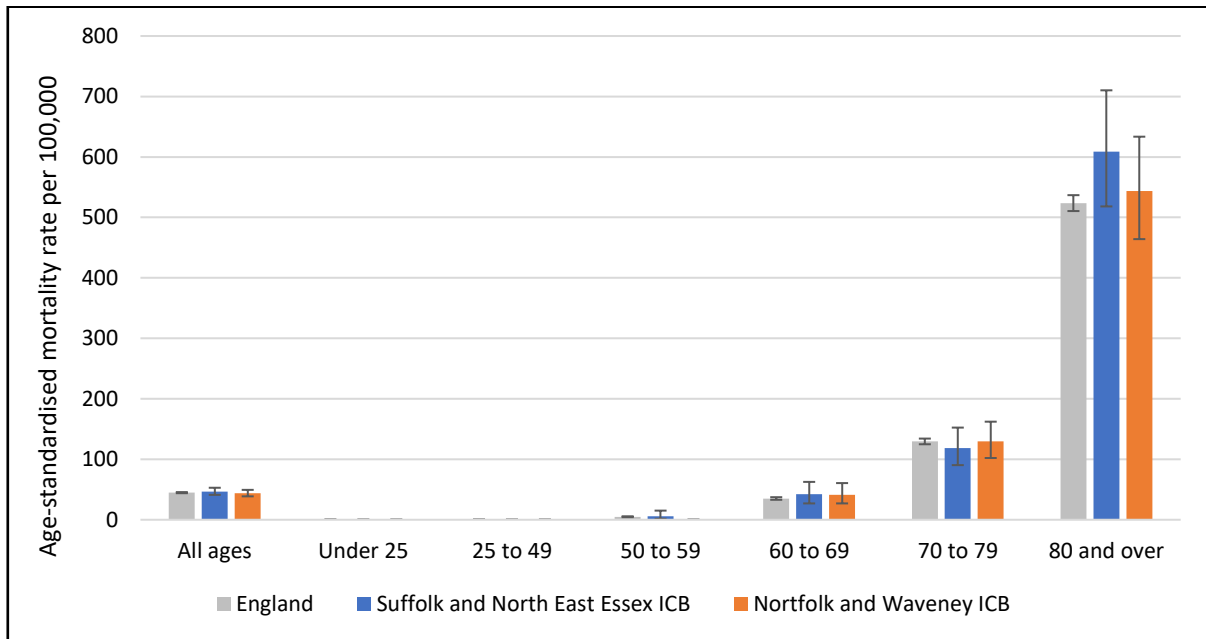
### Prostate cancer mortality variation by age

Alike other cancers, prostate cancer mortality rates increase with age. Of England's 10,268 prostate cancer deaths in 2020, 98.1% of them occurred in individuals aged 60 and over. The trend was similar for SNEE ICB, where 98.4% of prostate cancer deaths (245/249) in 2020 occurred in individuals aged 60 and above.

Figure 8 shows that both SNEE ICB and Norfolk and Waveney ICBs have statistically similar mortality rates for prostate cancer to the England average, within each age category.



**Figure 8. Prostate cancer mortality rates per 100,000 for Suffolk and North East Essex ICB, Norfolk and Waveney ICB, and England, for all ages and selected age groupings, all persons, 2020.**

