Cardiovascular Disease (CVD) Profile

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JSNA-on-a-page summary:

Cardiovascular disease profile 2025

What is cardiovascular disease?

Cardiovascular disease (CVD) is a group of conditions affecting the heart and blood vessels. It includes coronary heart disease, stroke, heart failure, atrial fibrillation, peripheral arterial disease, chronic kidney disease, and vascular dementia

Did you know?

The British Heart Foundation in September 2025 state that CVD causes around a quarter (26%) of all deaths in the UK; that's more than 170,000 deaths a year, or 480 each day – one every three minutes

The local picture - Suffolk at a glance

- **2,027 deaths** from CVD in Suffolk in 2024 (rate: 201.3 per 100,000, statistically significantly lower than the England average)
- **Under 75 mortality rate** from CVD: 61.0 per 100,000, also statistically significantly lower than the England rate
- **Men are more than twice as likely to die prematurely from CVD as women**

Main risk factors

Most CVD is preventable. Major risk factors in Suffolk include:

17.3%

- **High blood pressure**: the percentage of people with high blood pressure in Suffolk is statistically significantly higher than the England average (14.8% in 2023/24)

8.3%

- **Diabetes**: prevalence has statistically significantly increased in Suffolk from 5.8% in 2012/13 to 8.3% in 2024/25

67.2%

- **Excess weight**: Over 2 in 3 (67.2%) of Suffolk adults were classified as overweight (including obesity) in 2023/24
- Over 1 in 4 (28.5%) of Suffolk adults were classified as obese

10.6%

- **Smoking**: 10.6% of Suffolk adults aged 18 and over were current smokers in 2023

18.9%

- **Physical inactivity**: statistically significantly fewer people in Suffolk were classified as physically inactive compared to England (22.0%) in 2023/24

Treatment and prevention

Early detection and effective treatment can prevent heart attack and strokes

- **Health checks**: Only 6.0% of eligible adults in Suffolk received an NHS Health Check in 2024/25 (statistically significantly lower than England's average of 9.0%), despite a statistically significantly higher proportion of Suffolk eligible population receiving a health check between 2021/22 Q1 - 2025/26 Q2 (34.6% compared to 32.5%)
- **Primary Care**: Suffolk and North East Essex (ICB) ICB performs above average in blood pressure control, smoking cessation and diabetes care

Inequalities in heart health

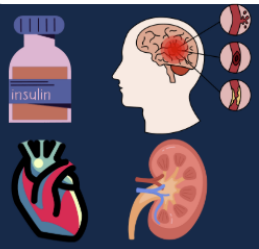
Cardiovascular disease is the **single largest contributor to the life expectancy gap** between Suffolk's most and least deprived areas

In 2022/23:

- **Men**: CVD contributed **27.1% (1.3 years of the total 6.6 year life expectancy gap)** - around 168 excess deaths
- **Women**: CVD contributed **26.6% (1.8 years of the total 5.2 year life expectancy gap)** - around 138 excess deaths
- Most affected areas: **Ipswich, Lowestoft**, and parts of **coastal Suffolk**
- Tackling **hypertension**, **cholesterol**, **diabetes**, **smoking**, and **obesity** can narrow this gap

CVD and related conditions

CVD is closely linked to other long-term conditions:



- **Diabetes**: 8.3% of Suffolk adults. Also good blood pressure control but rising prevalence over the previous 5 years
- **Kidney disease:** 6.3% of Suffolk adults – statistically significantly higher than England average (4.6%)
- **Stroke**: 2.2% prevalence; mortality rate per 100,000 in Suffolk is statistically significantly below England average

Progress and challenges

Inequalities in outcomes **persist** between communities

Prevention and detection (Health Checks, lipid management) remain **lower than target**

Mortality rates continue to fall and clinical management is strong

Looking ahead

- CVD prevention is a key priority under the **NHS Long Term Plan** and **Core20PLUS5** framework
- **Suffolk's focus**: reduce inequalities, improve early detection, and support healthier lifestyles

What's the issue?

Cardiovascular disease (CVD) is a broad term for conditions that affect the heart and blood vessels. It includes coronary heart disease, stroke, heart failure, atrial fibrillation, peripheral arterial disease, chronic kidney disease, and vascular dementia[1]. These conditions often share common risk factors and underlying causes, such as high blood pressure, high cholesterol, diabetes, smoking, obesity, and physical inactivity[1].

CVD remains one of the leading causes of death and disability in England and a major contributor to health inequalities[1]. It accounts for around a quarter of all deaths across England, and is a major driver of premature mortality, particularly among people living in more deprived communities. Although mortality rates have fallen over the past few decades, CVD continues to place a substantial burden on health and care services[2].

According to the NHS, most cardiovascular disease is preventable[1]. The development of CVD is usually linked to a gradual build-up of fatty deposits in the arteries (atherosclerosis) and damage to blood vessel walls, with this process accelerated by lifestyle and metabolic risk factors[1]. Preventing and managing these risk factors through early detection, behaviour change, and clinical management can significantly reduce morbidity and mortality.

The NHS Long Term Plan identifies CVD prevention as a national priority, aiming to prevent 150,000 heart attacks, strokes and cases of dementia over the next decade[3].

Early identification and management of high-risk individuals through initiatives such as the NHS Health Check programme and the CVDPREVENT audit, are key to preventing disease progression. These programmes focus on identifying undiagnosed hypertension, high cholesterol and diabetes, and ensuring effective treatment and lifestyle support[2].

CVD outcomes are shaped by a combination of individual, behavioural and wider determinants of health. Modifiable health behaviour factors such as diet, smoking, alcohol consumption, and physical activity play a major role, but social determinants including income, education, housing, and access to healthcare also influence risk and outcomes. These factors do not affect all communities equally, contributing to inequalities in cardiovascular health. People from South Asian, Black African, and African Caribbean backgrounds are at increased risk of developing CVD and its complications, partly due to higher rates of hypertension and type 2 diabetes.

The 2025 Chief Medical Officer Annual Report highlights that older adults are at higher risk of contracting various infections, facing a greater chance for those infections to become severe. Infections can elevate the risk of serious health issues common in older age, such as strokes and heart attacks, with these risks often lingering for weeks after the infection subsides.

For Suffolk, understanding the local picture of CVD prevalence, risk factors, and outcomes is necessary to plan effective prevention, and support early diagnosis and management of disease. The data used in this profile is primarily taken from the Office for Health Improvement and Disparities (OHID) Fingertips Cardiovascular disease profile and the CVDPREVENT audit, looking into current patterns, trends, and inequalities across the county.

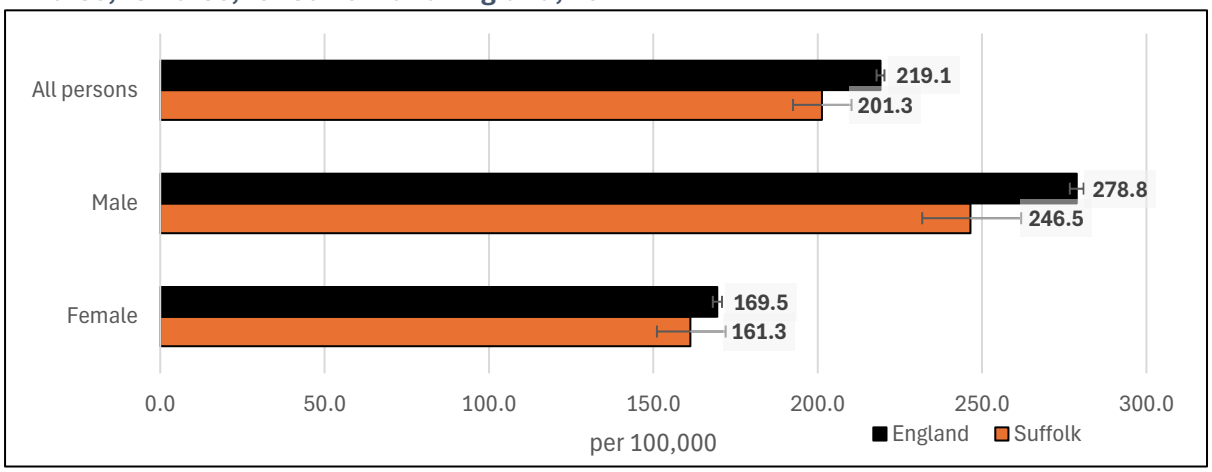
In 2024, there were 2,027 deaths in Suffolk from cardiovascular disease for all persons, producing a rate of 201.3 deaths from cardiovascular disease per 100,000. This rate was statistically significantly lower than the average across England in 2024 (219.1 per 100,000). Of the 2,027 deaths from cardiovascular disease in Suffolk in 2024, 53.0% were male deaths

(1,074) and 47.0% (953) were female deaths. The mortality rate from cardiovascular disease in 2024 was statistically significantly higher for males compared to females, both in Suffolk and across England.

The under 75 mortality rate from cardiovascular disease in Suffolk was 61.0 per 100,000 in 2024, statistically significantly lower than the England average of 74.3 per 100,000. This pattern of lower overall, and premature mortality from cardiovascular disease in Suffolk compared to the average across England reflects the county's more favourable cardiovascular health outcomes.

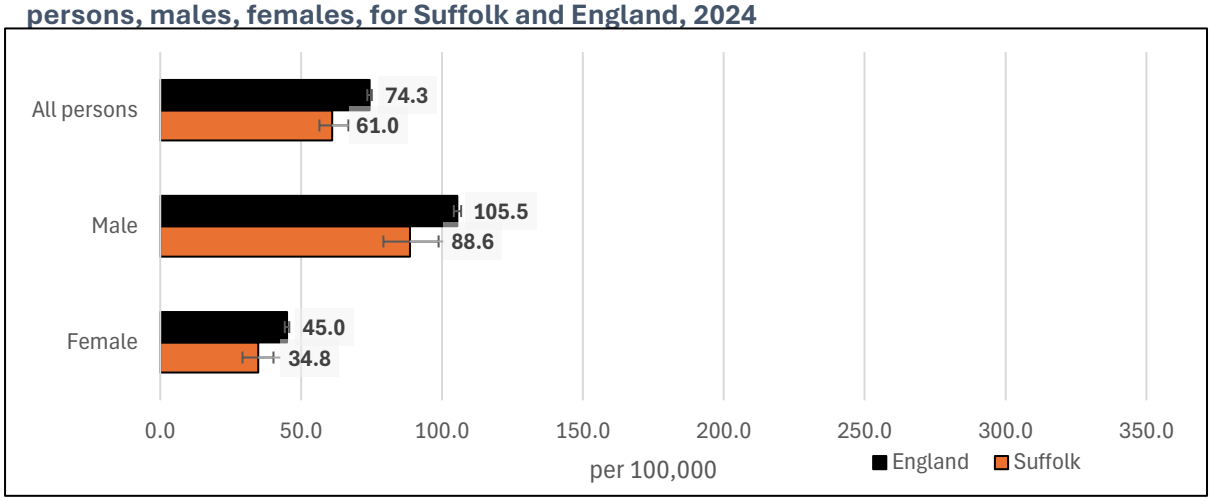
Consistent with all age mortality data, under 75 cardiovascular disease mortality shows disparities between males and females, with males in Suffolk experiencing a mortality rate of 88.6 deaths per 100,000, more than double the female rate of 42.5 per 100,000. This gap between males and females was also evident nationally, with male mortality at 109.4 per 100,000 compared to 34.8 per 100,000 for females, highlighting the substantially higher burden of premature cardiovascular death among men. This disparity reflects differences in exposure to risk factors, with men more likely to smoke, drink at harmful levels and develop hypertension and coronary heart disease at an earlier age, leading to higher premature CVD mortality[4].

Figure 1. Mortality rate per 100,000 from cardiovascular disease, all ages, persons, males, females, for Suffolk and England, 2024



Source: Office for Health Improvement and Disparities (2025)

Figure 2. Under 75 mortality rate per 100,000 from cardiovascular disease, all ages, persons, males, females, for Suffolk and England, 2024



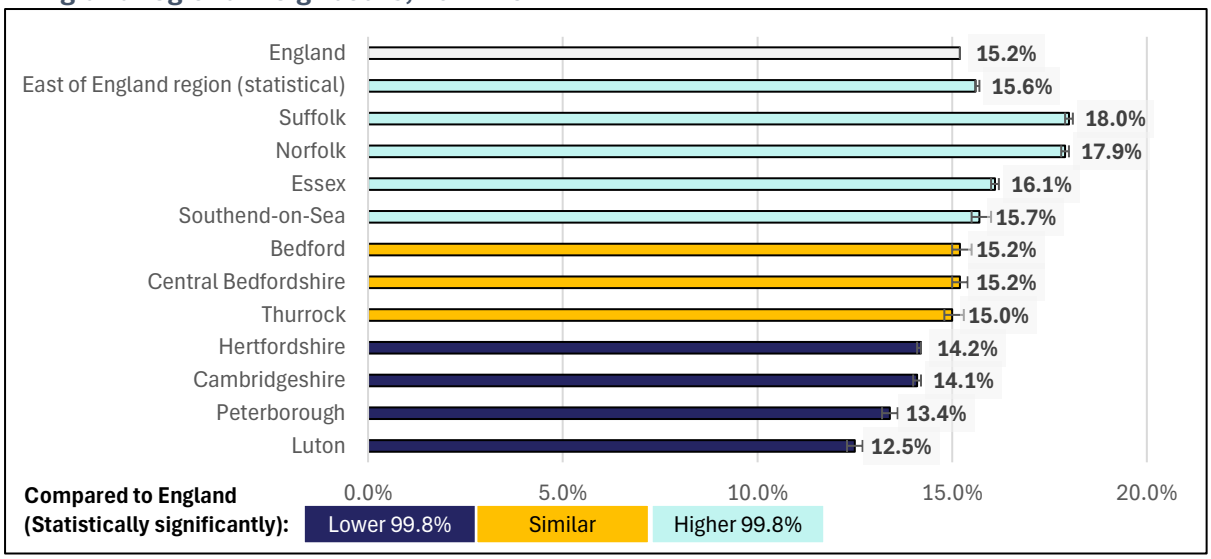
Source: Office for Health Improvement and Disparities (2025)

Causes and risk factors

This section captures data on the factors associated with a higher chance of developing CVD, by type and different demographics, while comparing key differences of modifiable and non-modifiable risk factors.

