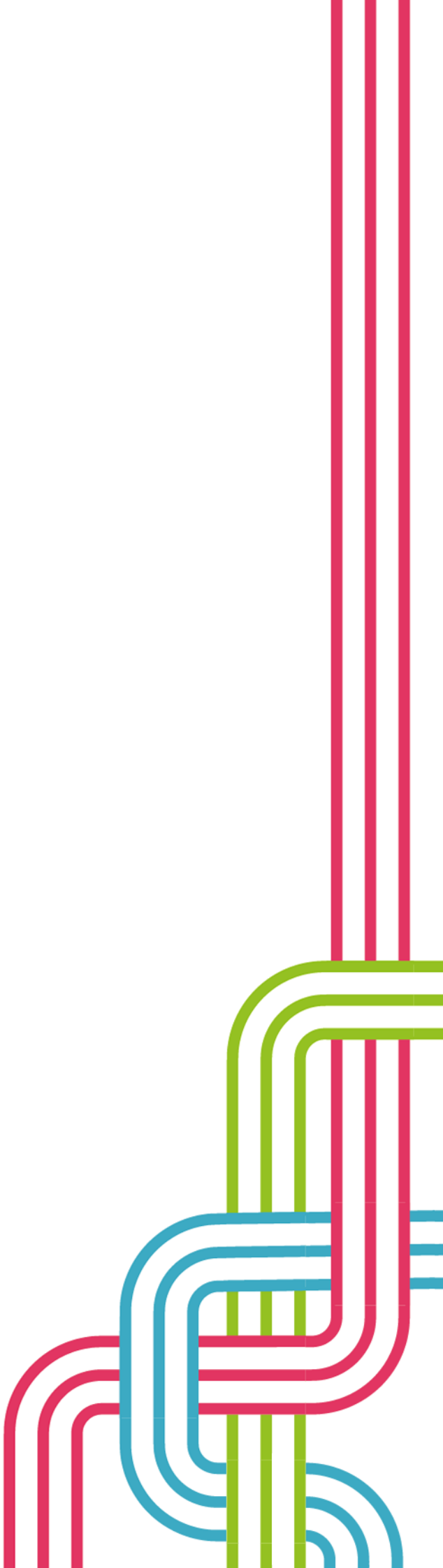
Suffolk County Council

Public Health & Communities

Colorectal Cancer

Suffolk

2023



Contents

Key points

1. Colorectal cancer incidence is higher for men than women, with men accounting for 55.8% of all colorectal cancer incidences for Suffolk and North East Essex (SNEE) ICB in 2020.

2. Colorectal cancer incidence for SNEE ICB has statistically significantly decreased by 23.1% from 2011 to 2020. This is likely due to fewer presentations and urgent referrals during the pandemic.

3. Colorectal cancer incidence is highest among those aged 60 and over, with over 8 in 10 (85.2%) incidences in SNEE ICB in 2020 occurring in this age group

4. Nationally, bowel cancer screening has led to almost 6 in 10 (59.9%) of colorectal cancers being diagnosed at stage 1 or 2 in 2018.

5. Bowel cancer screening rates in Suffolk are statistically significantly higher than the England average. However, 1 in 4 people eligible for bowel cancer screening in Suffolk do not participate in screening. Addressing this gap may improve earlier diagnosis and prevent colorectal cancers being diagnosed at stages where survival outcomes are worse.

6. Colorectal cancer survival has better outcomes than other cancer types. For SNEE ICB in 2020, over 4 in 5 individuals survived their cancer for at least 1 year after diagnosis.

7. The bowel cancer screening kit is currently sent to individuals aged between 60 and 74 years of age. NHS England is gradually expanding this programme to invite people aged between 50 and 59 years of age. The expansion of this programme should lead to an increase in the percentage of bowel cancers diagnosed at earlier stages.

An introduction to colorectal cancer

Colorectal cancer, also known as bowel cancer, refers to a cancer located in the large bowel, including the colon and rectum. The large bowel is part of the digestive system and helps absorb water from food and remove food waste from the body[1]. The terms colorectal cancer and bowel cancer will be used interchangeably within this chapter.

Colorectal cancer starts in the lining of the large bowel (colon) or back passage (rectum). Where the cancer is located affects treatment options. More information on the differences between colon and rectal cancer can be seen following the link provided: Bowel Cancer: Cancer Research UK.

Colorectal cancer is the 4th most common type of cancer in the UK, with around 42,900 people diagnosed each year[2].

Colorectal cancer can be tested for with a colonoscopy, where a camera is used to look inside the bowel. Additionally, a sample of the bowel lining may be taken for testing – called a biopsy. The Faecal Immunochemical Test (FIT) looks for blood in a sample of poo – tiny traces of blood you may not be able to see could be a sign of cancer[3]. Bowel cancer screening kits are currently sent to people in England aged between 60 and 74. The NHS is gradually expanding this programme to invite people aged between 50 and 59[4].

Treatment for colorectal cancer depends on the size, whether it has spread to other parts of the body (known as metastasis) and the person's age and general health. Treatment options include surgery, chemotherapy, radiotherapy, and targeted medicines.

The risk of developing bowel cancer depends on factors such as age, family history, genetic conditions, and diet and lifestyle factors[2]. It is estimated that:

- 13 out of 100 bowel cancer cases in the UK are linked to eating too much red and processed meat.
- 30 out of 100 bowel cancer cases are linked to too little fibre in an individuals' diet.
- 11 out of 100 bowel cancer cases are linked to obesity.
- 7 out of 100 bowel cancer cases are linked to smoking tobacco[5].

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

- Colorectal cancer incidence
- Colorectal cancer survival
- Colorectal cancer mortality
- Routes to diagnosis
- Stage of diagnosis
- Colorectal cancer screening

Summary of colorectal cancer statistics

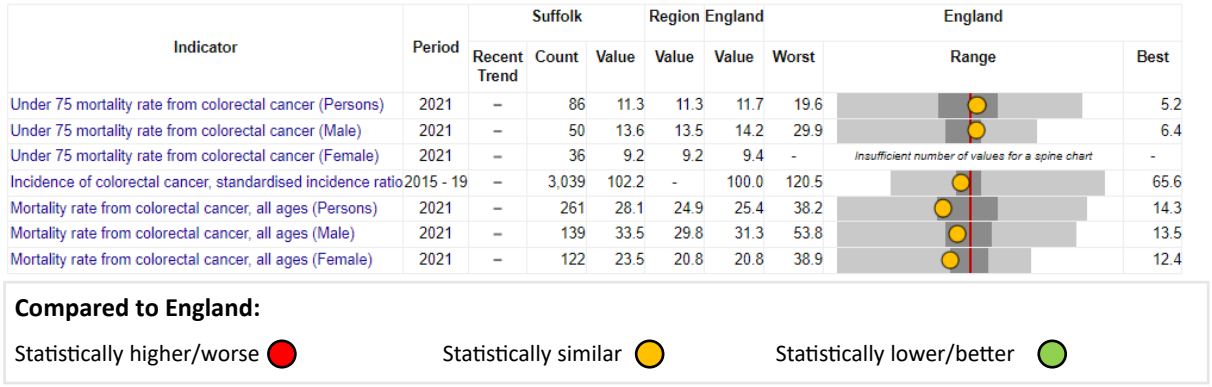
Figure 1 shows Suffolk's colorectal cancer profile compared to the England and East of England estimates. Results show that:

- In Suffolk between 2015-19, there were 2,039 incidences of colorectal cancer, statistically similar to the England average.
- Under 75 mortality from colorectal cancer in Suffolk is statistically similar to the England average. In 2021, 86 Suffolk residents under the age of 75 died from colorectal cancer, with

261 Suffolk residents total dying from the disease. This indicates that over 2 in 3 (67.0%) Suffolk deaths from bowel cancer in 2021 were for individuals aged 75 and over.

- Males and females in Suffolk have a statistically similar mortality rate from colorectal cancer in 2021 (males 33.5 per 100,000 - 139 deaths, females 23.5 per 100,000 - 122 deaths).

Figure 1. Suffolk colorectal cancer profile from Fingertips, compared to the England and East of England average.