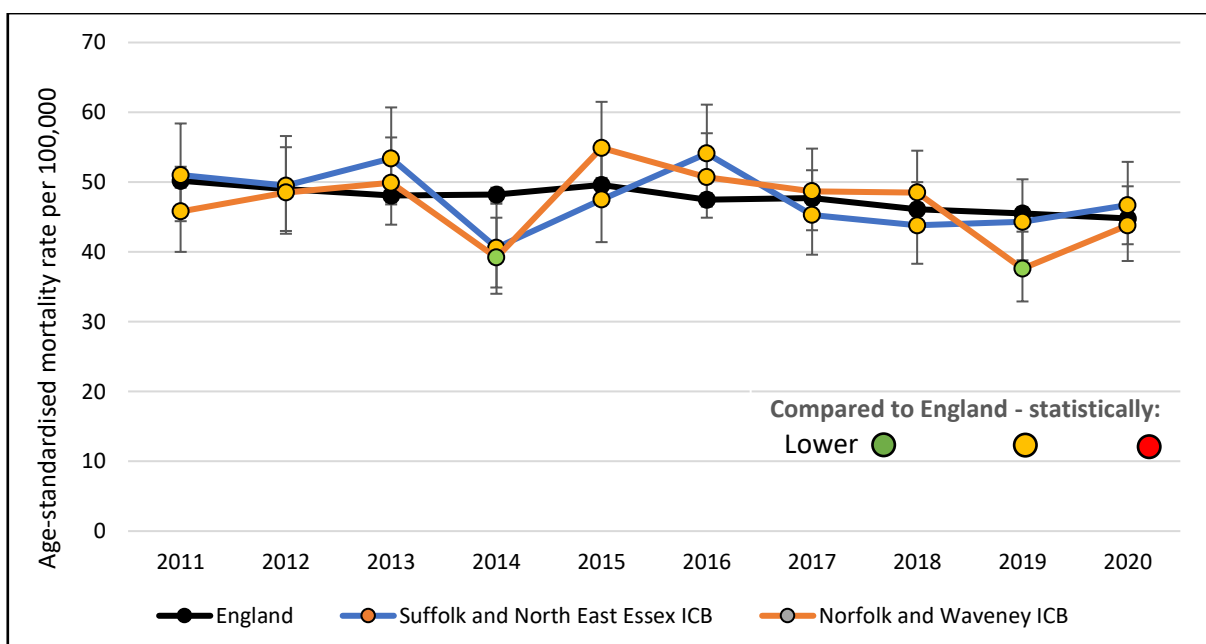


Source: [CancerData](#)

### Prostate cancer mortality trend

Figure 9 compares England's age-standardised, prostate cancer mortality rates per 100,000 to SNEE and Norfolk and Waveney ICBs rate. Prostate cancer mortality has statistically significantly decreased in England from 50.2 per 100,000 in 2011, to 44.8 per 100,000 in 2020. While national prostate cancer mortality rates have decreased, the rate for SNEE ICB has remained statistically similar between 2011-2020. The 2020 rate of 46.7 per 100,000 is statistically similar to the 2011 rate of 51.0 per 100,000. Norfolk and Waveney ICB also had a statistically similar prostate cancer mortality rate in 2020 (43.8 per 100,000) to 2011 (45.8 per 100,000).

**Figure 9. Prostate age-standardised cancer mortality rates per 100,000 for Suffolk and North East Essex ICB, Norfolk and Waveney ICB, males, all ages between 2011-2020 compared to England.**



Source: [CancerData](#)

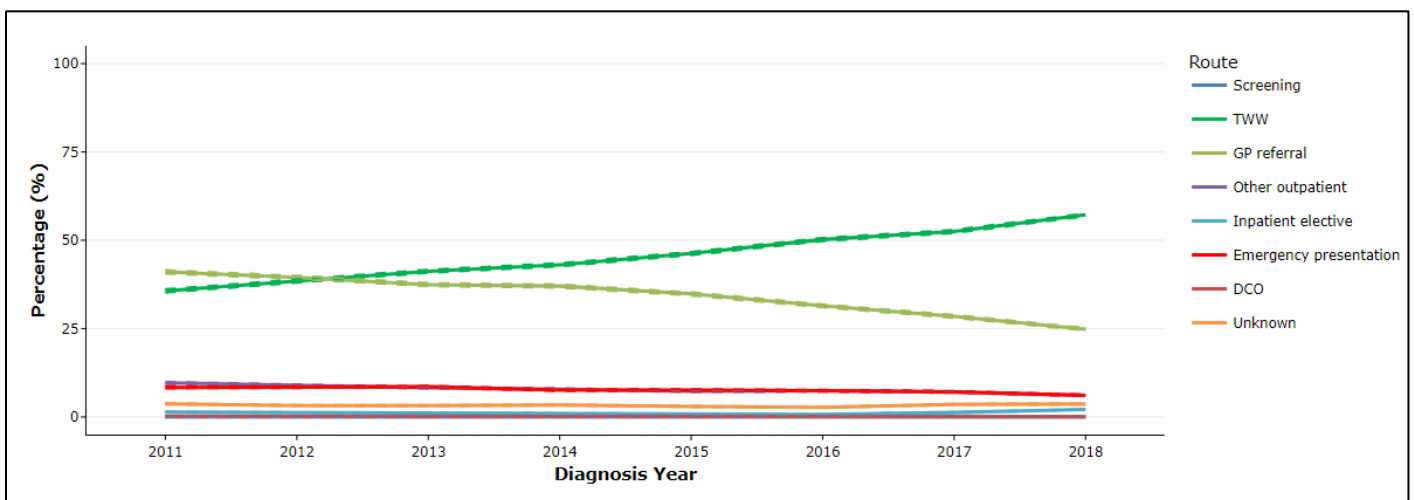
## Routes to diagnosis

The Covid-19 pandemic affected prostate cancer diagnoses more than other tumour types. As a result, 14,000 fewer prostate cancer cases were detected in the first two years of the pandemic than expected. This is in part due to fewer patients presenting to their GP with symptoms warranting an urgent suspected cancer referral<sup>1,2</sup>.