The following data presents the percentage of patients with established hypertension (or high blood pressure), as recorded on practice disease registers in Suffolk in 2024/25. 18.0% of registered patients on Suffolk's practice disease registered were recorded as having hypertension (149,712 individuals), statistically significantly higher than the England average (15.2%), and the East of England region average (15.6%).

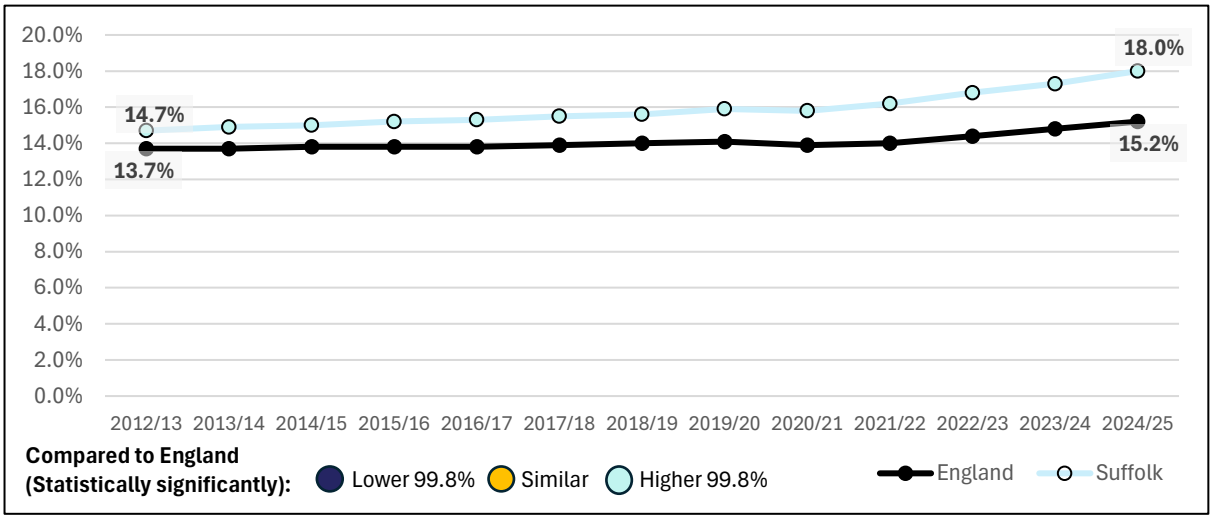
Figure 3. Hypertension: Quality Outcomes Framework prevalence, Suffolk and East of England regional neighbours, 2024/25



Source: Office for Health Improvement and Disparities (2025)

Over time, this percentage has increased across Suffolk, from 14.7% in 2012/13 to 18.0% in 2024/25. This percentage point increase for Suffolk (3.3 percentage points) is larger than the percentage point increase across England during the same period (1.5 percentage points).

Figure 4. Hypertension: Quality Outcomes Framework prevalence, Suffolk and England, 2012/13 to 2024/25



Source: Office for Health Improvement and Disparities (2025)

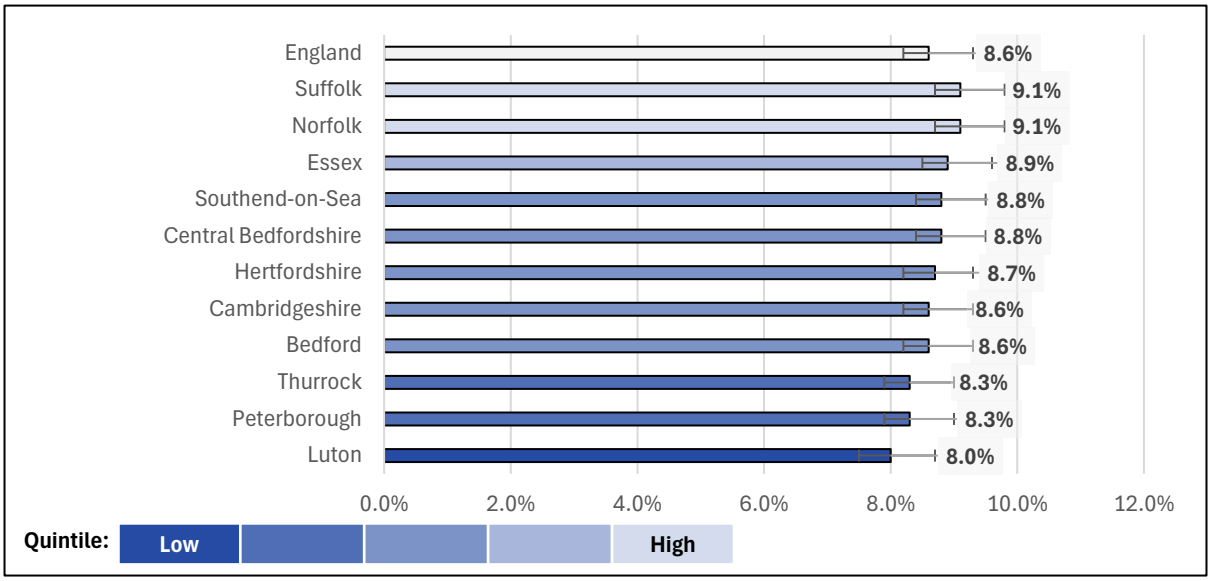
Hypertension is based on arbitrary cut-off points within a range of blood pressure, values, but most national and international guidelines utilise a common threshold for hypertension, defined as persistently raised blood pressure greater than or equal to a measurement of 140/90mmHg.

The NHS Long Term Plan published in 2019 included an ambition to prevent 150,000 strokes, heart attacks and dementia cases by 2029 by improving the detection and treatment of patients with hypertension and other high risk cardiovascular conditions.

Hypertension is a major risk factor for cardiovascular disease and high systolic blood pressure was estimated as the second highest global risk factor for all disease burden and the leading global risk factor for cardiovascular disease, as measured by disability adjusted life years (DALYs). The detection of hypertension requires an understanding of hypertension in the community where it is currently undiagnosed and therefore untreated. Detecting hypertension is beneficial, as bringing previously undiagnosed individuals into treatment pathways allows for effective management and a reduction of long-term cardiovascular risk.

The following data shows the modelled estimated prevalence of undiagnosed hypertension with blood pressure >= 140/90mmHg for adults aged 16 years or older. For Suffolk in 2021, the estimated prevalence of undiagnosed adult hypertension was 9.1%, putting the county in the highest quintile nationally.

Figure 5. Estimated prevalence of undiagnosed adult hypertension in England, Suffolk and East of England region neighbours, 2021



Source: Office for Health Improvement and Disparities (2024)

Non-modifiable risk factors

Non-modifiable risk factors play a major role in shaping an individual's underlying susceptibility to cardiovascular disease. CVD risk increases strongly with age, particularly from age 50 onwards, with older adults experiencing the highest burden of disease. Sex also influences risk, with men developing CVD earlier and at higher rates than women, although evidence shows that women with established CVD can experience worse outcomes. A family history of premature cardiovascular disease increases lifetime risk, reflecting shared genetic influences and common environmental exposures[5]. Risk also varies by ethnic background, with people of

South Asian and sub-Saharan African origin having an elevated risk of CVD, while people of South American or Chinese origin tend to have lower risk compared with people of European origin. These ethnic differences in CVD risk are partly driven by variations in underlying metabolic profiles, for instance South Asian and Black African/Caribbean populations have higher rates of insulin resistance, type 2 diabetes and hypertension at lower BMI levels, which increases lifetime cardiovascular risk despite similar or lower levels of traditional risk factors.

These non-modifiable factors interact with modifiable behaviours and wider determinants of health, shaping cardiovascular risk across the life course[5].

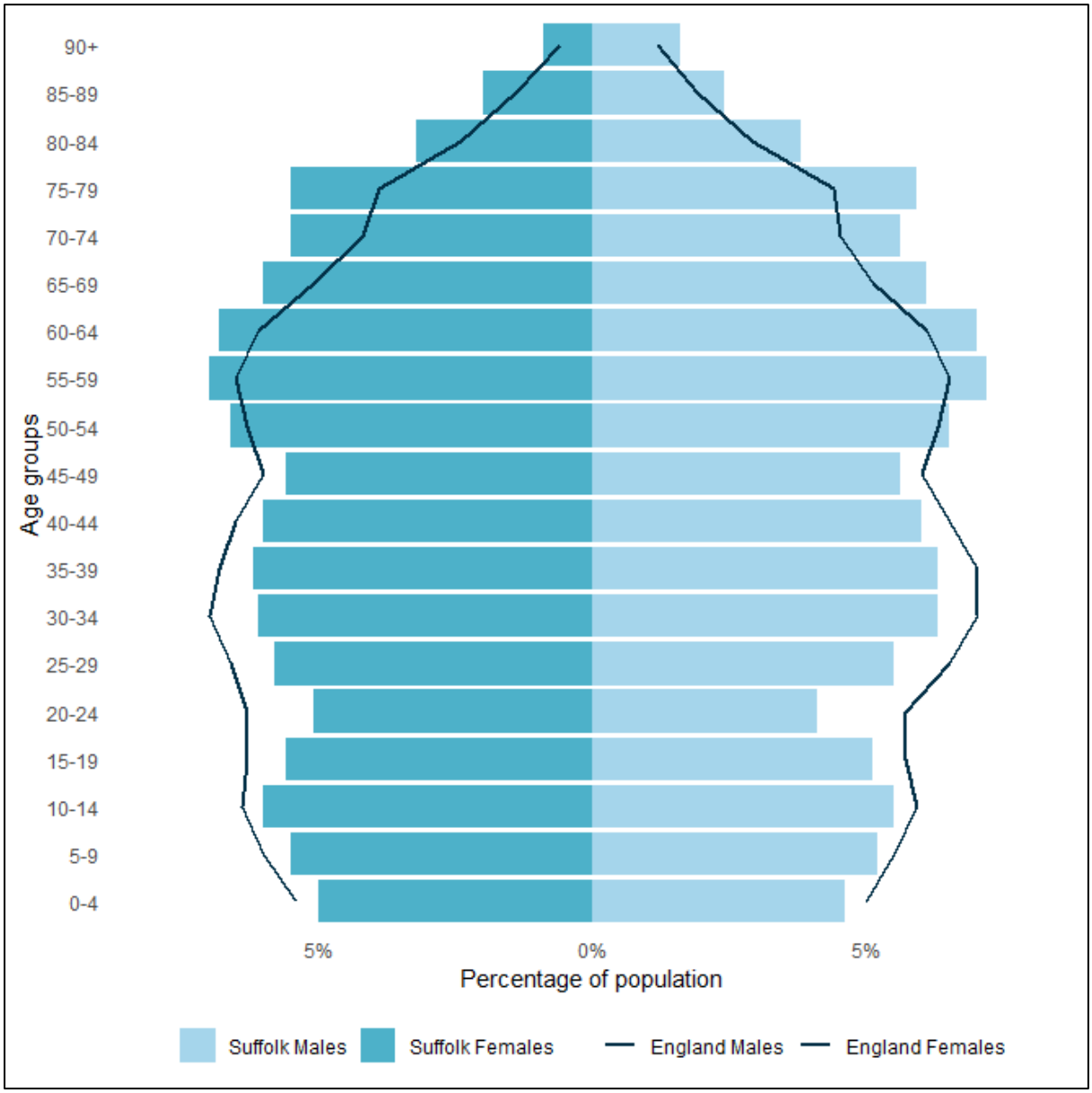
Suffolk has an older age profile than England overall, which has implications for future cardiovascular disease burden, given that age is one of the strongest non-modifiable risk factors for CVD. Across every age band from 55 onwards, Suffolk has a higher proportion of both men and women compared to the national average. The difference becomes more pronounced in the older working-age and early older-age groups (55–74), where Suffolk consistently exceeds England by 0.5 to 1 percentage point for both sexes.

Suffolk also has much higher proportions of residents aged 75–79 and 80–84 compared with England, for both males and females. The gap is particularly large for women: 3.8% of Suffolk's female population is aged 80–84 compared with 2.9% nationally, and 1.6% are aged 90+ compared with 1.2% across England. This reinforces the importance of later-life cardiovascular management and multi-morbidity planning.

In contrast, Suffolk has smaller proportions of younger adults aged 20–39 compared with England. This demographic difference means a relatively smaller population in age groups at the lowest risk of CVD and a larger population in older age groups where risk is higher.

Suffolk's age profile means the population carries a higher underlying susceptibility to cardiovascular disease, simply because a larger share of residents are older adults, particularly older women. This demographic pattern reinforces the need for strong prevention, early identification of cardiovascular risk, and proactive management of long-term conditions in an ageing population.

Figure 6. Population pyramid for Suffolk and England males and females, mid-2024



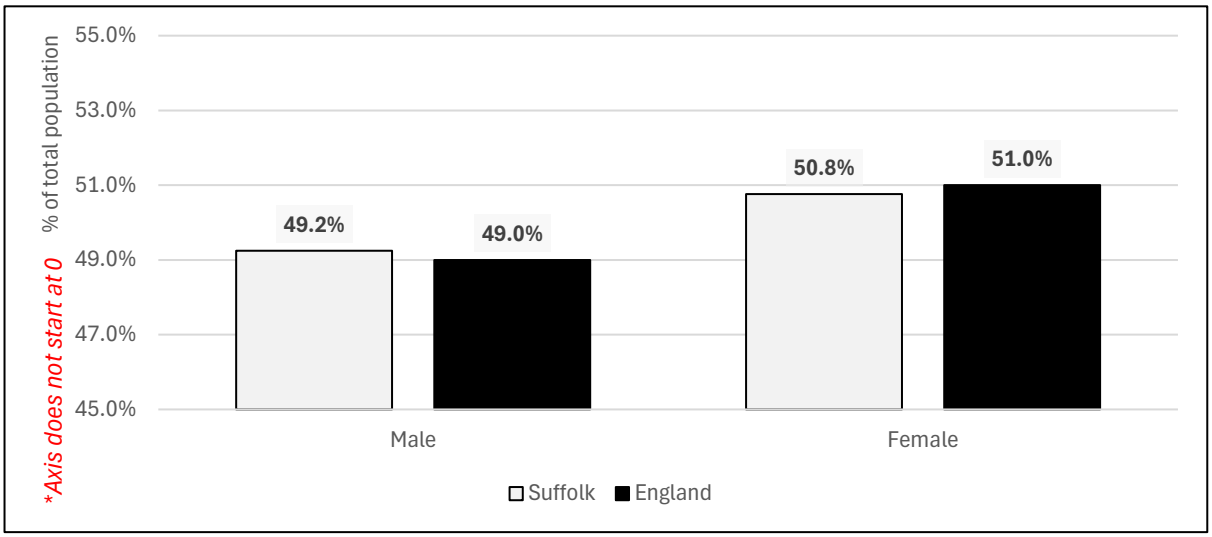
Source: Office for National Statistics (2025)

Sex is also an important non-modifiable determinant of cardiovascular disease risk. National evidence shows that men tend to develop CVD at an earlier age compared to women, while women who do develop CVD often experience worse outcomes, particularly at older ages[6].