Indicator	Period	Suffolk			Region England	England		England	
		Recent Trend	Count	Value	Value	Value	Worst	Range	Best
Under 75 mortality rate from colorectal cancer (Persons)	2021	–	86	11.3	11.3	11.7	19.6		5.2
Under 75 mortality rate from colorectal cancer (Male)	2021	–	50	13.6	13.5	14.2	29.9		6.4
Under 75 mortality rate from colorectal cancer (Female)	2021	–	36	9.2	9.2	9.4	-	Insufficient number of values for a spine chart	-
Incidence of colorectal cancer, standardised incidence ratio	2015 - 19	–	3,039	102.2	-	100.0	120.5		65.6
Mortality rate from colorectal cancer, all ages (Persons)	2021	–	261	28.1	24.9	25.4	38.2		14.3
Mortality rate from colorectal cancer, all ages (Male)	2021	–	139	33.5	29.8	31.3	53.8		13.5
Mortality rate from colorectal cancer, all ages (Female)	2021	–	122	23.5	20.8	20.8	38.9		12.4

Source: Fingertips Public Health Data

Table 1 shows the available colorectal cancer indicators for Suffolk, England, and Suffolk's districts, compared against the England average. Due to insufficient data, some local authority statistics for under 75 cancer mortality were unable to be calculated. Results show that:

- Each colorectal indicator for Suffolk is statistically similar to the England average.
- Babergh has a statistically significantly higher mortality rate from colorectal cancer for all persons and for females, compared to the England average.
- West Suffolk has statistically significantly lower mortality rates from colorectal cancer for all persons, and for males than the England average in 2021.

Table 1. Indicators for Suffolk and local authorities from OHID Fingertips for colorectal cancer, compared to the England average.

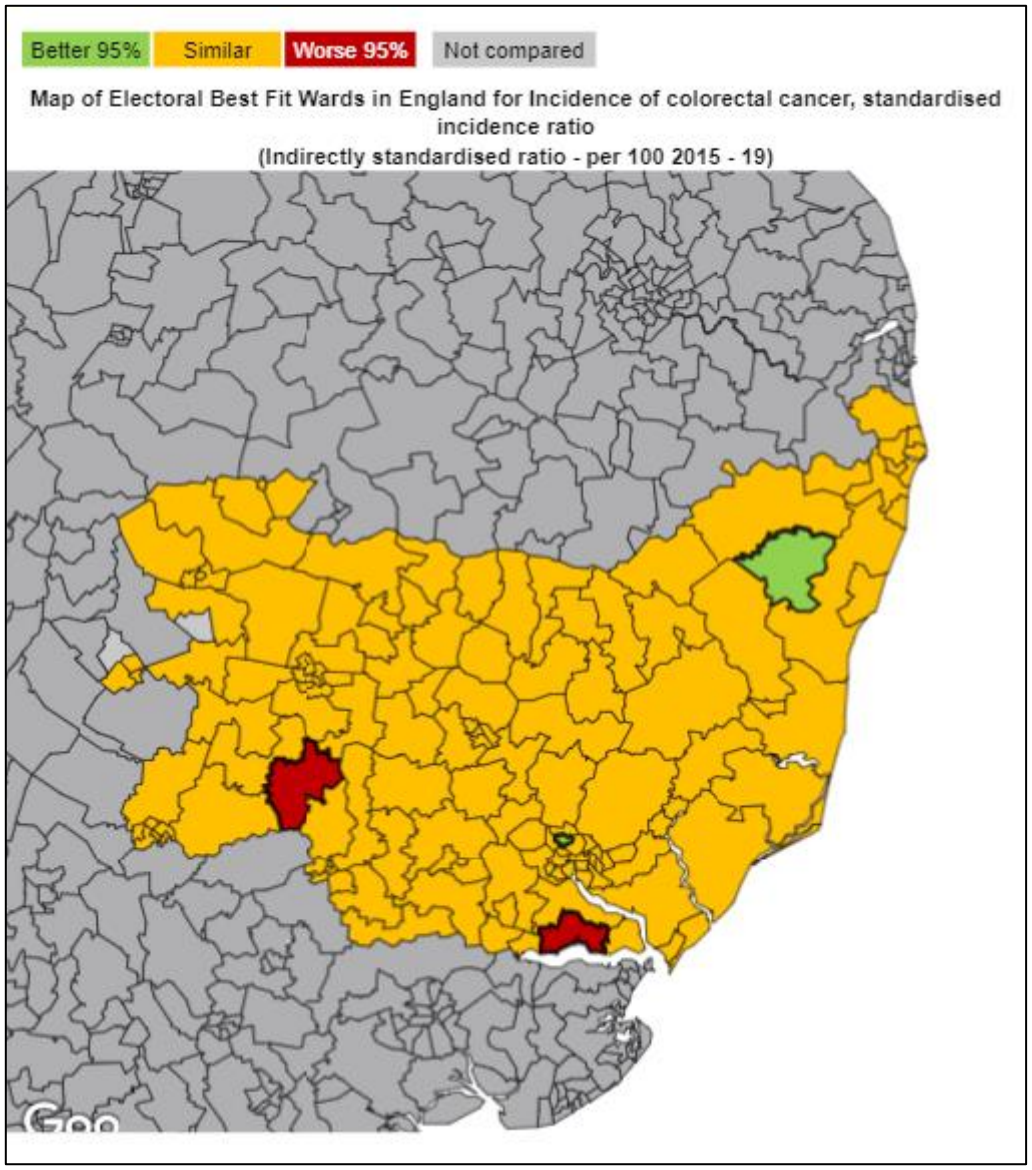
Indicator	Period	England	Suffolk	Babergh	East Suffolk	Ipswich	Mid Suffolk	West Suffolk
Under 75 mortality rate from colorectal cancer (Persons)	2021	11.7	11.3	11.1	13.4	15.1	8.7	6.9
Under 75 mortality rate from colorectal cancer (Male)	2021	14.2	13.6	*	16.5	19.5	*	*
Under 75 mortality rate from colorectal cancer (Female)	2021	9.4	9.2	*	10.4	*	*	*
Incidence of colorectal cancer, standardised incidence ratio	2015-19	100.0	102.2	106.9	103.6	101.3	99.4	99.4
Mortality rate from colorectal cancer, all ages (Persons)	2021	25.4	28.1	40.1	28.5	29.3	28.9	18.3
Mortality rate from colorectal cancer, all ages (Male)	2021	31.3	33.5	45.7	35.3	353	35.0	19.4
Mortality rate from colorectal cancer, all ages (Female)	2021	20.8	23.5	33.4	22.8	24.9	24.1	17.9

Source: Fingertips Public Health Data

Figure 2 shows the variation in colorectal 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 share a statistically similar colorectal cancer incidence to the England average. Areas of the county where colorectal cancer incidence was statistically significantly above the England average include Chadacre (West Suffolk) and Stour (Babergh). Areas of the county where colorectal cancer incidence was statistically significantly lower than the England average include Castle Hill (Ipswich) and Halesworth & Blything (East Suffolk).

Figure 2: Map of colorectal cancer incidence in Suffolk at ward level, using a standardised incidence ratio between 2015-19, compared to England for statistical significance.