Figure 10 displays the routes to diagnosis for prostate cancers in England between 2011 to 2018. In 2018, well over half (57.2%) of all prostate cancers diagnosed in England came from urgent two-week wait referrals, statistically significantly increasing from 35.7% in 2011. The Primary route of diagnosis in 2011 for prostate cancers was GP referrals at 41.1%, but this has statistically significantly decreased to just under 1 in 4 (24.8%) of prostate cancer diagnoses in 2018. To summarise, prostate cancers in England, 2018 – were diagnosed from these routes:

- Two-week wait referral (urgent GP referrals with a suspicion of cancer): 57.2%
- GP referral (routine and urgent referrals with a suspicion of cancer, where the patient was not referred under the TWW referral route): 24.8%
- Emergency presentation (an emergency route via A&E, emergency GP referral or emergency admission): 6.1%
- Other outpatient (elective route with an outpatient appointment): 6.1%
- Unknown: 3.7%
- Inpatient elective (no earlier information found prior to admission from a waiting list, booked or planned): 2.2%

**Figure 10: Prostate cancers routes to diagnosis between 2011 to 2018 for England.**

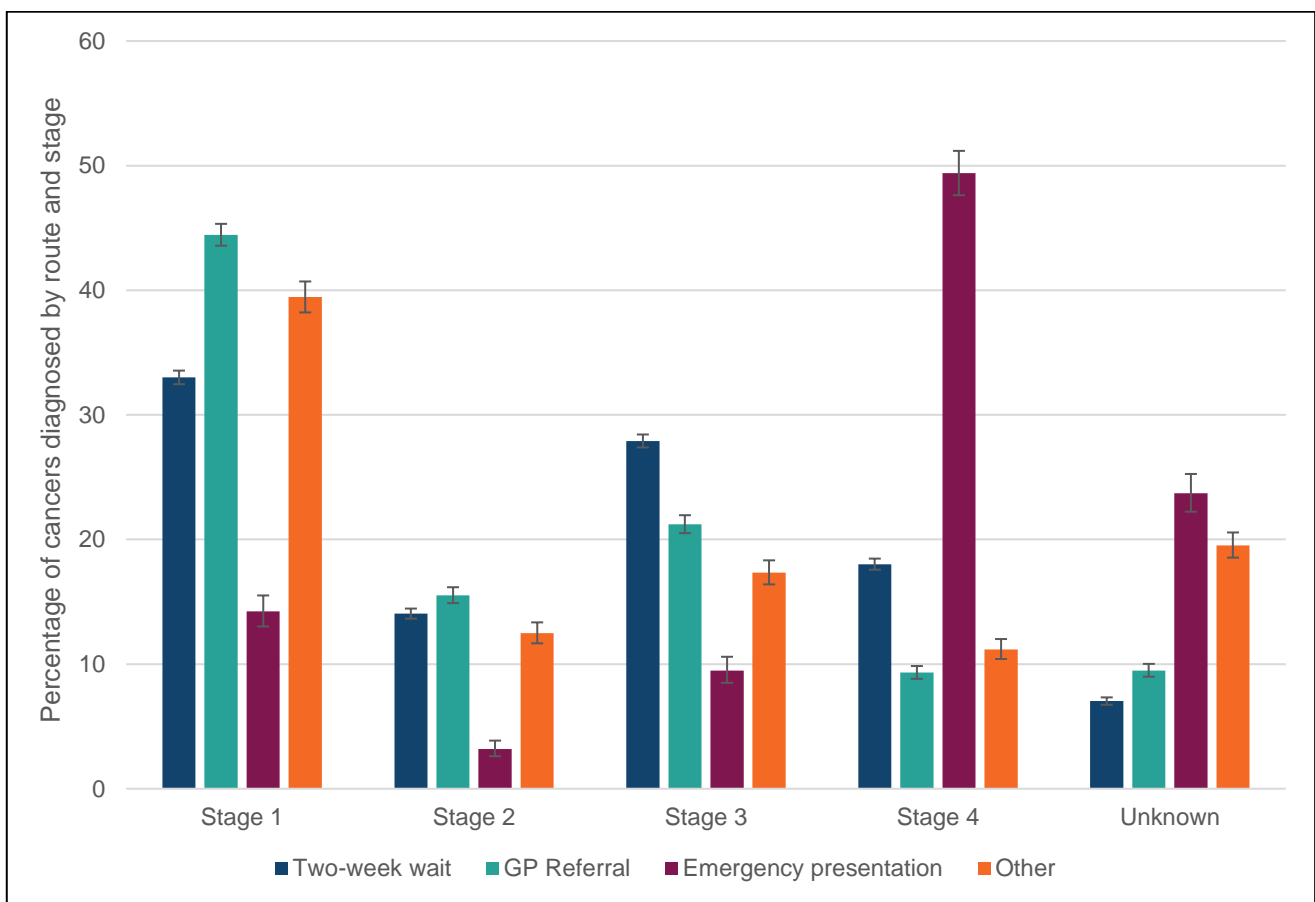


Source: [CancerData](#)