Suffolk's population is broadly similar to England in its overall sex distribution, with men making up 49.2% of the population (49.0% nationally) and women 50.8% (51.0% nationally). Although the balance between men and women is almost identical to the national picture, the implications for CVD differ across the life course. The earlier onset of cardiovascular disease in men means that a substantial proportion of working-age CVD burden is likely to fall on the male population. At older ages, the greater life expectancy of women and Suffolk's relatively older age structure mean that women make up a larger share of the population at the ages where CVD prevalence is highest.

Men face a disproportionate burden of cardiovascular disease and experience earlier onset and higher mortality from CVD. The Department of Health and Social Care's 2025 Men's Health Strategy highlights that CVD is one of the leading preventable causes of poor health in men, contributing to men living nearly four fewer years than women and spending over a fifth of their lives in poor health[7]. The report also notes that 36% of men died before age 75 in 2024, with CVD a major contributor[7]. South Asian men have the highest rates of heart attack mortality[7].

Figure 7. Percentage of total population for males and females, Suffolk and England, mid-2024



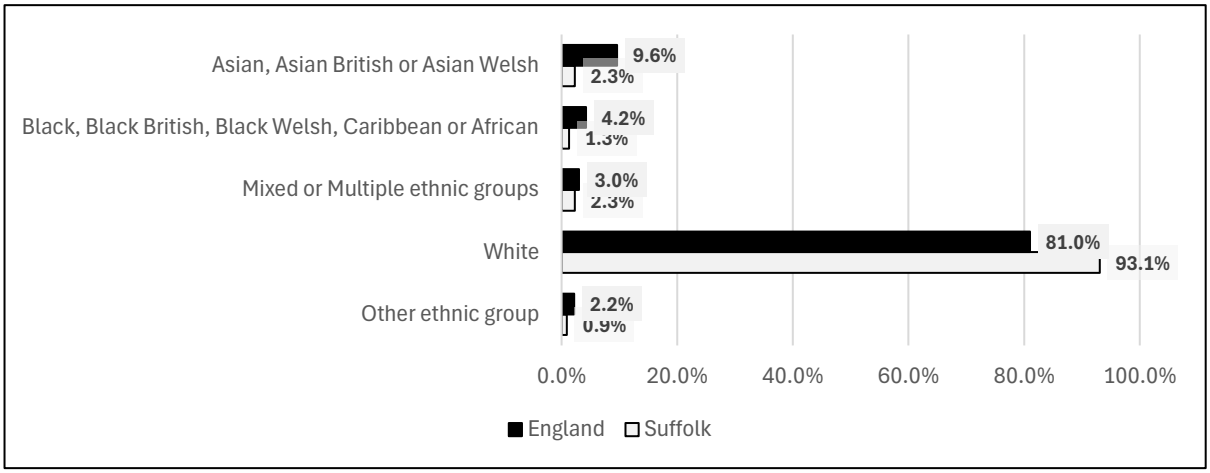
Source: Nomis (2025)

The ethnic composition of Suffolk differs markedly from the national picture and has implications for patterns of cardiovascular risk. According to the 2021 Census, Suffolk has a majority White population (93.1%), higher than the England average (81.0%). In contrast, population groups known nationally to be at increased risk of cardiovascular disease particularly South Asian and Black African or Caribbean communities[6] make up a much smaller proportion of Suffolk's residents. Asian/Asian British people account for 2.3% of the population (9.6% across England), and Black/Black British residents 1.3% (4.2% across England).

Although the overall numbers are small, these groups have higher prevalence of key risk factors, including hypertension, type 2 diabetes, and earlier onset of CVD[6]. Mixed and Other ethnic groups, which together comprise 3.2% of Suffolk's population, also include communities who may experience variable but sometimes elevated risks.

Suffolk's comparatively low ethnic diversity means that the contribution of ethnicity to population level CVD burden is smaller in Suffolk when compared to many parts of England. However, it remains important that prevention, screening, and management pathways are responsive to the needs of minority ethnic groups, who may have higher individual risk.

Figure 8. Ethnic group (broad) for Suffolk and England, Census 2021



Source: Nomis (2021)

Life-course and sex-specific factors also contribute to non-modifiable cardiovascular risk. Conditions that occur during pregnancy such as preeclampsia and gestational diabetes are associated with higher cardiovascular risk later in life[8]. Similarly, premature menopause (before age 40) accelerates loss of oestrogen's protective effects and increases long-term risk of atherosclerosis and hypertension[9]. These factors disproportionately affect women and should be considered alongside Suffolk's age and sex distribution.

Congenital cardiovascular conditions also contribute to non-modifiable risk, affecting individuals from birth and often requiring lifelong monitoring[10]. Although relatively uncommon, they represent an important subset of early-life determinants of adult cardiovascular health.

Modifiable risk factors

Heart health is influenced by a range of modifiable risk factors – with around 70% of the cardiovascular disease burden attributed to modifiable risk factors such as smoking and physical activity, and clinical risk factors such as high blood pressure (hypertension) and obesity[11].

Across England, age-standardised data shows a clear association between deprivation and hypertension prevalence, with more deprived areas showing a higher prevalence than less deprived areas[11]. Looking at Suffolk's demographic data, overall Suffolk had a deprivation score of 18.8 in 2025, placing the county in the fourth decile for deprivation.

Excess weight particularly around the waist can lead to fat deposits building up in the arteries, which can increase an individual's risk of high blood pressure, high cholesterol and type 2 diabetes[12,13]. The overweight and obesity prevalence in adults aged 18 and over in Suffolk in 2023/24 were both statistically significantly higher than the England average. 67.2% of adults were classified as overweight (including obesity) in Suffolk (compared to 64.5% across England), while 28.5% of Suffolk adults were classified as obese (compared to 26.5% across England).

A sedentary lifestyle is associated with an increased risk of heart and circulatory disease and general poor health[14]. Conversely, physical activity reduces the risk of cardiovascular disease and improves indicators associated with cardiovascular disease[15]. People who have a physically active lifestyle have a 20 to 35% lower risk of cardiovascular disease, coronary heart disease and stroke compared to those who have a sedentary lifestyle[16]. In Suffolk in 2023/24, 18.9% of adults were classified as physically inactive (engaging in less than 30 minutes of physical activity per week), statistically significantly lower than the average across England (22.0%).

Smoking is very harmful to an individual – increasing the risk of developing heart and circulatory diseases[17]. Smoking ranks among the top causes of cardiovascular disease, including coronary heart disease, ischemic stroke, peripheral artery disease and abdominal aortic aneurysm[18]. Acrolein, a chemical in cigarettes, impairs cholesterol processing by raising blood cholesterol levels and lowering the HDL (good) to LDL (bad) cholesterol ratio in tobacco users. HDL normally helps remove excess cholesterol by carrying it to the liver[19,20]. In Suffolk in 2024, 10.5% of adults aged 18 and over were current smokers, statistically similar to the figure across England (10.4%).

Table 1. Demographics indicators for cardiovascular disease, Suffolk compared to England

Indicator	Period	Suffolk Value	England Value	England Worst/Lowest	England Best/Highest
Deprivation score (IMD 2025)	2025	18.8	22.9	43.5	6.1
Overweight (including obesity) prevalence in adults (using adjusted self-reported height and weight) (18+ yrs)	2023/24	67.2%	64.5%	77.2%	42.6%
Obesity prevalence in adults (using adjusted self-reported height and weight) (18+ yrs)	2023/24	28.5%	26.5%	37.9%	11.0%
Percentage of physically inactive adults	2023/24	18.9%	22.0%	36.6%	10.8%
Smoking prevalence in adults (aged 18 and over) - current smokers (APS)	2024	10.5%	10.4%	20.8%	5.0%

Compared to England (Statistically significantly): Better 95% | Similar | Worse 95%

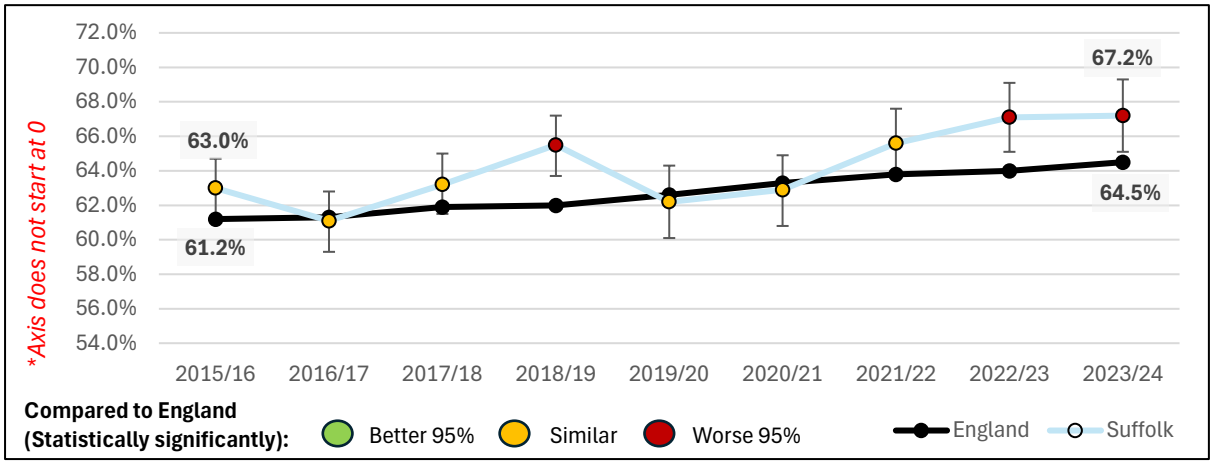
Quintiles: Best | | | | Worst

Source: Office for Health Improvement and Disparities (2024)

Over 2 in 3 adults (67.2%) of adults in Suffolk were classified as overweight or obese in 2023/24. Between 2015/16 and 2023/24, the proportion of adults classified as overweight or obese (using adjusted self-reported height and weight) increased from 63.0% to 67.2% (although not statistically significantly different). This pattern broadly aligns with national trends but shows a slightly steeper rise since the pandemic from 2020/21 onwards. NHS England highlights that individuals are at increased risk of CVD if their Body Mass Index (BMI) is 25 or above, or 23 or above for people from Asian, Black African, African-Caribbean or Middle Eastern backgrounds, recognising differences in how body fat is distributed across ethnic groups[6].

The steady rise, and statistically significantly higher prevalence of excess weight in Suffolk over the last two years is important given the strong relationship with cardiovascular risk, including hypertension, high cholesterol, and type 2 diabetes. These conditions are major contributors to avoidable CVD burden and are more prevalent among adults living with overweight or obesity. The latest data reinforces the need for sustained and targeted prevention, weight management support, and addressing the determinants that influence diet, physical activity, and health behaviours.

Figure 9. Overweight (including obesity) prevalence in adults (using adjusted self-reported height and weight) (18+ yrs), Suffolk and England, 2015/16 to 2023/24



Source: Office for Health Improvement and Disparities (2025)

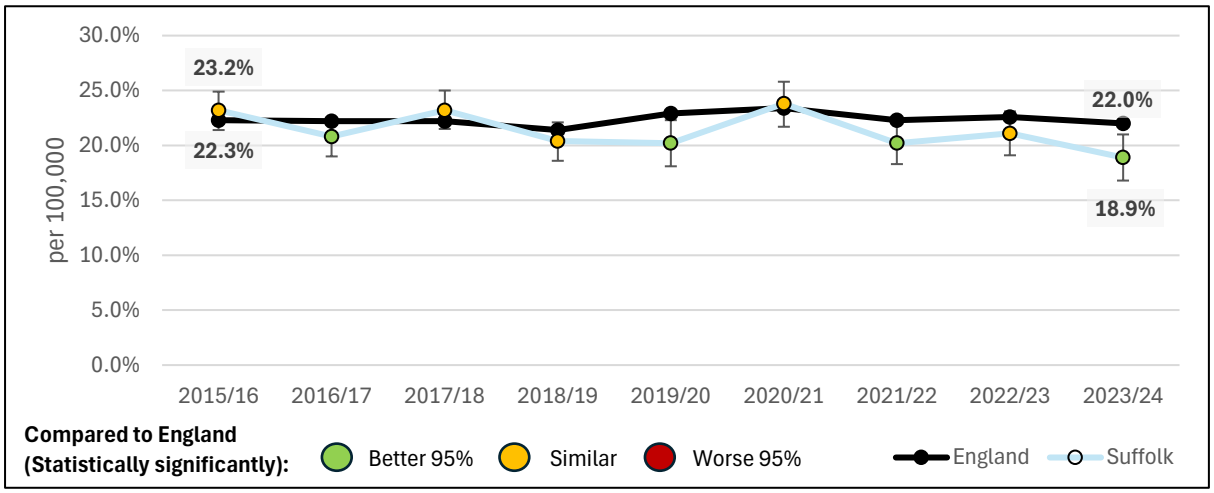
Physical inactivity is a major modifiable risk factor for cardiovascular disease. It is defined in the Active Lives Adult Survey, as undertaking less than 30 minutes of physical activity per week. Inactivity contributes to multiple clinical risk factors for CVD: people who are inactive are more likely to develop high blood pressure, high cholesterol, and excess weight, all of which elevate cardiovascular risk[21]. NHS England emphasises that regular physical activity helps maintain a healthy heart and, alongside a balanced diet, supports a healthy weight[6].

The health burden of inactivity is substantial - it is the fourth leading global risk factor for mortality, accounting for an estimated 6% of deaths worldwide[22], and costs the NHS over £0.9 billion per year[23]. Evidence shows that adults who are physically active have a 20–35% lower risk of cardiovascular disease, coronary heart disease, and stroke compared with those who are inactive[24]. For older adults, activity also supports functional ability and independence. National guidance from the UK Chief Medical Officers recommends adults undertake at least 150 minutes of moderate activity (or 75 minutes of vigorous activity) per week, but targeting those who are significantly inactive is known to generate the greatest impact on reducing chronic disease[24,25].