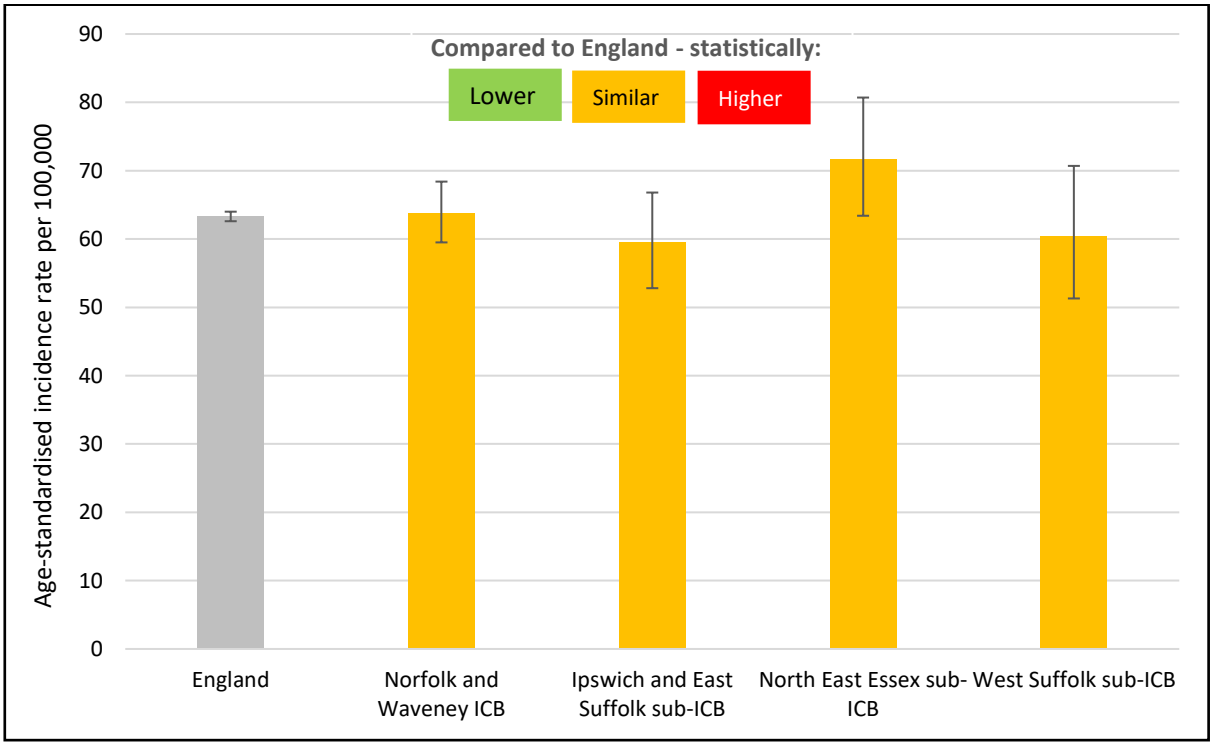
Source: Fingertips Public Health Data

Colorectal cancer incidence

Colorectal cancer incidence, all persons

Figure 3 summarises age-standardised colorectal cancer incidence rates per 100,000 in 2020, for ICB sub-locations covering Suffolk's ICB areas (North East Essex is included as part of SNEE ICB), compared to England. Results shows that, in 2020, the England age-standardised cancer incidence rate for malignant neoplasm of colon and rectum was 63.3 per 100,000 totalling 34,405 cases. Compared to the England colorectal cancer incidence rate in 2020, all sub-ICB locations have a statistically similar colorectal cancer incidence rate. Suffolk and North East Essex ICB (SNEE) had a rate of 63.8 per 100,000 (721 cases). Norfolk and Waveney ICB had a rate of 63.8 per 100,000.

Figure 3. Colorectal age-standardised cancer incidence rates per 100,000 for all persons, all ages for Suffolk sub-ICB locations, 2020.



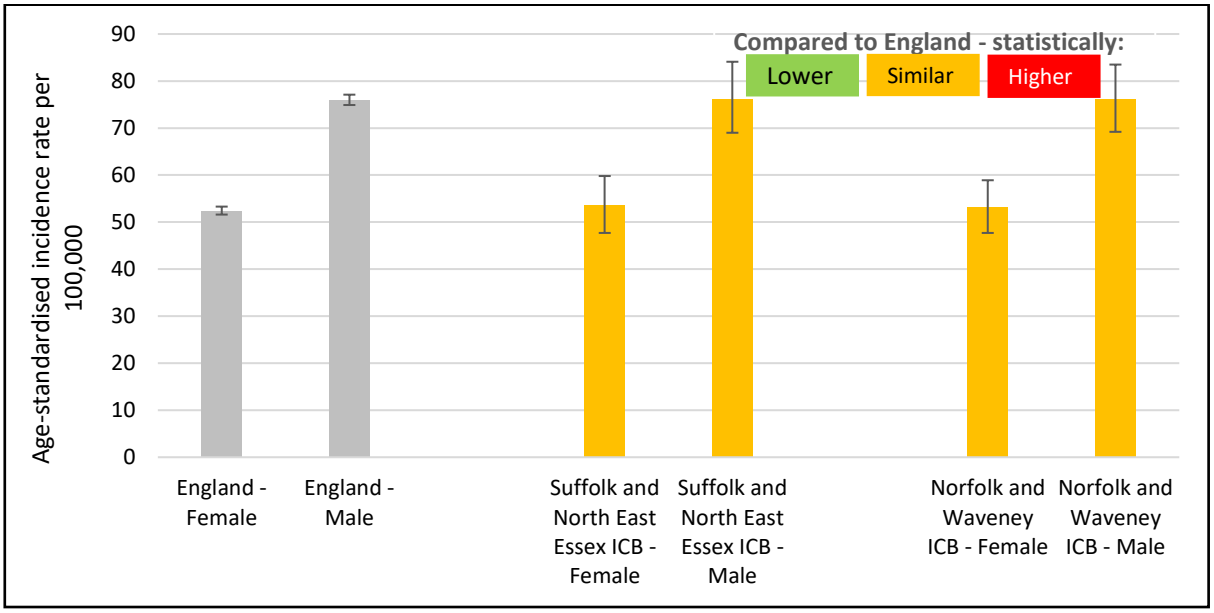
Source: CancerData

Colorectal cancer incidence variation by gender

Figure 4 shows the 2020 colorectal age-standardised cancer incidence rates for males and females for SNEE and Norfolk and Waveney ICB, compared to England. Results show that both the colorectal cancer incidence rates in SNEE and Norfolk and Waveney ICB, for males and females, was statistically similar to the respective England estimate. Additionally, males have statistically significantly higher colorectal cancer incidence than females both in England, and for SNEE and Norfolk and Waveney ICBs. A review in 2018 of UK colorectal data found minimal sex differences from routes to diagnosis to survival. The review suggested higher incidence and mortality in men appears to result from external and/or internal factors pre-diagnosis leading to higher incidence rates in males[6].

Males in SNEE ICB had an age-standardised colorectal cancer incidence rate of 76.2 per 100,000 (402 cases), accounting for 55.8% of all colorectal cases within the ICB. The female rate in SNEE was 53.5 per 100,000 (319 cases), accounting for 45.2% of all cases in the ICB. The England rate for males was 76.0 per 100,000 and was 52.4 per 100,000 for females.

Figure 4. Colorectal age-standardised cancer incidence rates per 100,000 for males and females, for Suffolk and North East Essex ICB and Norfolk and Waveney ICB, compared to England, 2020.

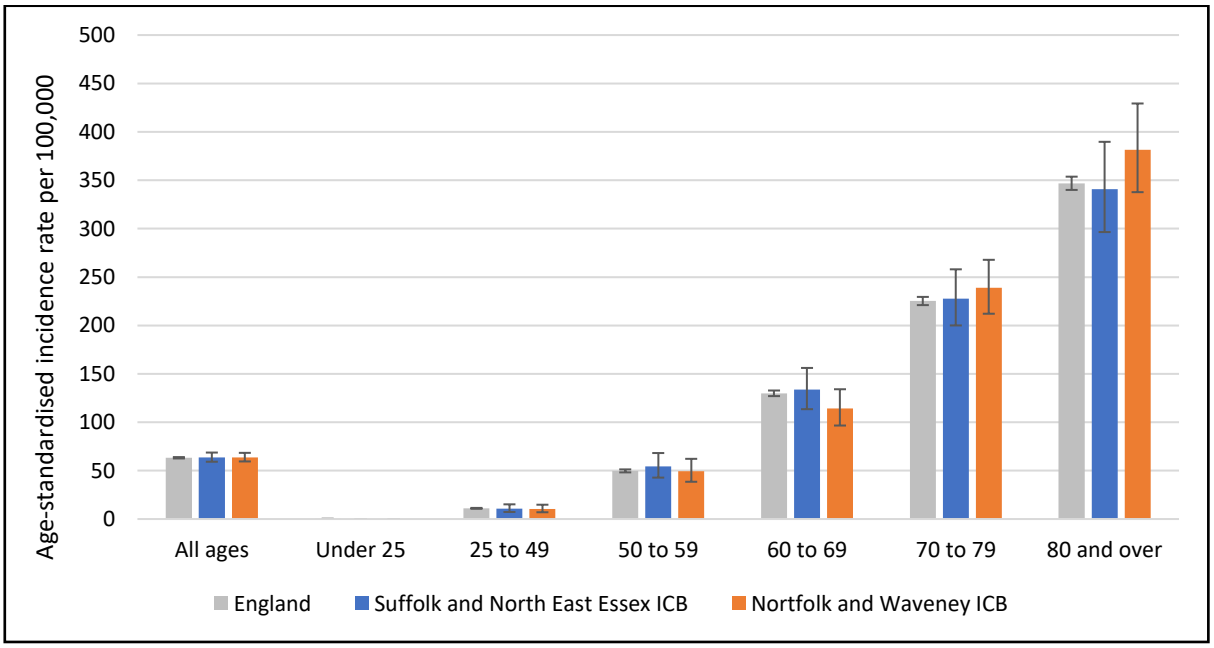


Source: CancerData

Colorectal cancer incidence variation by age

Figure 5 shows the 2020 colorectal cancer incidence rates for SNEE ICB, Norfolk and Waveney ICB, and England, for all ages and selected age groupings, all persons. Results show that incidence rates for colorectal cancer increase with age. Nationally, the highest incidence rates for colorectal cancer were in the 80 and over age group, at 346.8 per 100,000. For SNEE ICB, the 80 and over incidence rate of 340.8 per 100,000 is statistically significantly higher when compared to all other age groups, and statistically similar to the England average. Additionally, in 2020, over 8 in 10 (85.2%) of all colorectal cancer incidence in SNEE ICB occurred in individuals aged 60 and over.