## Stage of diagnosis

Figure 11 compares the percentage of prostate cancers diagnosed at stages 1 to 4 in England, 2018 by the route of diagnosis. Almost 1 in 2 (49.4%) of emergency presentations for prostate cancers were diagnosed at stage 4. Earlier diagnoses for prostate cancers came through GP referrals – with 59.5% of GP referrals for diagnosed prostate cancers at stage 1 or 2. Similarly, two-week waits referrals for prostate cancer accounted for 47.0% being diagnosed early at either stage 1 or 2.

Figure 11. Stage of diagnosis for the routes to diagnosis for prostate cancers in England, 2018.



Source: [CancerData](#)

## Prostate cancer screening

There is no single test for prostate cancer, and all tests used to diagnose the condition have benefits and risks. The most common tests for prostate cancer are:

- Physical examination of the prostate
- Blood tests
- MRI scan
- Biopsy

The blood test for prostate cancer is a prostate-specific antigen (PSA) test. This test measures the level of PSA which can detect early prostate cancer. Research has shown that around 3 in 4 men with a raised PSA level will not have cancer. Around 1 in 7 men with prostate cancer would have a normal PSA result. PSA levels can also be raised by other non-cancerous conditions, and a raised PSA level cannot tell a specialist whether an individual has life-threatening prostate cancer or not. It is also unclear how PSA screening impacts deaths due to prostate cancer<sup>7-9</sup>.

Due to this inaccuracy in diagnoses, the UK National Screening Committee does not recommend the PSA test for prostate cancer screening. This recommendation has been in place since the last UK NSC review of the condition in November 2020. The next review is due between 2023 to 2024<sup>10</sup>.

The Reimagine study published in August 2023 found MRI screening may have value independent of the PSA test for screening prostate cancers. MRI scans proved to be more accurate at diagnosing prostate cancers than blood tests, but a larger study would be required to assess their effectiveness<sup>11</sup>.

More information on prostate cancer screening please follow the link provided: [UK National Screening Committee recommendations](#).

## References

1. CancerData - Routes to Diagnosis 2006-2018. Accessed June 2, 2023. <https://www.cancerdata.nhs.uk/routestodiagnosis>
2. CancerData. Accessed June 21, 2023. <https://www.cancerdata.nhs.uk/covid-19/rcrd>
3. Prostate cancer - NHS. Accessed June 6, 2023. <https://www.nhs.uk/conditions/prostate-cancer/>
4. Risk and causes of prostate cancer | Cancer Research UK. Accessed June 6, 2023. <https://www.cancerresearchuk.org/about-cancer/prostate-cancer/risks-causes>
5. Cancer survival: Index for sub-Integrated Care Boards, 2005 to 2020 - NDRS. Accessed April 20, 2023. <https://digital.nhs.uk/data-and-information/publications/statistical/cancer-survival-in-england/index-for-sub-integrated-care-boards-2005-to-2020#resources>
6. Cancer Survival in England, cancers diagnosed 2015 to 2019, followed up to 2020 - NDRS. Accessed June 16, 2023. <https://digital.nhs.uk/data-and-information/publications/statistical/cancer-survival-in-england/cancers-diagnosed-2015-to-2019-followed-up-to-2020>
7. Martin RM, Donovan JL, Turner EL, et al. Effect of a low-intensity PSA-based screening intervention on prostate cancer mortality: The CAP randomized clinical trial. *JAMA - Journal of the American Medical Association*. 2018;319(9):883-895. doi:10.1001/JAMA.2018.0154
8. Gottlieb S. Study shows poor reliability of prostate cancer test. *BMJ : British Medical Journal*. 2003;327(7409):249.
9. Prostate cancer - Should I have a PSA test? - NHS. Accessed June 6, 2023. <https://www.nhs.uk/conditions/prostate-cancer/should-i-have-psa-test/>
10. Prostate cancer - UK National Screening Committee (UK NSC) - GOV.UK. Accessed June 27, 2023. <https://view-health-screening-recommendations.service.gov.uk/prostate-cancer/>
11. Moore CM, Frangou E, McCartan N, et al. Prevalence of MRI lesions in men responding to a GP-led invitation for a prostate health check: a prospective cohort study. *BMJ Oncology*. 2023;2(1):e000057. doi:10.1136/BMJONC-2023-000057