In Suffolk, inactivity levels have fluctuated over the past decade but have statistically significantly decreased between 2015/16 and 2023/24, with inactivity decreasing from 23.2% to 18.9%. While Suffolk has experienced occasional peaks, particularly in 2017/18 and during the Covid-19 pandemic in 2020/21 – the value remains statistically significantly lower in 2023/24 when compared to 2015/16.

While Suffolk has a statistically significantly lower percentage of physically inactive adults in 2023/24 compared to the England average – almost one in five adults remains inactive, which represents a sizeable population at elevated risk of CVD. There is also a proportion of the Suffolk population that achieve 30 minutes of physical activity a week but fail to meet CMO guidelines and are therefore not active enough to maintain good health.

Figure 10. Percentage of physically inactive adults, Suffolk and England, 2015/16 to 2023/24



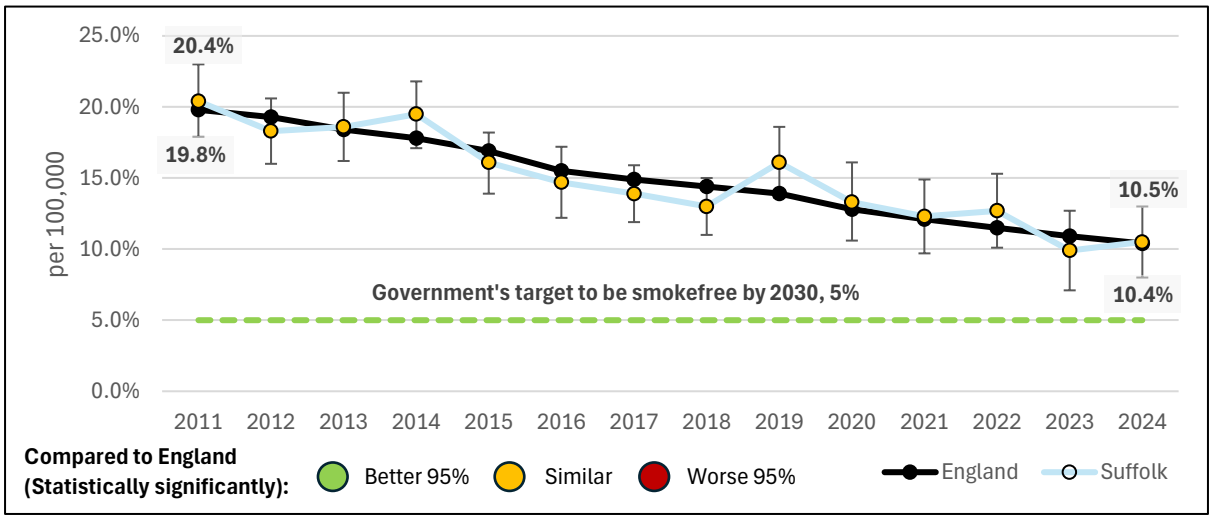
Source: Office for Health Improvement and Disparities (2025)

Smoking is one of the most significant modifiable risk factors for cardiovascular disease[6]. Tobacco smoke contains harmful chemicals that directly damage the lining of blood vessels, promoting the narrowing of arteries, and accelerating the build-up of atherosclerotic plaque. As a result, smokers are increased risk of coronary heart disease, stroke, peripheral artery disease and other major cardiovascular conditions[26]. NHS England highlights that the substances in tobacco can damage and constrict blood vessels, contributing to raised blood pressure and reduced oxygen transport - key pathways in the development of CVD[6].

Smoking prevalence in Suffolk has statistically significantly decreased over the past decade, in line with national trends. In 2011, 20.4% of adults in Suffolk were current smokers. By 2024, this had statistically significantly decreased to 10.5%, representing almost a halving of smoking prevalence across the county. This long-term reduction mirrors significant national public health efforts such as tobacco control regulation, smoking cessation services, and smoke-free legislation.

Across the full time series, Suffolk's smoking prevalence has been statistically similar to the England average each year. Notably, Suffolk's prevalence dipped below 10% in 2023, before returning to 10.5% in 2024.

Figure 11. Smoking prevalence in adults (aged 18 and over) – current smokers (APS), Suffolk and England, 2011-2024



Source: Office for Health Improvement and Disparities (2025)

Overall, the data suggests sustained progress in reducing tobacco use locally; however, around one in ten adults in Suffolk continues to smoke. Given smoking's strong and well-established association with cardiovascular disease, further reducing prevalence remains a key opportunity to lower avoidable CVD risk across Suffolk.

Several long-term health conditions interact with modifiable risk factors and increase cardiovascular risk through behavioural, metabolic and inflammatory pathways. Serious mental health conditions, including depression, schizophrenia and anxiety disorders, are associated with higher rates of smoking, reduced physical activity and poorer diet, as well as direct physiological effects on the cardiovascular system[5,27].

People with severe mental illness including schizophrenia, bipolar disorder and severe depression die 10-20 years earlier than people without SMI, largely due to preventable physical health conditions[28]. Elevated rates of smoking, physical inactivity, obesity and medication-related metabolic effects contribute to significantly higher cardiovascular disease risk, making CVD a key driver of premature mortality in this group.

Systemic inflammatory conditions, such as rheumatoid arthritis and lupus, accelerate atherosclerosis through chronic inflammation and can also be worsened by lifestyle factors such as inactivity or smoking. Also, chronic kidney disease (CKD) significantly increases cardiovascular risk and is closely linked with hypertension, diabetes, obesity and other modifiable risks. Effective management of these conditions paired with lifestyle change can reduce overall cardiovascular risk[29,30].

Additional cardiovascular risk factors

Beyond traditional modifiable risks, several other factors influence CVD risk. Clinical conditions such as serious mental health disorders (including schizophrenia, PTSD, and anxiety[27]), systemic inflammatory diseases (such as rheumatoid arthritis and lupus), and chronic kidney disease can increase cardiovascular risk. Life-course events such as preeclampsia[31], gestational diabetes, premature menopause, polycystic ovary syndrome, and certain congenital heart conditions also contribute to later CVD[5,32].

Environmental and social determinants including long-term exposure to air pollution, social isolation, and lower socioeconomic status further compound cardiovascular risk. Addressing these emerging and contextual risk factors alongside modifiable behaviours provides a comprehensive approach to preventing and managing CVD[5].

The NHS Health Check programme helps prevent heart disease, stroke, diabetes, and kidney disease by offering checks every five years to people aged 40–74 who have not been diagnosed with these conditions. As the programme operates on a five-year cycle, annual participation figures alone do not fully reflect programme performance.

Early identification through high participation allows for timely intervention and support. In Suffolk in 2024/25, 6.0% (13,402 people) of the eligible population received an NHS Health Check in the previous year, which was statistically significantly lower than the England average (9.0%). However, this annual figure is influenced by service mobilisation and delivery changes.

Looking across a longer timeframe provides a fuller and more accurate picture - over the five-year period from 2021/22 Q1 to 2025/26 Q2, Suffolk performed statistically significantly better than England across all key NHS Health Check indicators. During this period, 88.6% of the eligible population were invited for a Health Check (compared with 85.3% nationally), 34.6% received a Health Check (32.5% nationally), and 39% took up an invitation, slightly higher than the England average of 38%.

These findings suggest that despite recent short-term fluctuations in annual delivery, overall engagement with the NHS Health Check programme in Suffolk is strong, supporting early identification and management of cardiovascular and related long-term condition risk at the population level.

Table 2. People receiving an NHS Health Check per year, Suffolk compared to England, 2024/25

Indicator	Period	Suffolk Value	England Value	England Worst/Lowest	England Best/Highest
People receiving an NHS Health Check per year	2024/25	6.0%	9.0%	0.6%	20.4%
People receiving an NHS Health Check	2021/22 Q1 – 2025/26 Q2	34.6%	32.5%	21.%	77.7%

Compared to England (Statistically significantly): Better 95% | Similar | Worse 95%

Source: Office for Health Improvement and Disparities (2025)

Treatment targets

The following data covers the Suffolk and North East Essex (SNEE) Integrated Care Board (ICB) area, rather than the Suffolk County geography. SNEE ICB includes North East Essex and also *excludes* the Waveney component of East Suffolk within Suffolk.

Across a range of cardiovascular prevention and management indicators, SNEE ICB performs generally well compared with national averages, indicating strong systems for detection, monitoring and treatment of cardiovascular risk factors within primary care.

In 2025, 91.9% of hypertension patients in SNEE had a recent blood pressure reading, statistically significantly higher than the England average of 90.0% and close to the national best performance of 92.3%. Similarly, 72.1% of hypertension patients were treated to the appropriate threshold, again statistically significantly higher than the national figure of 70.3% and approaching the best observed value nationally (74.7%). Among SNEE patients aged under 80 with hypertension, 69.4% had a most recent blood pressure reading of 140/90 mmHg or lower, compared with 67.8% across England, while 82.5% had readings of 150/90 mmHg or lower, also statistically significantly higher than the national rate of 81.2%. These figures indicate that SNEE is performing strongly in the management and control of blood pressure among hypertensive patients.

For screening among adults aged 45 and over, 89.2% of SNEE patients aged 45 and over had a recorded blood pressure measurement within the last five years, statistically significantly higher when compared with 87.3% across England. Similarly, smoking-related indicators are positive. In 2024/25, 94.9% of SNEE ICB patients with relevant long-term conditions had their smoking status recorded within the previous 12 months, also statistically significantly higher than the national average of 93.9%, and 95.4% of smokers aged 15 and over had been offered cessation support or treatment within the past two years, higher than the England average of 93.6% and among the best results nationally.

Cholesterol is a type of lipid or natural fatty substance in the blood. It is produced in the liver and it's also present in some of the foods. Cholesterol is important to keep the cells in the body healthy. High cholesterol is when there is too much cholesterol in the blood, which can increase the risk of having a heart attack or stroke. Lipid-lowering therapy with a high-intensity statin or other lipid-lowering medication can reduce cholesterol levels and is a clinically effective treatment option for the prevention of cardiovascular disease. The one area where SNEE performs less well in comparison with the national average is lipid management. Among patients with a QRISK score (a tool to assess the potential risk of CVD in patients) of 20% or greater, 61.1% were treated with lipid-lowering therapy, statistically significantly below the England figure of 63.6%.

Table 3. Treatment targets relating to cardiovascular disease for Suffolk and North East Essex ICB, 2024/25

Indicator	Period	SNEE ICB Count	SNEE ICB Value	England Value	England Worst/Lowest	England Best/Highest
Hypertension patients with a recent blood pressure reading	2024/25	164,770	91.1%	90.0%	87.1%	92.3%
Hypertension patients treated to appropriate threshold	2025	129,175	72.1%	70.3%	65.7%	74.7%
Last BP reading of patients (<80 yrs, with hypertension) in the last 12 months is <= 140/90 mmHg (denominator incl. PCAs)	2024/25	99,026	69.4%	67.8%	62.1%	73.4%
Last BP reading of patients (<80 yrs, with hypertension) in the last 12 months is <= 150/90 mmHg (denominator incl. PCAs)	2024/25	37,564	82.5%	81.2%	77.8%	84.2%
Patients with QRISK ≥ 20% treated with lipid lowering therapy	2025	30,485	61.1%	63.6%	58.7%	72.0%
Patients (aged 45+ yrs), who have a record of blood pressure in the last 5 yrs (denominator incl. PCAs)	2024/25	469,241	89.2%	87.3%	82.0%	89.9%
Smoking status of patients with certain conditions recorded in the last 12 months (denominator incl. PCAs)	2024/25	-	94.9%	93.9%	92.7%	94.9%
Record of offer of support and treatment in the last 24 months for smokers aged 15+ yrs (denominator incl. PCAs)	2024/25	119,643	95.4%	93.6%	86.0%	95.4%

Compared to England (Statistically significantly):

Better 99.8% | Better 95% | Similar | Worse 95% | Worse 99.8%

Lower 99.8% | Similar | Higher 99.8%

Source: Office for Health Improvement and Disparities (2025)

Statistics about key conditions

Diabetes

Diabetes is a lifelong condition that causes a person's blood sugar level to become too high. There are two main types of diabetes:

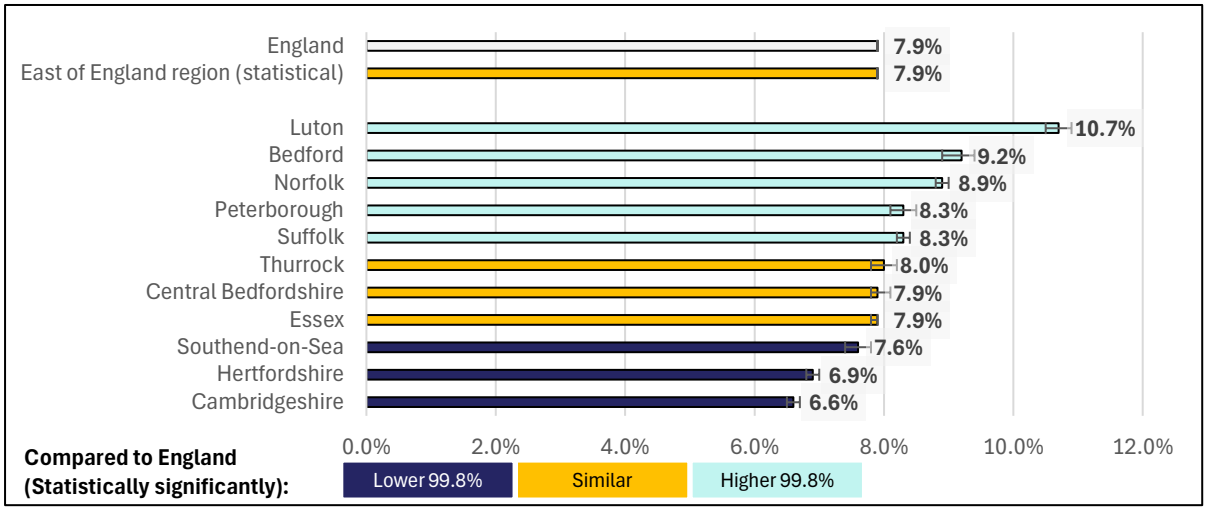
- type 1 diabetes – where the body's immune system attacks and destroys the cells that produce insulin
- type 2 diabetes – where the body does not produce enough insulin, or the body's cells do not react to insulin

Individuals with diabetes are more at risk of diseases that affect the heart or blood vessels. Cardiovascular diseases affect circulation too, which can make other diabetes complications worse[33]. High blood sugar levels for a prolonged period can cause blood vessels to get damaged, leading to heart complications. When blood sugar levels are high, the body cannot use all this sugar properly, meaning more of it builds up in the blood after sticking to red blood cells, which can cause damage and blockages of the vessels carrying blood to and from the heart, restricting essential oxygen and nutrients[33].