Figure 5. Colorectal 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, all persons, 2020.



Source: CancerData

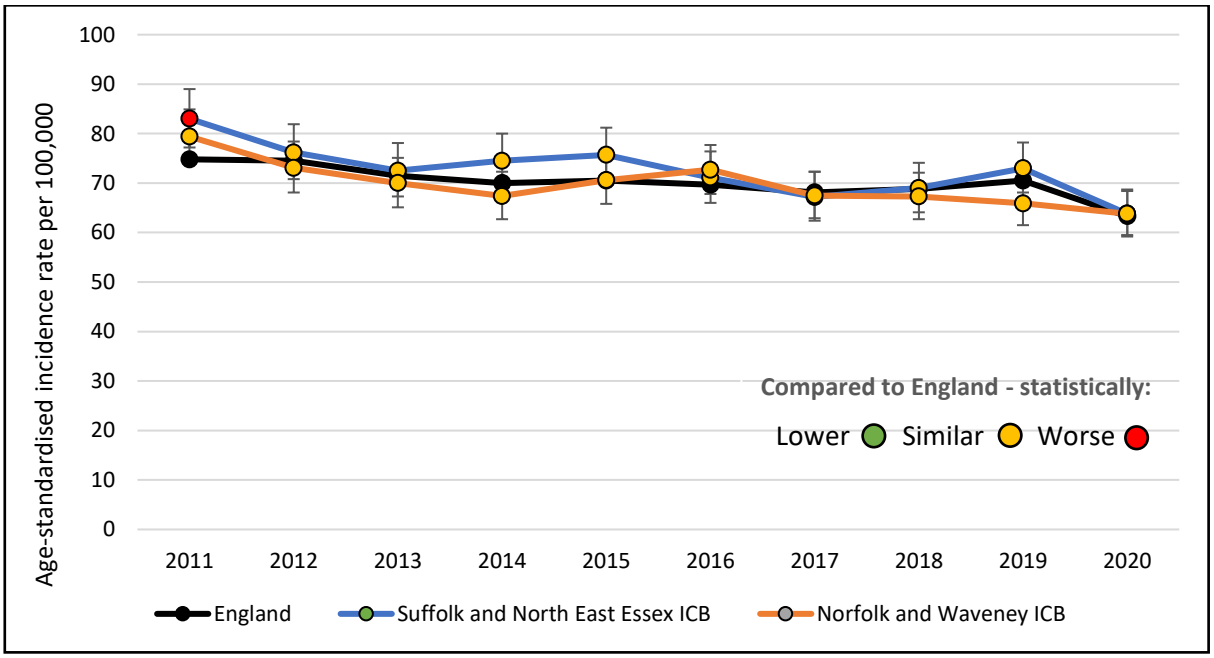
Colorectal cancer incidence trend

Figure 6 shows the colorectal age-standardised cancer incidence rates per 100,000 for SNEE ICB, Norfolk and Waveney ICB, all persons, all ages, between 2011-2020 compared to England. For England, SNEE ICB, and Norfolk and Waveney ICB, colorectal cancer incidence rates have statistically significantly decreased between 2011-2020.

- The rate for England has statistically significantly decreased by 14.7%, from 74.8 per 100,000 in 2011 to 63.3 per 100,000 in 2020.
- The rate for SNEE ICB has statistically significantly decreased by 23.1%, from 83.0 per 100,000 in 2011 to 63.8 per 100,000 in 2020.
- The rate for Norfolk and Waveney ICB has statistically decreased by 19.6%, from 79.4 per 100,000 in 2011 to 63.8 per 100,000 in 2020.

Additionally, since 2012, each year the colorectal cancer incidence rates for SNEE ICB and Norfolk and Waveney ICBs have been statistically similar to the colorectal cancer incidence rate for England.

Figure 6. Colorectal age-standardised cancer incidence rates per 100,000 for Suffolk and North East Essex ICB, Norfolk and Waveney ICB, all persons, all ages, between 2011-2020 compared to England.



Source: CancerData

Colorectal cancer survival

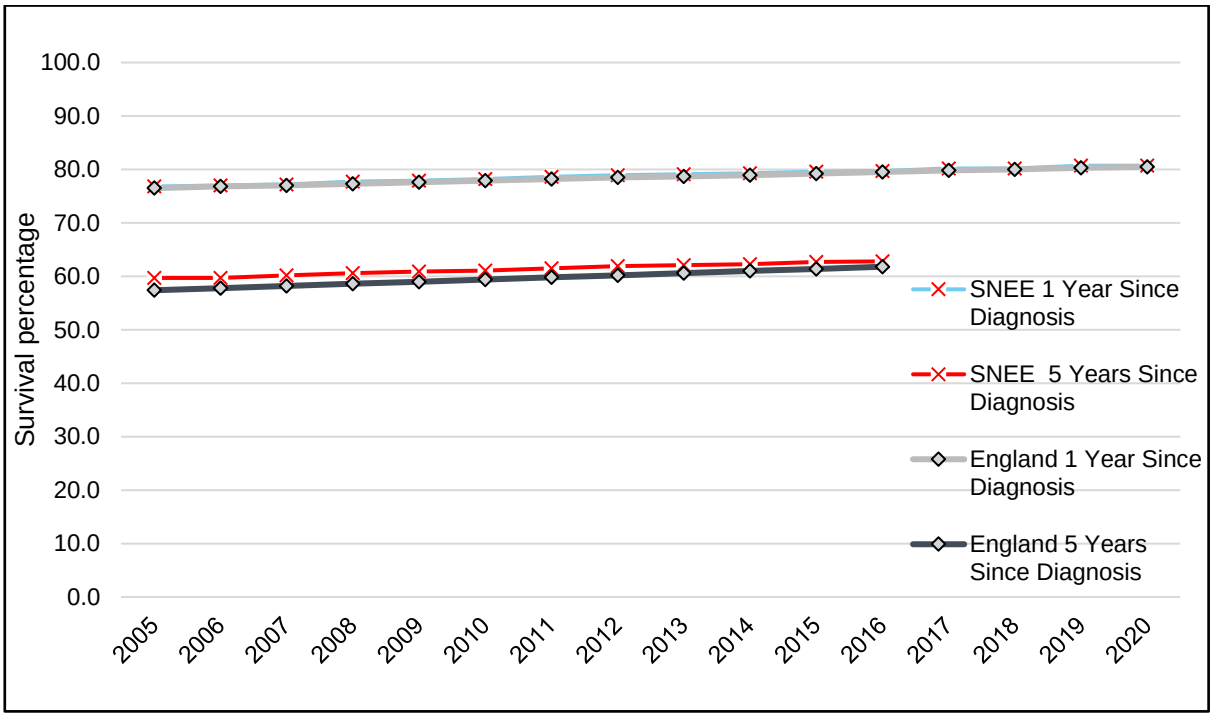
Colorectal cancer survival data is available at a national level and for ICB locations. The dataset provides information on the percentage of people who had received a colorectal cancer diagnosis, who were still alive 1 year, or 5 years after their diagnosis. A caveat to this dataset is that confidence intervals are not reported; therefore, we are unable to calculate statistical significance– however, the dataset does allow us to acknowledge trends in colorectal cancer survival.