People with diabetes are also more likely to have certain risk factors such as high blood pressure or high cholesterol that increase their chances of having a heart attack or a stroke[34]. People with diabetes tend to develop heart disease at a younger age than people without diabetes. Adults with diabetes are nearly twice as likely to have heart disease or stroke as adults without diabetes[35,36]. Many people with type 2 diabetes are also overweight or obese, which is also a risk factor for cardiovascular disease[37].

For Suffolk in 2024/25, 8.3% (57,383) of patients aged 17 and over had diabetes mellitus, as recorded on practice disease registers. This is statistically significantly higher than the England figure (7.9%) and the East of England average (7.9%) in 2024/25. The prevalence of diabetes for persons aged 17 and over in Suffolk has also statistically significantly increased by 2.5 percentage points, from 5.8% in 2012/13 to 8.3% in 2024/25. The percentage point increase across England has been lower than the increase across Suffolk, rising 1.9 percentage points from 6.0% in 2012/13 to 7.9% in 2024/25.

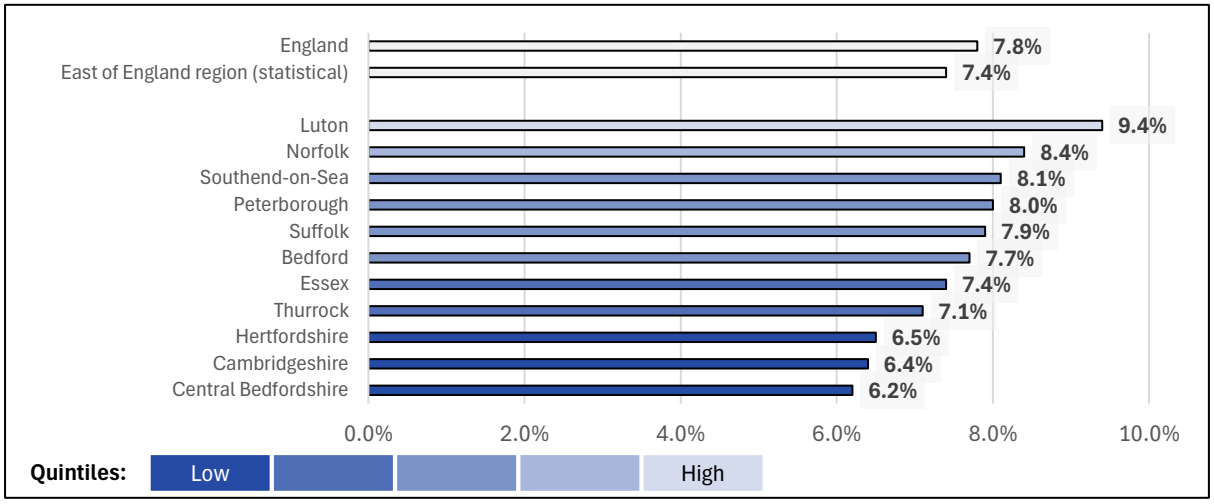
Figure 12. Diabetes: QOF prevalence for Suffolk and East of England regional neighbours, 2024/25



Source: Office for Health Improvement and Disparities (2025)

The following indicator is the modelled estimated prevalence of diagnosed and undiagnosed type 2 diabetes for people aged 16 years and over. Diagnosed diabetes is defined as self-reported doctor diagnosed type 2 diabetes. Undiagnosed diabetes is defined as having a HbA1c reading of greater than or equal to 48mmol/mol and did not self-report having a diabetes diagnosis. In Suffolk in 2021, the estimated prevalence of diagnosed and undiagnosed type 2 diabetes for individuals aged 16 and over was 7.9%, placing Suffolk in the third quintile nationally.

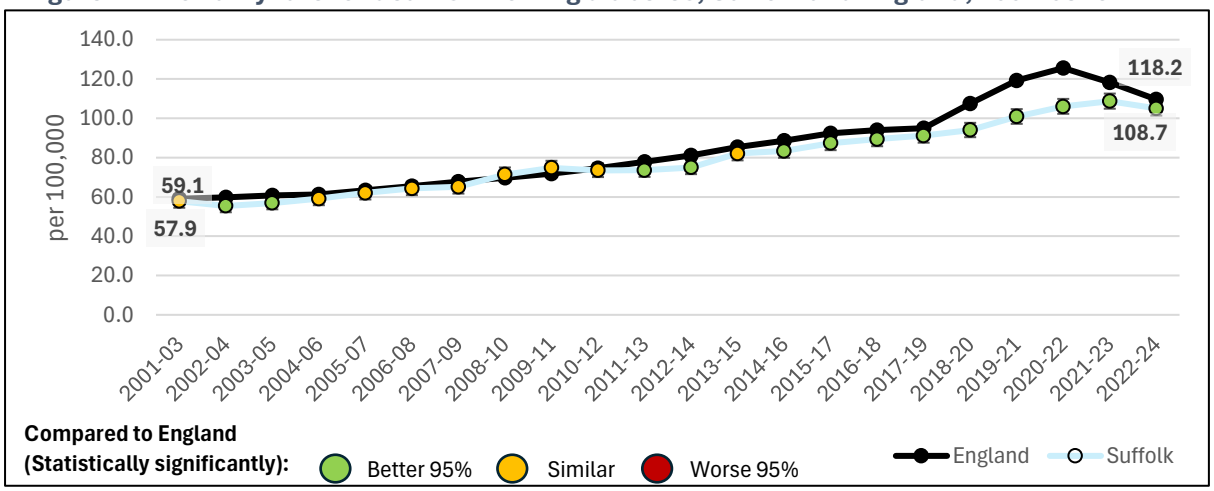
Figure 13. Estimated prevalence of diagnosed and undiagnosed type 2 diabetes (16+ yrs), Suffolk and East of England Region neighbours, 2021



Source: Office for Health Improvement and Disparities (2025)

The following indicator captures mortality trends for all deaths involving diabetes, as diabetes contributes to a proportion of deaths that are not selected as the underlying cause of death. Across Suffolk between 2022-24, there were 3,137 deaths involving diabetes for people of all ages, for a rate of 105.0 deaths involving diabetes per 100,000. This rate was statistically significantly lower than the rate across England (109.6 per 100,000) over the same period. The rate for Suffolk has statistically significantly increased, nearly doubling from 2001-03 (57.9 per 100,000) to 2022-24 (105.0 per 100,000). Part of this increase reflects the disproportionate risk faced by people with diabetes during the Covid-19 pandemic, when Covid-19 was more likely to lead to severe illness and death among individuals with existing metabolic conditions[38].

Figure 14. Mortality rate for deaths involving diabetes, Suffolk and England, 2001-03 to 22-24



Source: Office for Health Improvement and Disparities (2025)

The following data includes rates of diabetes and associated care quality measures among the Suffolk and North East Essex (SNEE) ICB population. In 2023/24, the recorded prevalence of diabetes in SNEE was 7.8%, statistically significantly higher than the national rate of 7.7%. The estimated prevalence of diagnosed and undiagnosed type 2 diabetes among adults aged 16 and over was 7.9% in 2021. These figures indicate that levels of diabetes within the SNEE population are consistent with national patterns.

Regarding care processes for diabetes across SNEE ICB; for people with type 1 diabetes, 65.5% received all eight recommended care processes in 2023/24, statistically significantly higher than the England average of 47.2%. For type 2 diabetes, 73.9% of patients received all eight care processes, also statistically significantly higher when compared with 62.4% across England, placing SNEE among the better-performing areas in England. These care processes include essential checks such as HbA1c (blood glucose), blood pressure, cholesterol, kidney function, foot and eye assessments, and lifestyle reviews, which are key to preventing complications.

Outcomes relating to disease control are also broadly positive. For type 1 diabetes, 39.8% of patients achieved a blood glucose (HbA1c) level of 58 mmol/mol or less, statistically similar to the national figure. Among those with type 2 diabetes, 66.0% achieved this level, statistically significantly higher than the England rate of 64.2%. This suggests relatively effective glycaemic control among patients with type 2 diabetes in the SNEE area.

Blood pressure control among people with diabetes is similarly strong. 66.6% of those with type 1 diabetes and 69.3% of those with type 2 diabetes achieved a blood pressure reading of 140/80 mmHg or lower, compared with national averages of 67.7% (statistically similar to England for type 1 diabetes) and 66.0% (statistically significantly higher for type 2 diabetes when compared to England) respectively.

Table 4. Rates of diabetes and associated indicators from Fingertips for Suffolk and North East Essex ICB registered patients, compared to England, 2023/24

Indicator	Period	SNEE ICB Count	SNEE ICB Value	England Value	England Worst/Lowest	England Best/Highest
Diabetes: QOF prevalence	2024/25	72,127	8.1%	7.9%	6.3%	10.0%
Estimated prevalence of diagnosed and undiagnosed type 2 diabetes (16+ yrs)	2021	64,804	7.9%	7.8%	6.3%	9.7%
People with type 1 diabetes who received all 8 care processes	2023/24	3,690	65.5%	47.2%	33.4%	65.5%
People with type 2 diabetes who received all 8 care processes	2023/24	46,325	73.9%	62.4%	44.2%	76.3%
People with type 1 diabetes who achieved a blood glucose level of 58 mmol/mol or less	2023/24	2,025	39.8%	39.8%	32.4%	47.1%
People with type 2 diabetes who achieved a blood glucose level of 58 mmol/mol or less	2023/24	39,605	66.0%	64.2%	61.4%	67.7%
People with type 1 diabetes who achieved a blood pressure of 140/80 or less	2023/24	3,315	66.6%	67.7%	60.7%	75.4%
People with type 2 diabetes who achieved a blood pressure of 140/80 or less	2023/24	40,995	69.3%	66.0%	59.4%	70.3%

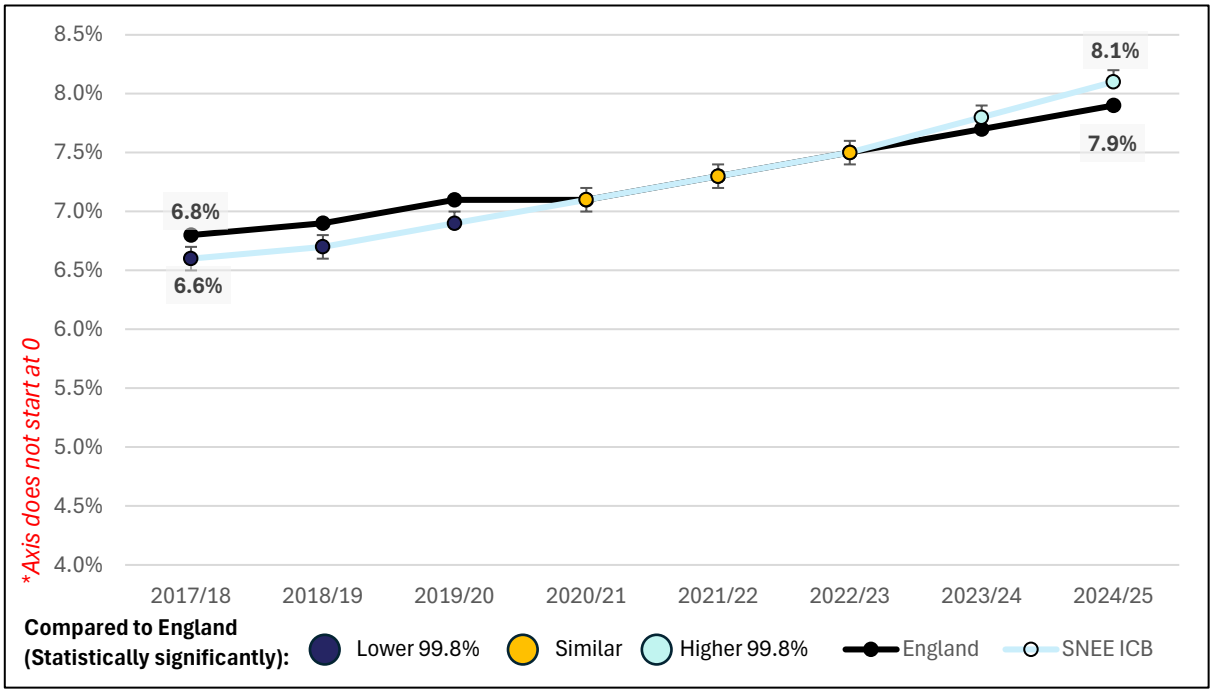
Compared to England (Statistically significantly): Better 95% | Similar | Worse 95% | Lower 99.8% | Similar | Higher 99.8%

Quintiles: Low | | | | High

Source: Office for Health Improvement and Disparities (2025)

The prevalence of diabetes among SNEE ICB registered patients has statistically significantly increased from 6.6% in 2017/18 to 8.1% in 2024/25. The prevalence across England has also statistically significantly increased over the same period, from 6.8% in 2017/18 to 7.9% in 2024/25. SNEE ICB previously had a diabetes prevalence statistically significantly lower than the England average between 2017/18 to 2019/20, before the prevalence in 2023/24 and 2024/25 for SNEE ICB became statistically significantly higher than the England rate (8.1% for SNEE ICB, 7.9% for England).