Figure 6 shows the colorectal cancer 1-year and 5-year survival net survival percentages by calendar year of diagnosis, for all adults (aged 15 to 99) for Suffolk and North East Essex ICB and England. For England in 2020, over 8 in 10 (80.5%) individuals with a colorectal cancer diagnosis survived their cancer for at least one year. One-year survival has increased since 2005 for colorectal cancer, where just over 3 in 4 (76.5%) of individuals in England survived their colorectal

cancer for at least a year. SNEE 1-year colorectal cancer survival has followed the same pattern, increasing from 76.8% in 2005 to 80.7% in 2020.

5-year survival for England in 2016 for colorectal cancers was 61.8%, increasing from 57.4% in 2005. SNEE ICB mirrors the same trend, with 5-year colorectal cancer survival at 62.8% in 2016 compared to 59.7% in 2005.

Figure 7. Colorectal cancer 1-year and 5-year survival net survival percentages by calendar year of diagnosis, for all adults (aged 15 to 99) for Suffolk and North East Essex ICB and England.



Source: [Cancer survival: Index for sub-Integrated Care Boards, 2005 to 2020]

Colorectal cancer mortality

Colorectal cancer mortality, all persons

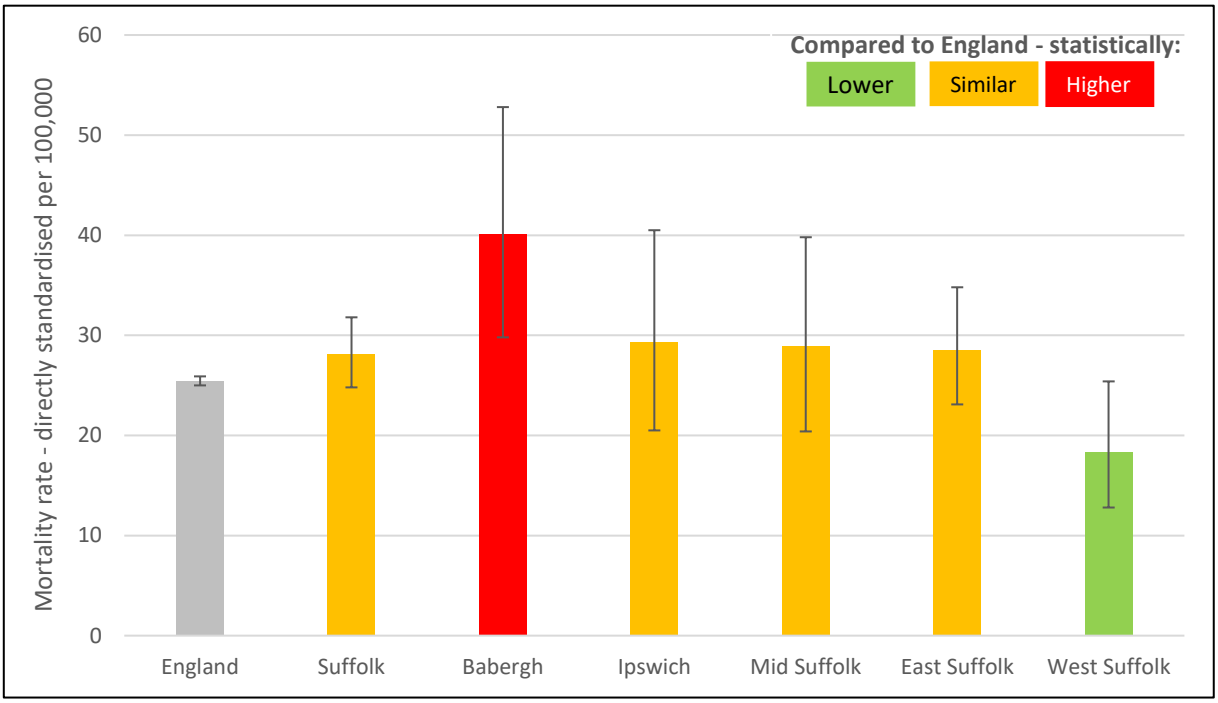
Fingertips data for colorectal cancer mortality covers 2021 and provides a breakdown by Suffolk districts. CancerData provides colorectal cancer mortality data for 2020 at sub-ICB level. Both are presented below.

In Suffolk, 2021 – 261 individuals died from colorectal cancer. Those 261 deaths were distributed around the county accordingly:

- Ipswich: 36 deaths.
- East Suffolk: 100 deaths.
- West Suffolk: 36 deaths.
- Babergh: 51 deaths.
- Mid Suffolk: 38 deaths.

Figure 8 shows the directly standardised mortality rate from colorectal cancer (all ages, all persons) per 100,000 in 2021 for Suffolk and districts, compared to the England average. Suffolk has a statistically similar colorectal cancer mortality rate to the England average, at 28.1 per 100,000. There is significant variation to the England average for colorectal cancer mortality rates across the Suffolk districts. West Suffolk (18.3 per 100,000) has a statistically significantly lower colorectal cancer mortality rate than the England average in 2021. Babergh (40.1 per 100,000) has a statistically significantly higher colorectal cancer mortality rate than the England average in 2021. All other Suffolk districts (Ipswich, Mid Suffolk, East Suffolk) have statistically similar colorectal cancer mortality rates to the England average (25.4 per 100,000) in 2021.

Figure 8. Lung cancer mortality rate (directly standardised) per 100,000 for Suffolk and districts, compared to England in 2021.



Source: [OHID Fingertips]

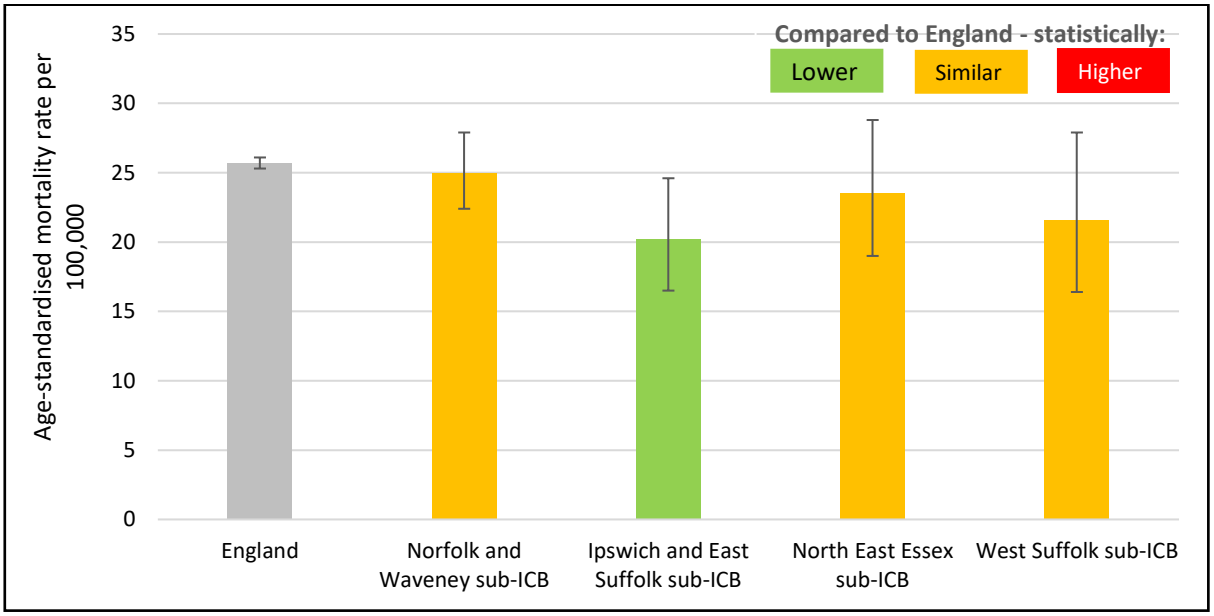
Figure 9 shows the colorectal cancer age-standardised mortality rates for all persons, all ages, for Suffolk sub-ICB locations, in 2020, compared to England. The England age-standardised mortality rate for colorectal cancers was 25.7 per 100,000 – accounting for 14,033 deaths nationally.

For SNEE ICB in 2020, the colorectal age-standardised mortality rate was 21.7 per 100,000 (254 deaths) – statistically significantly lower than the England average. The Norfolk and Waveney ICB rate was 25.0 per 100,000 – statistically similar to the England average.

For the sub-ICB areas covering Suffolk, Ipswich and East Suffolk sub-ICB was the only area to have a statistically significantly lower colorectal mortality rate than the England average at 20.2 per 100,000. The 254 colorectal cancer deaths in 2020 were distributed across SNEE ICB accordingly:

- Ipswich and East Suffolk sub-ICB – 101 deaths, rate of 20.2 per 100,000. Statistically significantly lower than England.
- North East Essex sub-ICB – 94 deaths, rate of 23.5 per 100,000. Statistically similar to England.
- West Suffolk sub-ICB – 59 deaths, rate of 21.6 per 100,000. Statistically similar to England.

Figure 9. Colorectal cancer age-standardised mortality rates per 100,000 for all persons, all ages, for Suffolk sub-ICB locations, 2020.



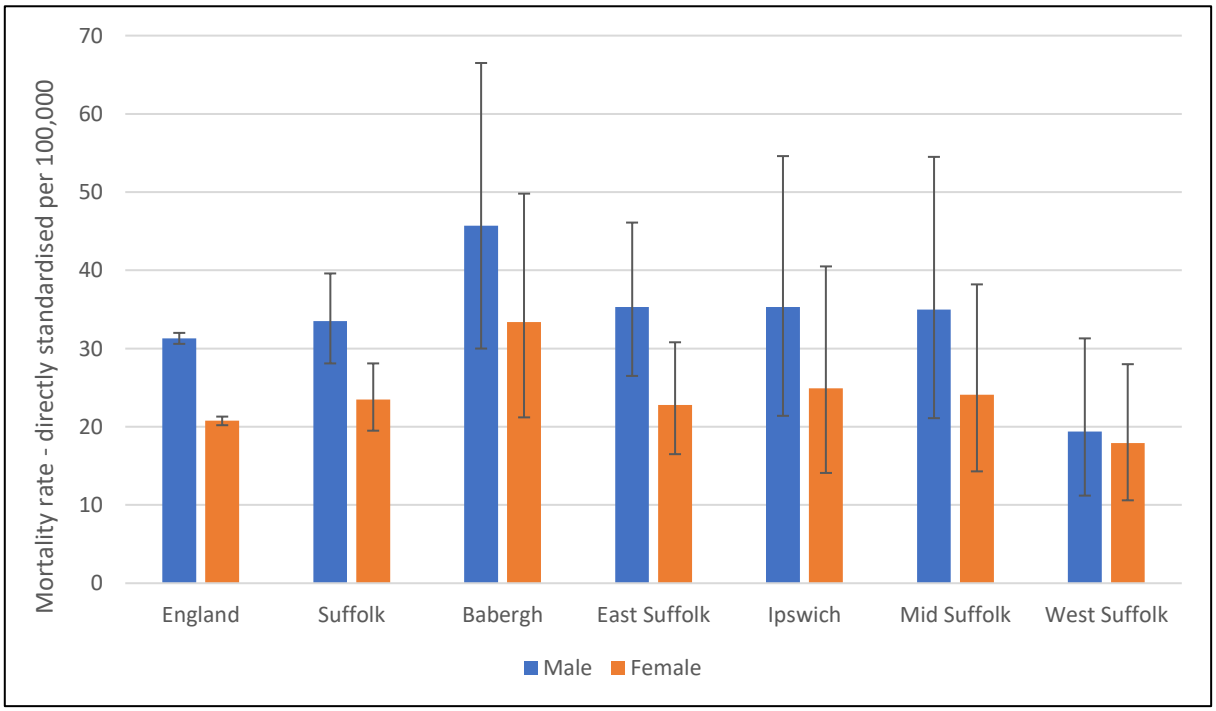
Source: CancerData

Colorectal cancer mortality variation by gender

Fingertips again provides colorectal cancer mortality rates per 100,000 for England, Suffolk and districts in 2021 for all persons, males and females. CancerData also provides this data for males and females, but for health geography boundaries, and for 2020. Both are presented below.

Of the 261 colorectal cancer deaths in Suffolk in 2021, over half (139 deaths/53.3%) were for males, with 122 (46.7%) for females. Figure 10 shows that for England and Suffolk, males had a statistically significantly higher mortality rate from colorectal cancer in 2021 than females. At Suffolk district level, males and females had statistically similar lung cancer mortality rates (due to small numbers leading to large confidence intervals.

Figure 10. Colorectal cancer mortality rate (directly standardised) per 100,000 for males and females in Suffolk and districts, 2021.



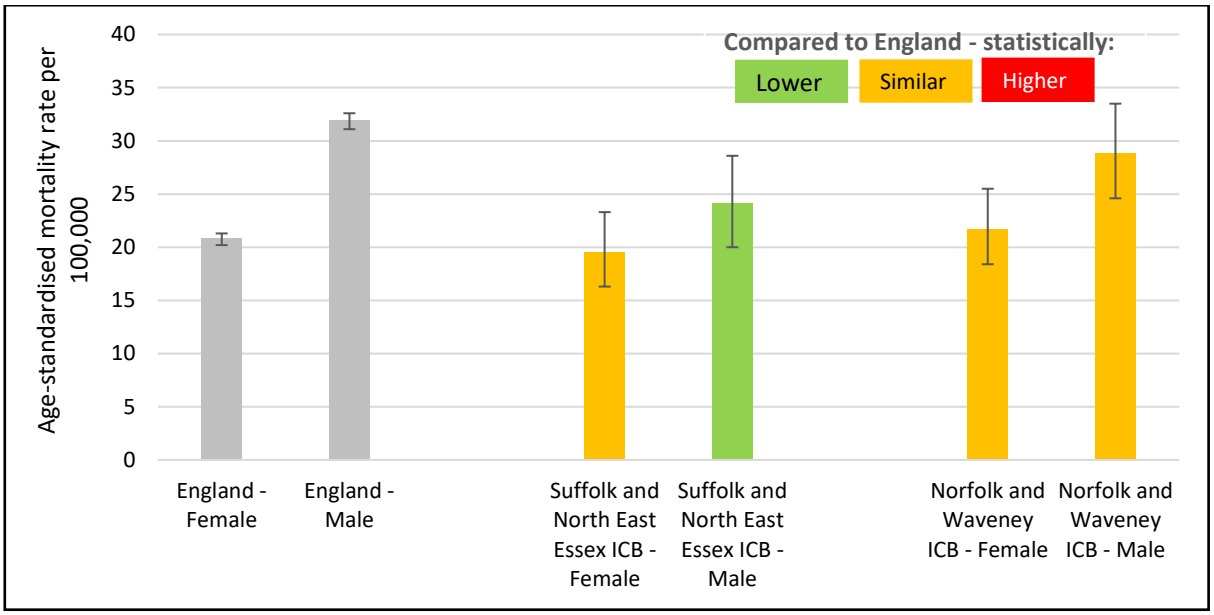
Source: OHID Fingertips

Figure 11 shows the 2020 Colorectal age-standardised cancer mortality rates for males and females, for SNEE ICB and Norfolk and Waveney ICB, compared to England. Females in SNEE ICB and Norfolk and Waveney ICB both had statistically similar colorectal cancer mortality rates to the England average for females in 2020.

Males in Norfolk and Waveney ICB had a statistically similar mortality rate to the England male mortality rate in 2020. However, males in SNEE ICB had a statistically significant lower mortality rate of 24.1 per 100,000, which was also statistically similar to the female mortality rate (19.5 per 100,000) for SNEE ICB.

Both males and females had the same number of deaths in SNEE ICB in 2020 (127 people). Nationally, males had a higher percentage of colorectal cancer deaths at 55.0% (7,722/14,033 people).

Figure 11. Colorectal age-standardised cancer mortality rates per 100,000 for males and females, for SNEE ICB and Norfolk and Waveney ICB, compared to England, 2020.