Figure 15. Diabetes prevalence for Suffolk and North East Essex ICB registered patients, compared to England, 2017/18 to 2024/25



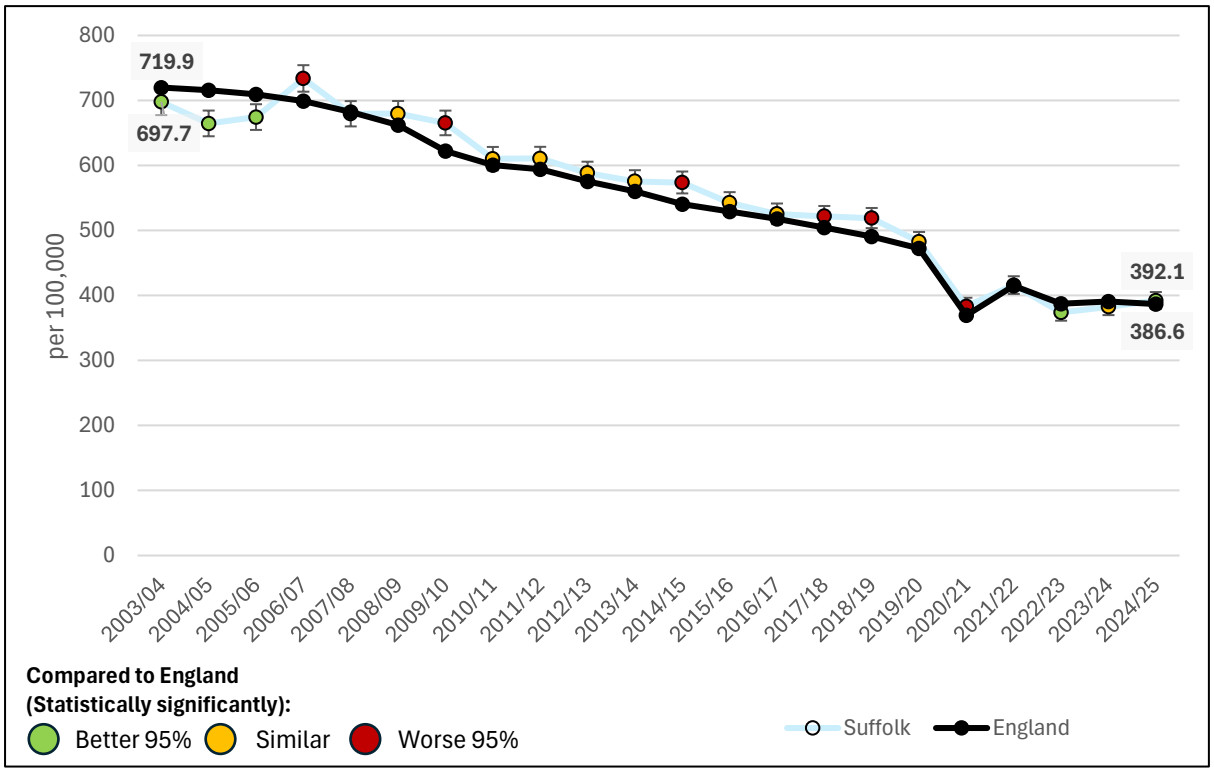
Source: Office for Health Improvement and Disparities (2025)

Conditions affecting the heart

Coronary heart disease is one of the two most common causes of premature death in the UK. Evidence relating to the management of CHD is well established and if implemented can reduce the risk of death from CHD and improve the quality of life for patients. The following data focuses on the burden of patients in hospital settings either receiving emergency care for acute coronary heart disease events such as heart attack, or elective care and treatment for those patients with established CHD consistent with clinical guidelines.

The directly age standardised hospital admission rate from coronary heart disease for Suffolk was 392.1 per 100,000 population for all ages in 2024/25, statistically similar to the England rate (386.6 per 100,000) in the same year. This rate has statistically significantly decreased over the last 20 years from the figure in 2004/05 (664.5 per 100,000). The trend also includes a noticeable dip in 2020/21, reflecting the reduction in hospital attendances during the Covid-19 pandemic when access to, and use of, healthcare services was disrupted.

Figure 16. Hospital admissions due to coronary heart disease (CHD), rate per 100,000, England and Suffolk, 2003/04 to 2024/25



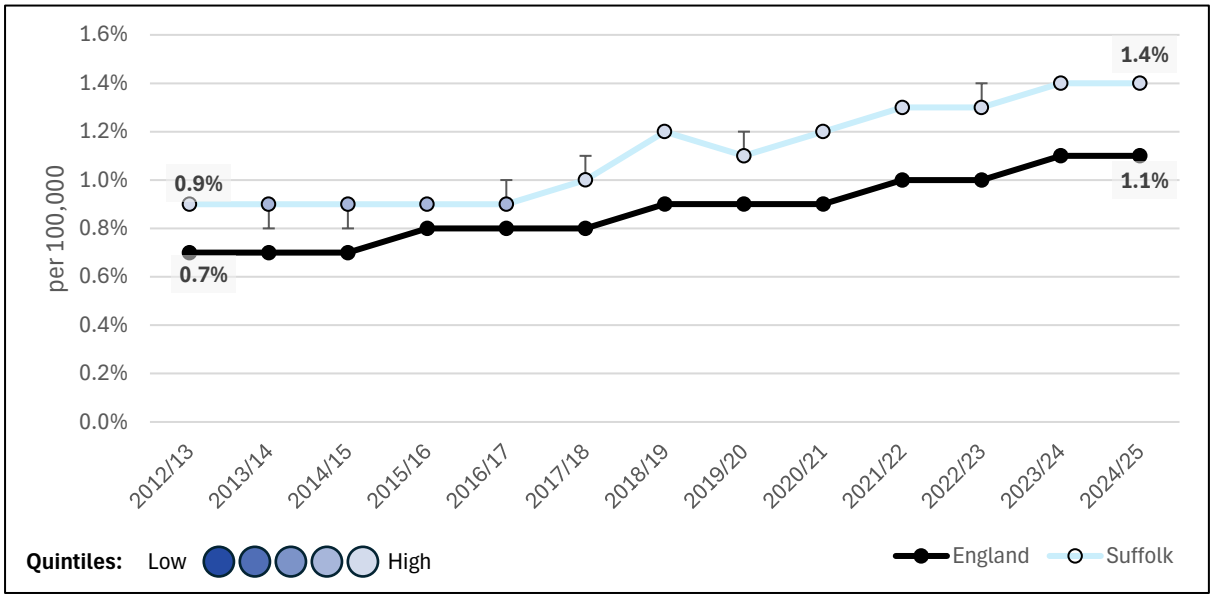
Source: Office for Health Improvement and Disparities (2025)

Heart Failure (HF) is responsible for a dramatic impairment of quality of life, carries a poor prognosis for patients, and is very costly for the NHS to treat (second only to stroke). The following data focuses on the burden of patients in hospital settings in England either receiving emergency care for acute events, or elective care and treatment for those patients with established heart failure consistent with clinical guidelines in England.

The Quality and Outcomes Framework (QOF) states 1.4% (11,714) of Suffolk patients have heart failure as recorded on practice disease registers in 2024/25. This proportion places

Suffolk in the highest quintile nationally, with the percentage statistically significantly increasing from 0.9% in 2012/13 to 1.4% in 2024/25.

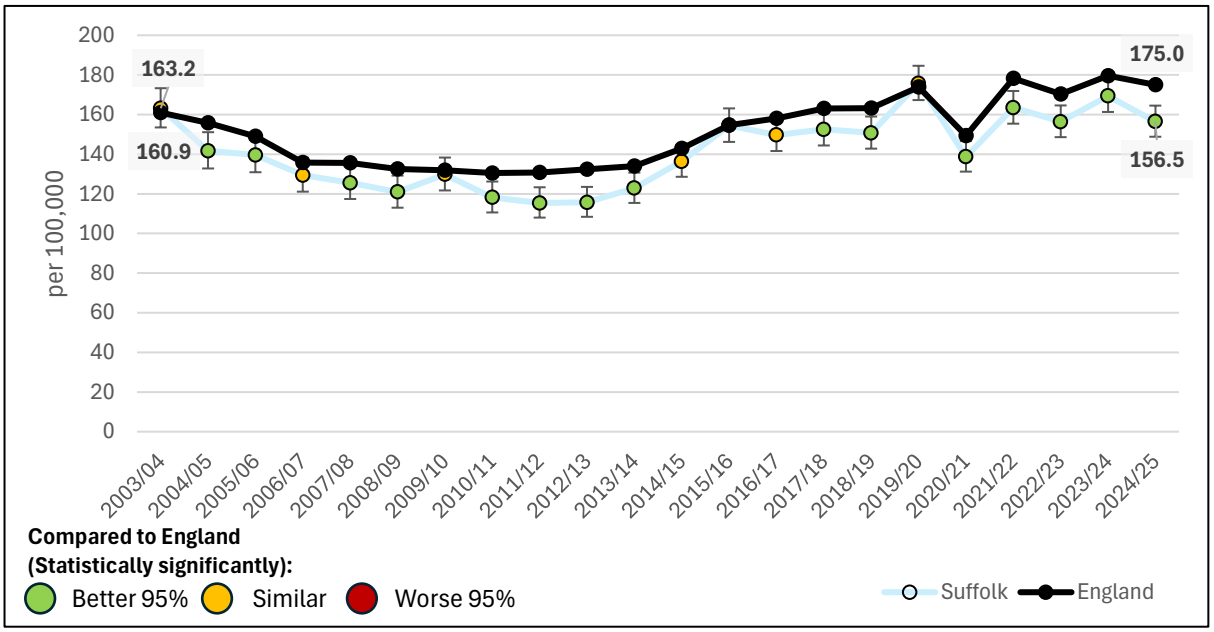
Figure 17. Heart failure: QOF prevalence (All ages), Suffolk and England, 2012/13 to 2024/25



Source: Office for Health Improvement and Disparities (2025)

In Suffolk in 2024/25, there were 1,575 hospital admissions due to heart failure, producing a rate of 156.5 per 100,000. This rate was statistically significantly lower than the average across England during the same period (175.0 per 100,000). However, the rate per 100,000 of hospital admissions due to heart failure in Suffolk is statistically similar in 2024/25 to 20 years prior – 163.2 per 100,000 in 2003/04.

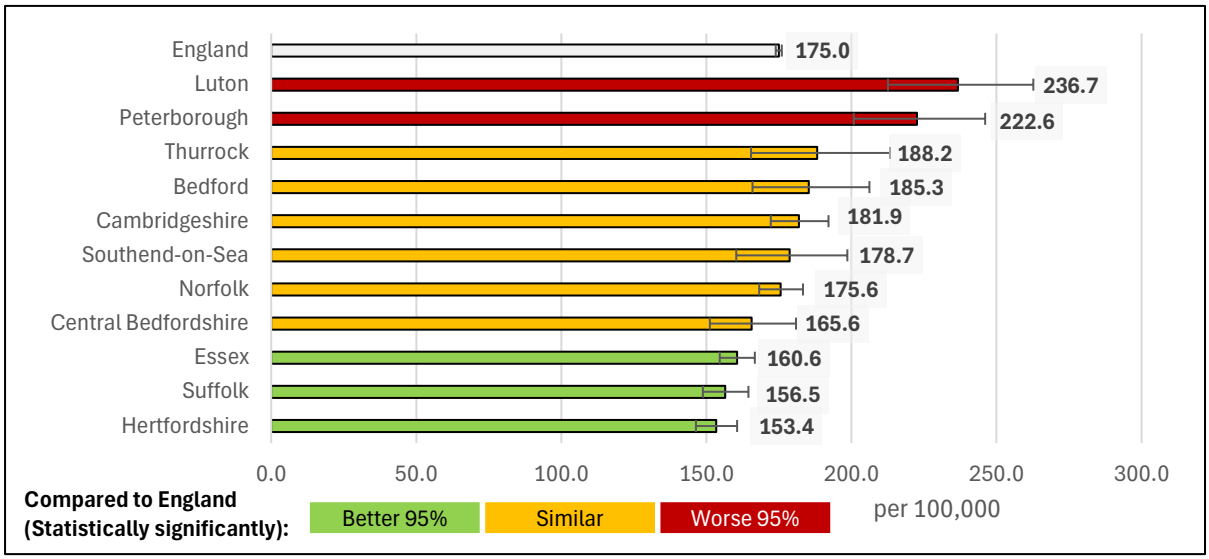
Figure 18. Hospital admissions due to heart failure, Suffolk and England, 2003/04 to 2024/25



Source: Office for Health Improvement and Disparities (2025)

Compared to other upper-tier local authorities across the East of England, Suffolk has one of the lowest rates per 100,000 of hospital admissions due to heart failure in 2024/25, being one of the four areas with a rate statistically significantly lower than the average across England (including Essex and Hertfordshire).

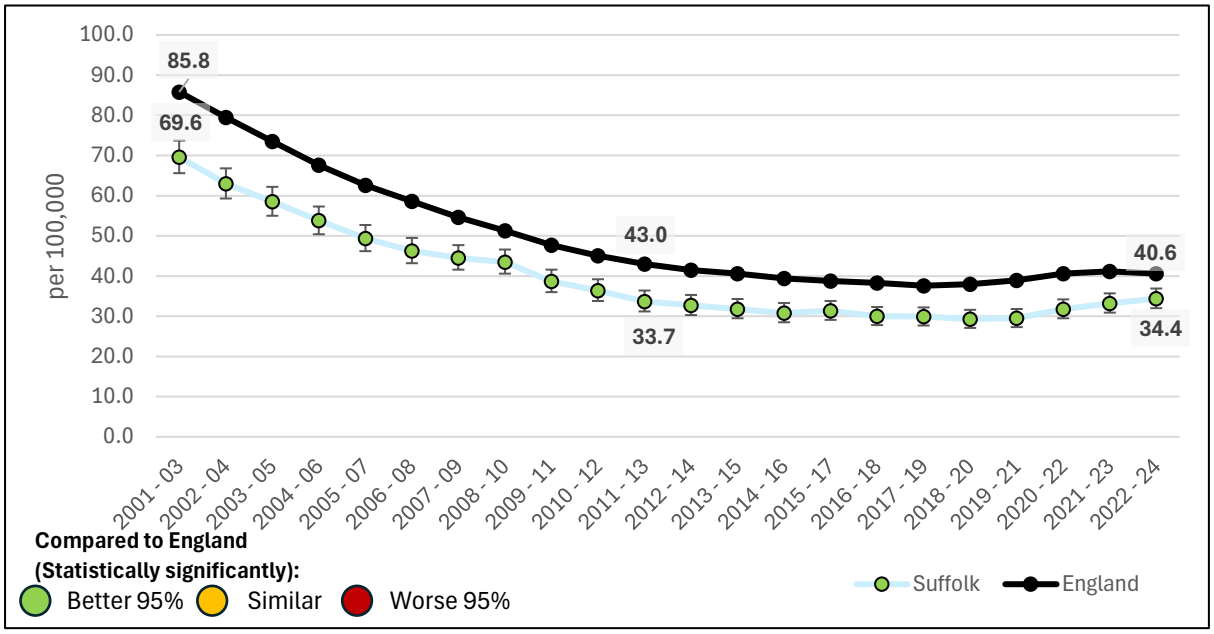
Figure 19. Hospital admissions due to heart failure, Suffolk and East of England region neighbours, compared to England, 2024/25



Source: Office for Health Improvement and Disparities (2024)

Ischaemic heart disease is a leading cause of death in England, especially among males, and is the most common cause of premature mortality[39]. Although treatment and lifestyle improvements have reduced deaths, continued progress requires focused efforts on prevention and care[39]. The following indicator captures the directly age-standardised mortality rate from ischaemic heart disease per 100,000 in those aged under 75 years of age between 2022-24. Across Suffolk between 2022-24, there were 785 deaths from ischaemic heart disease, producing a rate of 34.4 per 100,000, which was statistically significantly lower than the rate across England over the same period (40.6 per 100,000). Improvements in the mortality rate from ischaemic heart disease per 100,000 for Suffolk and England have stalled in recent years. While the mortality rate for Suffolk and England halved from 69.6 per 100,000 in 2001-03 to 33.7 per 100,000 in 2011-13, the rate in 2011-13 remains statistically similar in Suffolk in 2022-23 (34.4 per 100,000).