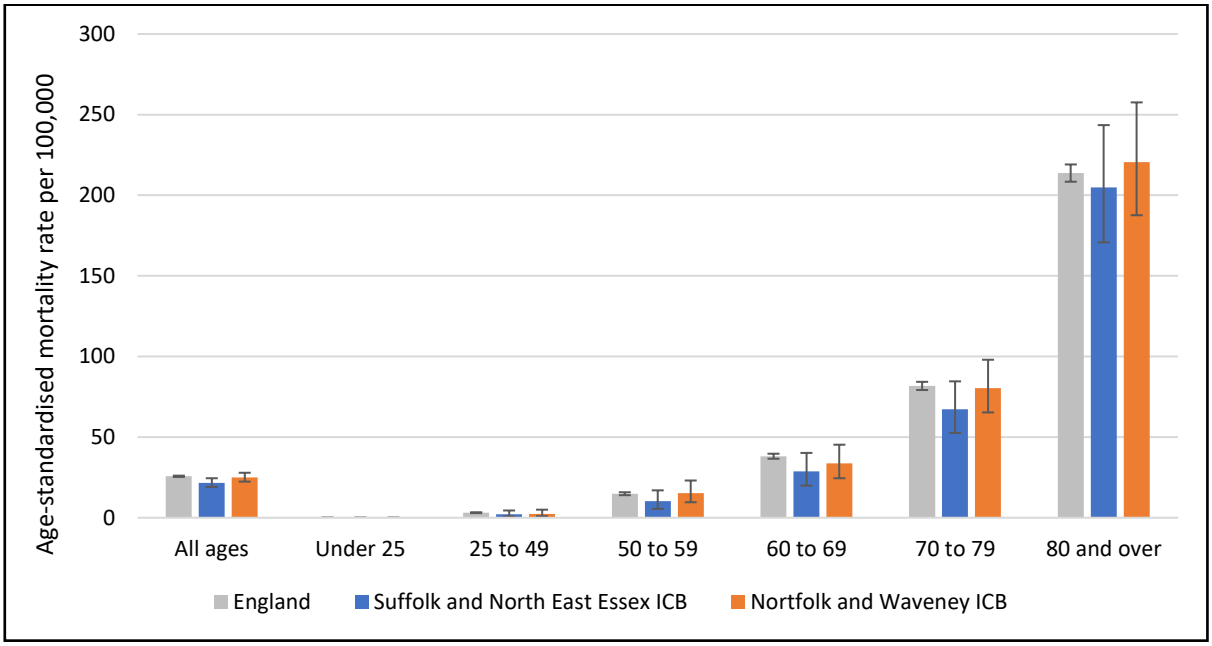


Source: CancerData

Colorectal cancer mortality variation by age

Figure 12 shows the 2020 colorectal cancer mortality rates for SNEE ICB, Norfolk and Waveney ICB, and England, for all ages and selected age groupings, all persons. Results show that colorectal cancer mortality increases significantly with age. In England, 2020 – 87.8% of all colorectal cancer deaths occurred in individuals aged 60 and over (12,322 deaths). In the same year for SNEE ICB, over 9 in 10 (92.1%) of all colorectal cancer deaths were for individuals aged 60 and over (234/254 deaths). Additionally, both SNEE ICB and Norfolk and Waveney ICB have statistically similar cancer mortality rates to the England average.

Figure 12. Colorectal cancer mortality rates per 100,000 for SNEE ICB, Norfolk and Waveney ICB, and England, for all ages and selected age groupings, all persons, 2020.



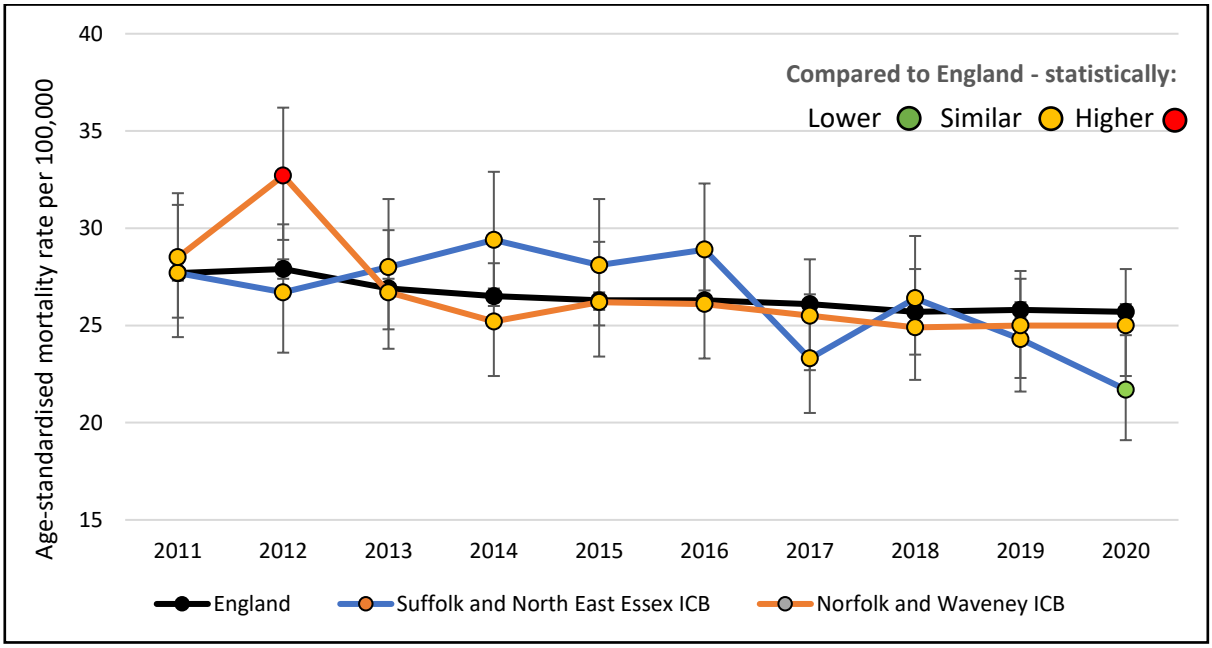
Source: CancerData

Colorectal cancer mortality trend

Figure 13 shows the colorectal age-standardised cancer mortality rates per 100,000 for SNEE ICB, Norfolk and Waveney ICB, all persons, all ages between 2011-2020 compared to England. Results show that, in England, colorectal cancer mortality has marginally decreased (albeit a statistically significant decrease) from 27.7 deaths per 100,000 in 2011, to 25.7 deaths per 100,000 in 2020.

SNEE ICB has had a statistically similar colorectal cancer mortality rate per 100,000 each year between 2011 to 2019 to the England average. While the 2020 colorectal cancer mortality rate (21.7 per 100,000) is statistically significantly below the England average, SNEE ICB's colorectal cancer mortality rate has remained statistically similar between 2011 to 2020.

Figure 13. Colorectal age-standardised cancer mortality rates per 100,000 for SNEE ICB, Norfolk and Waveney ICB, all persons, all ages between 2011-2020 compared to England (Y axis starts at 15 for readability).



Source: CancerData

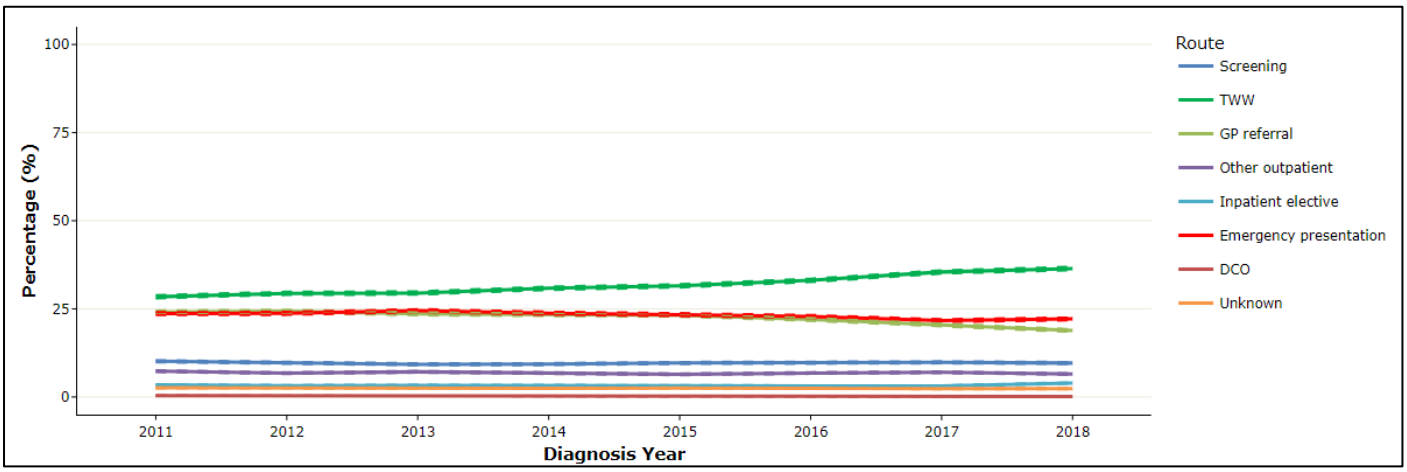
Routes to diagnosis

Compared to the European average, national cancer survival in England is low. Studies suggest this difference could be due to later diagnosis of cancers, where cancers are harder to treat, and survival outcomes are worse[7–9].