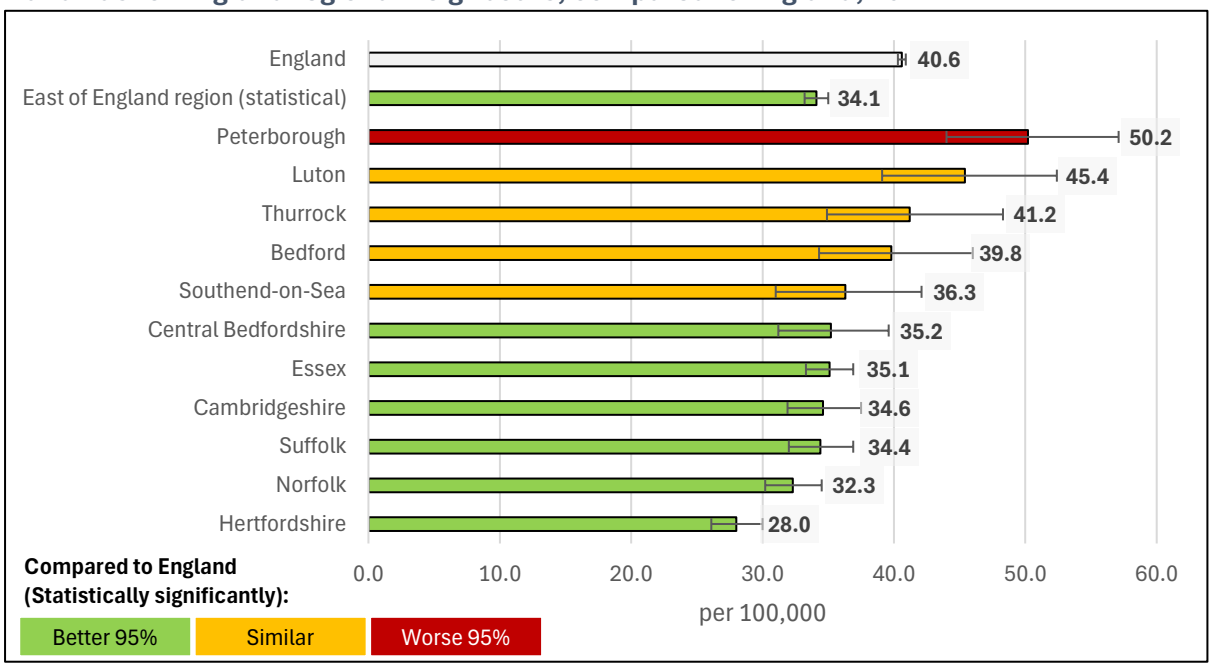
Figure 20. Under 75 mortality rate per 100,000 from ischaemic heart disease for Suffolk and England, 2001-03 to 2022-24



Source: Office for Health Improvement and Disparities (2025)

Across the East of England region, Suffolk has the third lowest rate per 100,000 (34.4) for under 75 mortality from ischaemic heart disease in 2022-24, above only Norfolk (32.3 per 100,000) and Hertfordshire (28.0 per 100,000).

Figure 21. Under 75 mortality rate per 100,000 from ischaemic heart disease for Suffolk and East of England regional neighbours, compared to England, 2022-24



Source: Office for Health Improvement and Disparities (2024)

Rates of cardiovascular disease and related conditions among registered patients in the SNEE ICB area are generally in line with or above national averages. For several key indicators, prevalence and management outcomes are statistically significantly higher than England

values, suggesting effective identification and ongoing management of cardiovascular conditions.

In 2024/25, the recorded prevalence of coronary heart disease (CHD) in SNEE was 3.4%, statistically significantly higher than the national figure of 3.0%. Similarly, the prevalence of heart failure was 1.4% compared with 1.1% nationally, while heart failure due to left ventricular systolic dysfunction (LVSD) affected 0.7% of registered patients, but was statistically significantly higher than the England average (0.6%).

Among SNEE ICB patients with CHD aged under 80, 78.1% had a most recent blood pressure reading of 140/90 mmHg or below, statistically similar when compared with 77.5% across England. For those aged 80 and over, 86.9% had a last blood pressure reading at or below 150/90 mmHg, also statistically similar to the England average of 86.0%.

Indicators relating to the clinical management of CHD and heart failure are broadly similar to those seen nationally. Among patients with CHD, 90.6% had a record confirming the use of aspirin, anti-platelet therapy (APT) or anticoagulant (ACT) treatment, statistically similar to the England value of 90.7%. For patients with heart failure due to LVSD, 81.5% were treated with an ACE inhibitor (ACE-I) or angiotensin receptor blocker (ARB), compared with 81.7% across England, and 80.1% were prescribed beta-blockers, compared with 81.5% nationally.

84.9% of patients with heart failure had their diagnosis confirmed by an electrocardiogram (ECG) or specialist assessment, just below but statistically similar to the England average of 85.0%. Meanwhile, 80.5% of patients with heart failure received a comprehensive annual review including an assessment of functional capacity, statistically significantly higher than the national rate of 78.5%.

Overall, the data indicates that SNEE ICB performs strongly in identifying and monitoring cardiovascular conditions compared to the England average values, particularly in detecting CHD and heart failure, as well as managing blood pressure among affected patients.

Table 5. Rates of Coronary Heart Disease and associated indicators from Fingertips for Suffolk and North East Essex ICB registered patients, compared to England, 2023/24

Indicator	Period	SNEE ICB Count	SNEE ICB Value	England Value	England Worst/Lowest	England Best/Highest
CHD: QOF Prevalence	2024/25	36,973	3.4%	3.0%	1.8%	4.6%
Heart Failure: QOF Prevalence (All ages)	2024/25	14,770	1,4%	1.1%	0.6%	1.8%
Heart failure with LVSD: QOF prevalence (All ages)	2024/25	7,269	0.7%	0.6%	0.3%	1.1%
Last BP reading of patients (<80 yrs, with CHD) in the last 12 months is <= 140/90 mmHg (denominator incl. PCAs)	2024/25	19,168	78.1%	77.5%	73.5%	82.7%
Last BP reading of patients (80+ yrs, with CHD) in the last 12 months is <= 150/90 mmHg (denominator incl. PCAs)	2024/25	10,802	86.9%	86.0%	83.1%	88.9%
For patients with CHD, a record that aspirin, APT or ACT is taken exists (denominator incl. PCAs)	2024/25	33,514	90.6%	90.7%	88.8%	92.2%

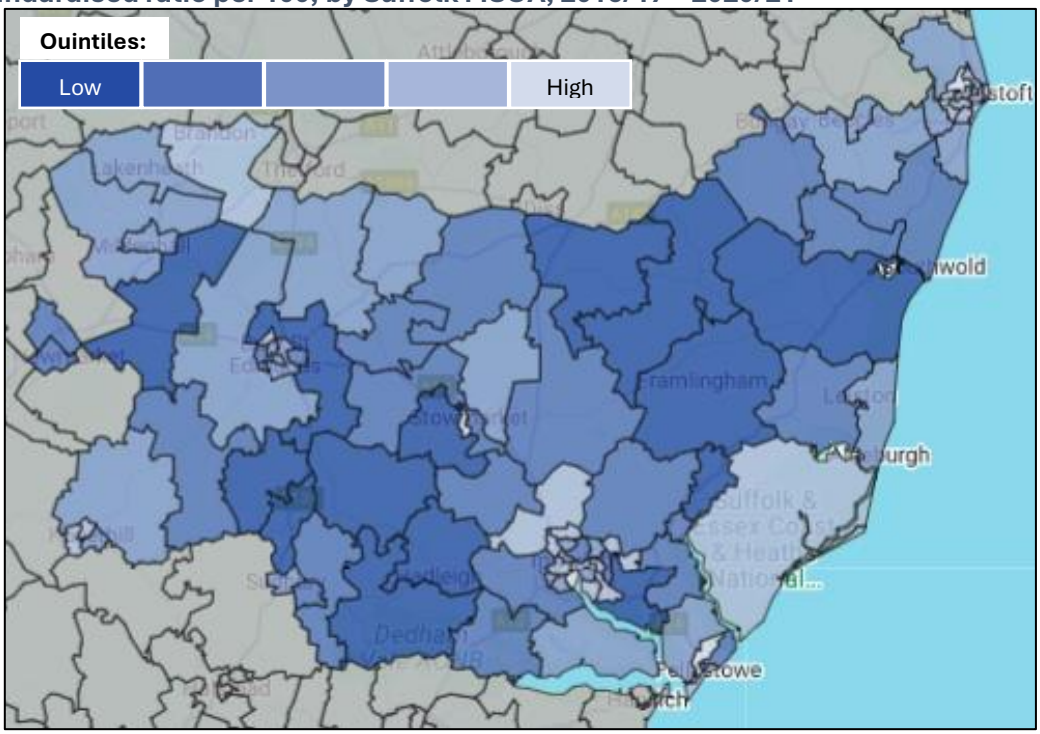
Heart failure w LVSD: treated with ACE-I or ARB (denominator incl. PCAs)	2024/25	5,921	81.5%	81.7%	78.1%	85.2%
Patients' heart failure diagnosis confirmed by an ECG or specialist assessment (denominator incl. PCAs)	2024/25	3,682	84.9%	85.0%	79.6%	89.1%
Patients with heart failure due to LVSD treated with beta-blockers (denominator incl. PCAs)	2024/25	5,822	80.1%	81.5%	77.8%	85.9%
Patients with heart failure who had a review in the last 12 months, including the assessment of functional capacity (denominator incl. PCAs)	2024/25	11,893	80.5%	78.5%	70.7%	85.1%

Compared to England (Statistically significantly): Lower 99.8% | Similar | Higher 99.8%

Source: Office for Health Improvement and Disparities (2024)

Emergency hospital admissions for coronary heart disease between 2016/17 and 2020/21 showed significant geographic variation across the county. While the county overall recorded an indirectly standardised ratio of 92.4 per 100, statistically significantly below the England average of 100.0, this masked considerable inequality. Stowmarket West experienced the highest ratio at 144.2, over 40% higher than the England average, with multiple urban and coastal neighbourhoods in Ipswich and Lowestoft also recording elevated rates above 110. In contrast, rural communities such as Fressingfield, Laxfield & Worlingworth (61.4) and Hadleigh (65.3) experienced rates at least 30% below the national average. This pattern likely reflects the clustering of cardiovascular risk factors and deprivation in specific urban and coastal areas.

Figure 22. Coronary heart disease: emergency hospital admissions, indirectly standardised ratio per 100, by Suffolk MSOA, 2016/17 – 2020/21

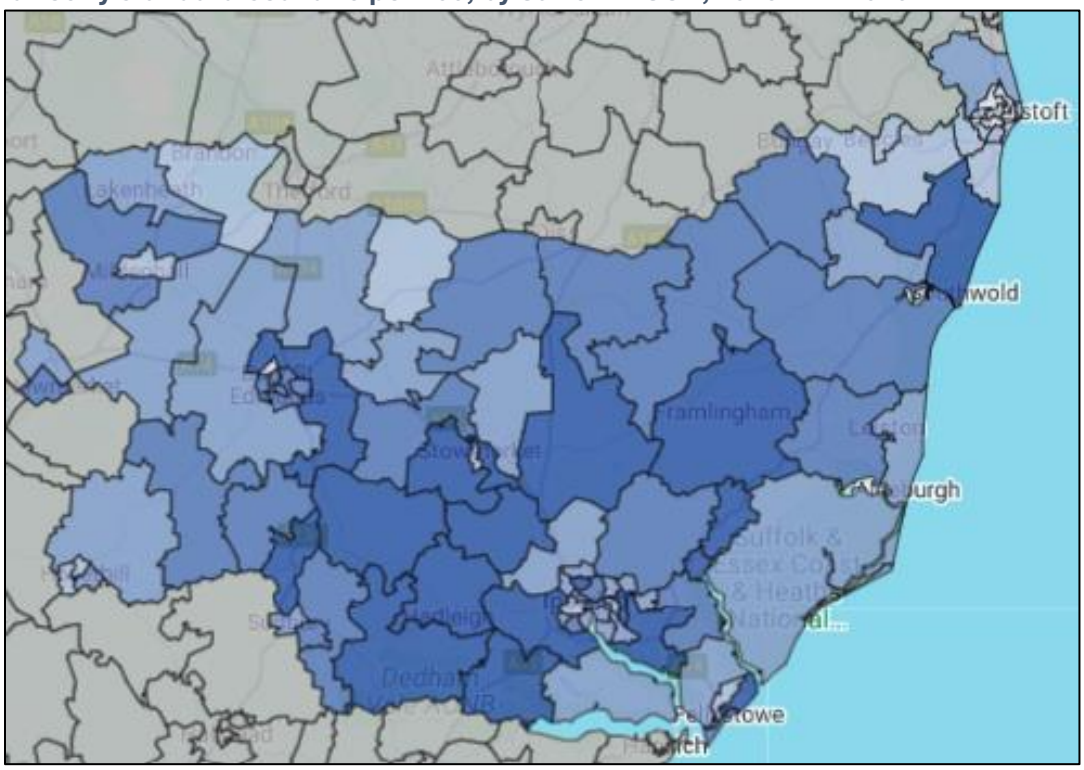


Source: Office for Health Improvement and Disparities (2022)

Emergency hospital admissions for heart attack (myocardial infarction) between 2016/17 and 2020/21 also varied across the county. Suffolk overall recorded an indirectly standardised ratio of 91.4, which was statistically significantly below the England average of 100.0. Gunton West experienced the highest ratio at 147.5, with Oulton (137.8), Normanston & Oulton Broad East (133.5), and Howard Estate & Northgate (128.5) also recording the highest ratios across Suffolk. Coastal Lowestoft communities featured particularly prominently, with five neighbourhoods experiencing rates at least 25% above the national average, alongside higher rates in Felixstowe West, Stowmarket West, Haverhill, and Brandon. In contrast, rural and market town communities such as Woodbridge (57.0), Stowmarket Outer, Finborough & Battisford (57.5), Castle Hill (57.8), and Wickham Market & Melton (62.4) experienced rates at least 30% below the England average.