Figure 14 illustrates the routes to diagnosis in England for colorectal cancers between 2011 to 2018. In 2018, two-week wait referrals were the primary source of diagnoses for colorectal cancer accounting for over 1 in 3 diagnoses (36.4%). The rate of colorectal cancers being diagnosed from two-week waits has also statistically significantly increased from 28.4% in 2011 to 36.4% in 2018. In 2018, colorectal cancers in England were diagnosed proportionately by these routes:

- Two-week waits (urgent GP referrals with a suspicion of cancer): 36.4%
- Emergency presentation (an emergency route via A&E, emergency GP referral or emergency admission): 22.1%
- GP referral (routine and urgent referrals with a suspicion of cancer, where the patient was not referred under the TWW referral route): 18.8%
- Screening (detected through the colorectal screening programme): 9.6%
- Other outpatient (elective route with an outpatient appointment): 6.5%
- Inpatient elective (no earlier information found prior to admission from a waiting list, booked or planned): 4.0%
- Unknown: 2.4%
- DCO (diagnosis by death certificate only): 0.1%.

Figure 14. Colorectal cancer routes to diagnosis between 2011 to 2018 for England.

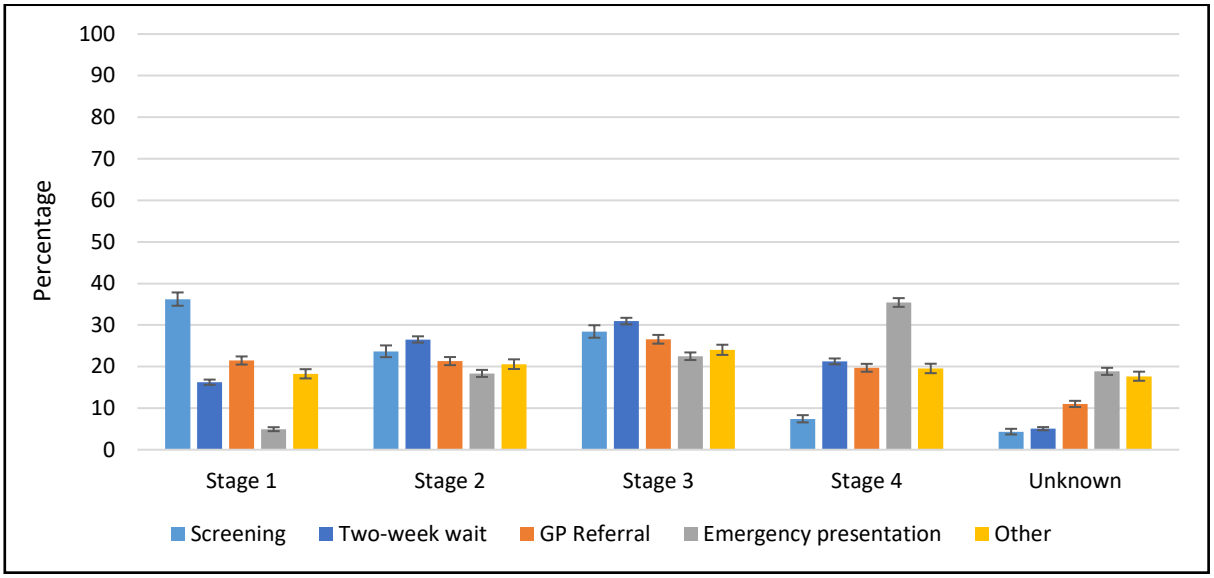


Source: CancerData

Stage of diagnosis

Figure 15 summarises the percentage of colorectal cancers diagnosed at each stage, by the route of diagnosis in England, 2018. Over 1 in 3 (35.4%) of colorectal cancers diagnosed at stage 4 were from emergency presentations in 2018. The screening programme for bowel cancer is successful at diagnosing cancers at earlier stages - with over 1 in 2 (59.8%) of colorectal cancers diagnosed through screening at stage 1 and 2.

Figure 15. Stage of diagnosis for the routes to diagnosis for colorectal cancers in England, 2018.



Source: CancerData

Colorectal cancer screening

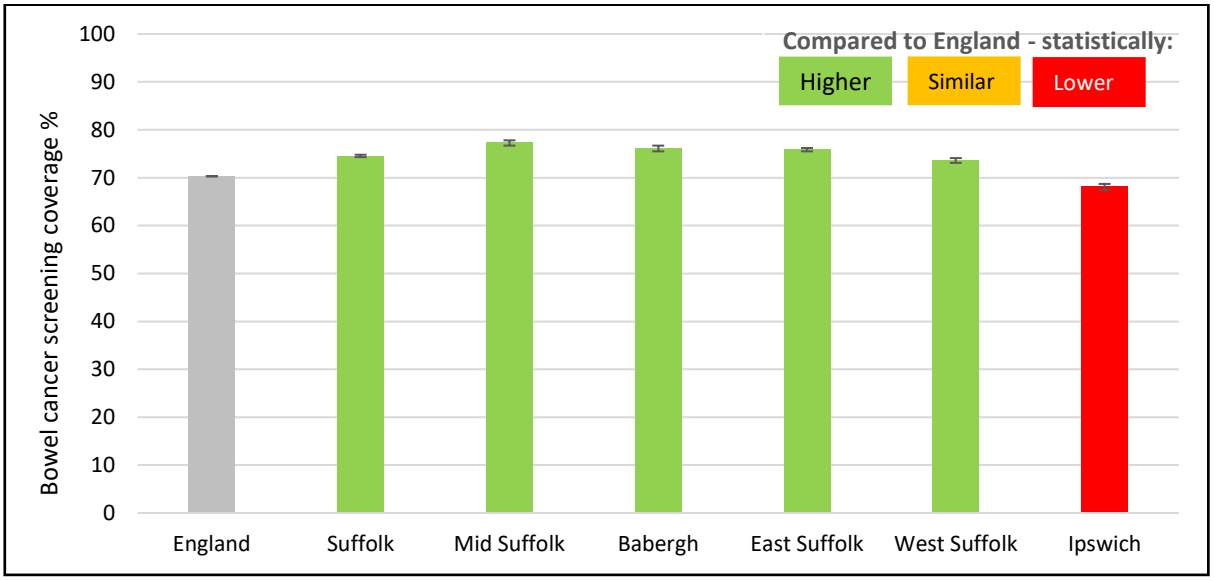
Bowel cancer screening supports the early detection of cancer and polyps (polyps grow in the bowel and are not cancerous but could develop into cancers over time).

Bowel cancer screening is available to everyone aged between 60 to 74 years. Since April 2021, the programme is expanding to everybody aged between 50 to 59 years. The test includes a faecal immunochemical test (FIT), to collect a small faecal sample which is sent to a lab to be analysed for small amounts of blood. The presence of blood can be a sign of polyps or bowel cancer[10].

Improvement in bowel cancer screening coverage and uptake could increase chances of detection at earlier and more treatable stages, allowing more polyps to be detected and removed – reducing the risk of bowel cancer developing.

Figure 16 shows the proportion of eligible men and women aged 60 to 74 for screening in 2021, who had an adequate FIT screening result in the previous 30 months. Results show that Suffolk (74.5%) and all districts other than Ipswich had statistically significantly higher bowel cancer screening coverage than the England average (70.3%) in 2022. While this is positive, over 1 in 4 (25.5%) of Suffolk residents aged between 60-74 receiving invitations to complete bowel screening, do not participate. An improvement to this figure could increase the rate of earlier diagnosis and prevent cases presenting as emergencies, at later stages, where outcomes are worse.

Figure 16. Suffolk and district bowel cancer screening coverage for all persons (60-74yrs), compared to England average, 2022.



Source: [Fingertips Public Health Data]

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