These neighbourhood-level differences in emergency admissions reflect broader geographic inequalities in cardiovascular and premature mortality. National data show that even after adjusting for age, sex, ethnicity and migration status, large variations remain between areas, with socioeconomic factors explaining a substantial portion of the gap[40,41].

Figure 23. Heart attack (myocardial infarction): emergency hospital admissions, indirectly standardised ratio per 100, by Suffolk MSOA, 2016/17 – 2020/21



Source: Office for Health Improvement and Disparities (2022)

Conditions of the kidney

Chronic kidney disease (CKD) is a long-term condition where the kidneys do not work as well as they should. It's a common condition often associated with getting older[42]. Individuals with chronic kidney disease (CKD) have an increased risk of developing cardiovascular disease and are 20 times more likely to die from cardiovascular disease than kidney failure[43,44]. They exhibit an elevated cardiovascular risk manifesting as coronary artery disease, heart failure, arrythmias, and sudden cardiac death[45]. Several of the risk factors for kidney disease are also risk factors for cardiovascular disease, such as high blood pressure or diabetes[43]. The kidneys and the cardiovascular system are interconnected, meaning issues with one can affect the other. For instance, when the kidneys aren't functioning properly, blood pressure may rise and blood vessels might weaken, causing the heart to work harder to circulate blood throughout the body[43].

The aim of early identification and treatment of chronic kidney disease is to decrease the risk of progression to cardiovascular disease, as well as avoiding the need for dialysis or a kidney transplant[44].

CKD prevalence rises sharply with age, and national data consistently shows much higher rates of moderate-to-severe CKD in older adults[29]. This means Suffolk's demographic structure alone places the county at greater risk of CKD, hypertension, atrial fibrillation and other cardiovascular comorbidities. Because CKD is both a consequence and driver of cardiovascular disease, this contributes to other risks such as diabetes, hypertension and social isolation in older age.

The prevalence and management of chronic kidney disease among patients registered with Suffolk and North East Essex (SNEE) Integrated Care Board (ICB) general practices indicated a higher recorded burden of disease, along with generally good performance in areas of clinical management.

In 2024/25, the recorded prevalence of CKD among adults aged 18 and over across SNEE ICB was 6.2%, statistically significantly higher than the England average of 4.6%. This likely reflects both a genuine higher burden of disease linked to underlying population risk factors, such as hypertension and diabetes, and effective case-finding and diagnosis within primary care, as well as having an older population structure compared to the England average.

In terms of clinical management, 52.0% of SNEE ICB CKD patients had a record of an albumin-to-creatinine ratio (ACR) test, which is a key marker for kidney damage. This proportion was statistically similar to the national average of 52.4%. Blood pressure control among CKD patients in SNEE was statistically similar to the England average, with 73.1% of patients treated to the appropriate threshold, compared with 72.5% nationally. Lipid management was statistically significantly lower for SNEE ICB compared to national performance: 69.3% of CKD patients were treated with lipid-lowering therapy compared with 70.3% across England.

Data on kidney replacement therapy provide additional context on disease progression and treatment outcomes. Between 2018 and 2023, the kidney replacement therapy acceptance rate in SNEE was 118.3 per million population, close to the national rate of 121.5. The ratio of observed to expected acceptance rates was 0.9. In 2023, an estimated 950 people in SNEE were receiving kidney replacement therapy, representing a 4.7% increase since 2018 - slightly below the national increase of 7.4%.

Across SNEE, 58.0% of patients receiving kidney replacement therapy had a kidney transplant, slightly higher than the national average of 55.5%, while 39.4% were on hospital-based dialysis (compared with 37.0% across England). Home-based dialysis was relatively uncommon, with only 2.6% of dialysis patients treated at home – less than half the national average of 7.4%.

Overall, SNEE ICB shows a high prevalence of CKD in 2024/25, but strong performance on monitoring and treatment indicators, particularly for blood pressure control and case identification. While the uptake of home dialysis remains lower than the England average, transplant rates are higher, and the overall burden of kidney replacement therapy is consistent with national levels. Please note in the following table, a lack of shading means the corresponding indicator has not been tested for statistical significance.

Table 6. Rates of Chronic Kidney Disease (CKD) and associated indicators from Fingertips for Suffolk and North East Essex ICB registered patients, compared to England, 2024/25

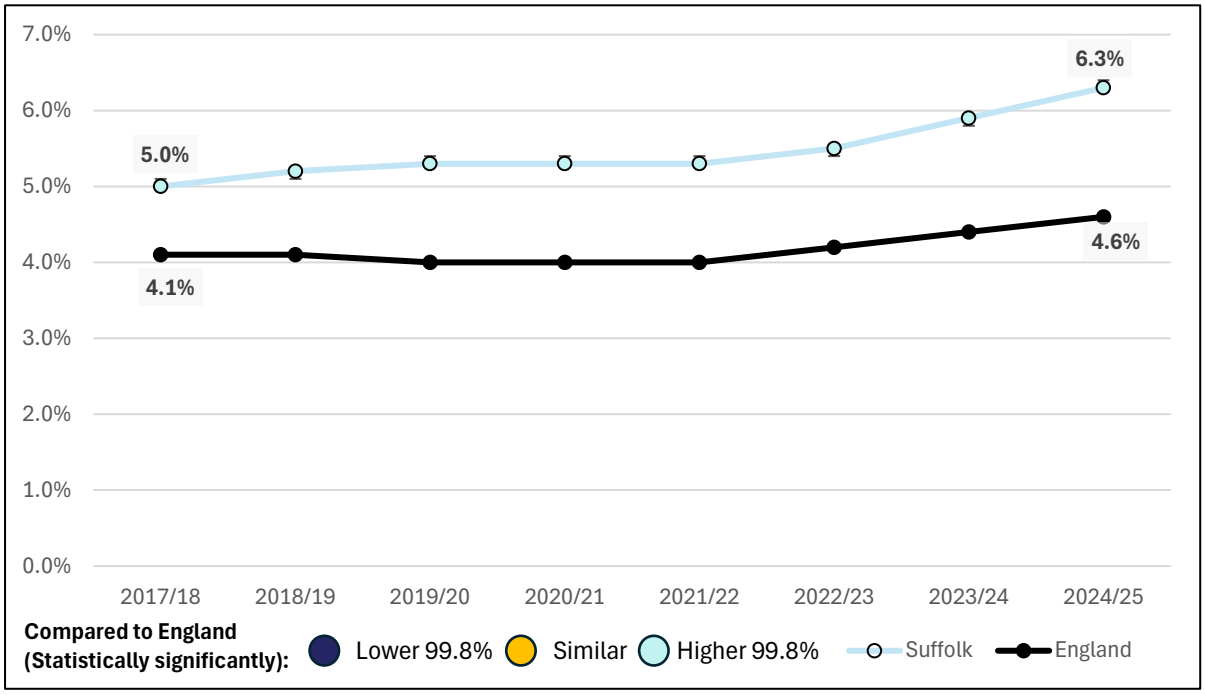
Indicator	Period	SNEE ICB Count	SNEE ICB Value	England Value	England Worst/Lowest	England Best/Highest
CKD: QOF prevalence (18+ yrs)	2024/25	53,964	6.2%	4.6%	2.6%	7.9%
CKD patients with a record of monitoring ACR test	2025	26,630	52.0%	52.4%	32.0%	70.1%
CKD patients treated with lipid lowering therapy	2025	35,480	69.3%	70.3%	63.5%	76.2%
CKD patients treated to appropriate blood pressure threshold	2025	29,495	73.1%	72.5%	66.1%	78.3%
Kidney replacement therapy acceptance rate	2018-23	-	118.3	121.5	96.6	170.2
Ratio of observed to expected kidney replacement therapy acceptance rate	2018-23	-	0.9	1.0	0.7	1.7
Number of people receiving kidney replacement therapy	2023	-	950	60,084	-	-
Percentage change in number of people receiving kidney replacement therapy	2018-23	-	4.7%	7.4%	-0.5%	20.9%
Percentage of people receiving dialysis who are on home-based dialysis	2023	-	6.3%	16.7%	6.3%	35.3%
Percentage of people receiving kidney replacement therapy on the different modality types: Kidney transplant	2023	-	58.0%	55.5%	42.8%	66.6%
Percentage of people receiving kidney replacement therapy on the different modality types: Home dialysis	2023	-	2.6%	7.4%	2.6%	18.5%
Percentage of people receiving kidney replacement therapy on the different modality types: Hospital dialysis	2023	-	39.4%	37.0%	27.2%	47.0%

Compared to England (Statistically significantly): Lower 99.8% | Similar | Higher 99.8% | Better 95% | Similar | Worse 95%

Source: Office for Health Improvement and Disparities (2025)

The prevalence of chronic kidney disease across Suffolk has statistically significantly increased by 1.3 percentage points from 2017/18 (5.0%) to 2024/25 (6.3%). The prevalence of CKD across England has also increased – but not by such a large proportion, increasing 0.5 percentage points from 4.1% in 2017/18, to 4.6% in 2024/25.

Figure 24. Chronic Kidney Disease (CKD) prevalence for Suffolk registered patients, compared to England, 2017/18 to 2024/25



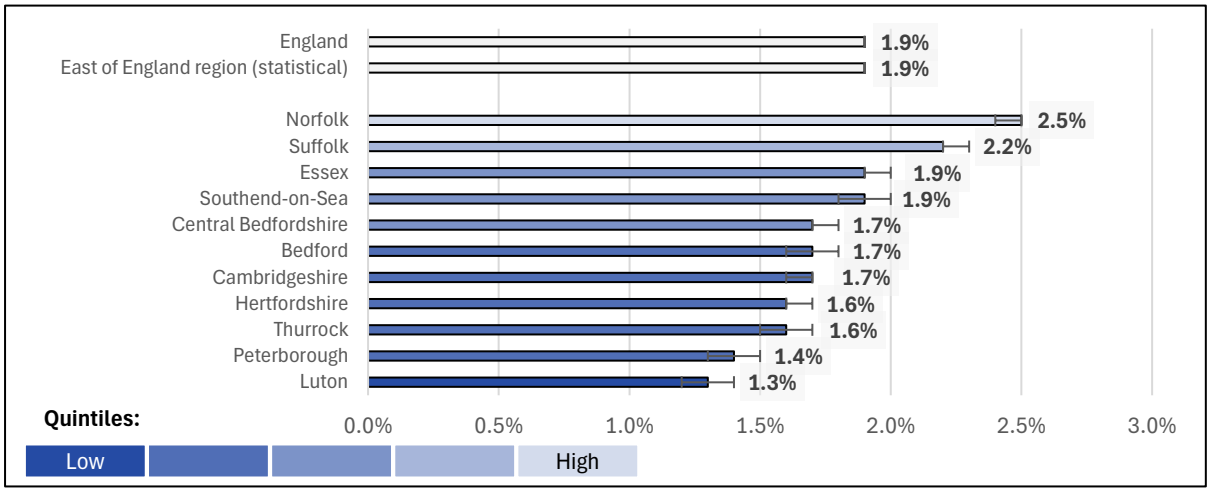
Source: Office for Health Improvement and Disparities (2025)

Stroke

Most cardiovascular disease deaths (around 85%) result from heart attacks and strokes, which are typically acute events caused by a blockage or rupture of blood vessels supplying the heart or brain[46]. A transient ischaemic attack (also called a TIA or "mini-stroke") is similar, but the blood flow to the brain is only temporarily disrupted[47]. Stroke is a type of cerebrovascular disease and is one of the leading causes of death in the UK. Many patients who survive a stroke will live with a disability because of their stroke. Stroke symptoms can include sudden weakness or numbness (often on one side of the body), difficulty speaking or understanding speech, loss of vision, dizziness, or severe headache[46]. Prompt recognition and urgent medical attention are vital to improve survival and recovery.

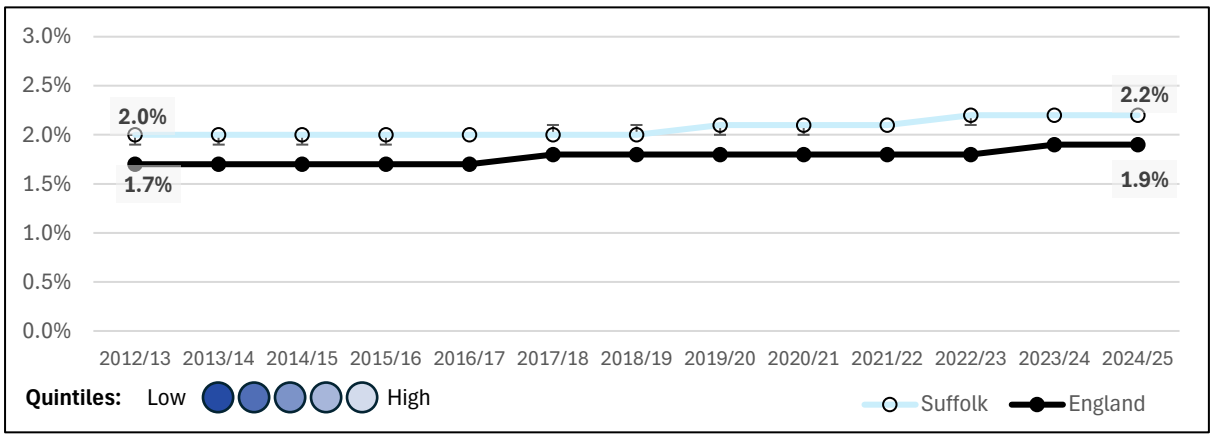
In 2024/25, the Quality and Outcomes Framework had the stroke prevalence at 2.2% of all Suffolk GP registered patients (18,188 individuals). This indicator includes the percentage of patients with stroke or transient ischaemic attack recorded on Suffolk's practice disease registers. The Suffolk prevalence of 2.2% places the county in the second highest quintile nationally, while also statistically significantly increasing over time (from 2.0%/16,229 individuals in 2018/19, to 2.2% in 2023/24).

Figure 25. Stroke: Quality and Outcomes Framework percentage, Suffolk and East of England region neighbours, 2024/25



Source: Office for Health Improvement and Disparities (2025)

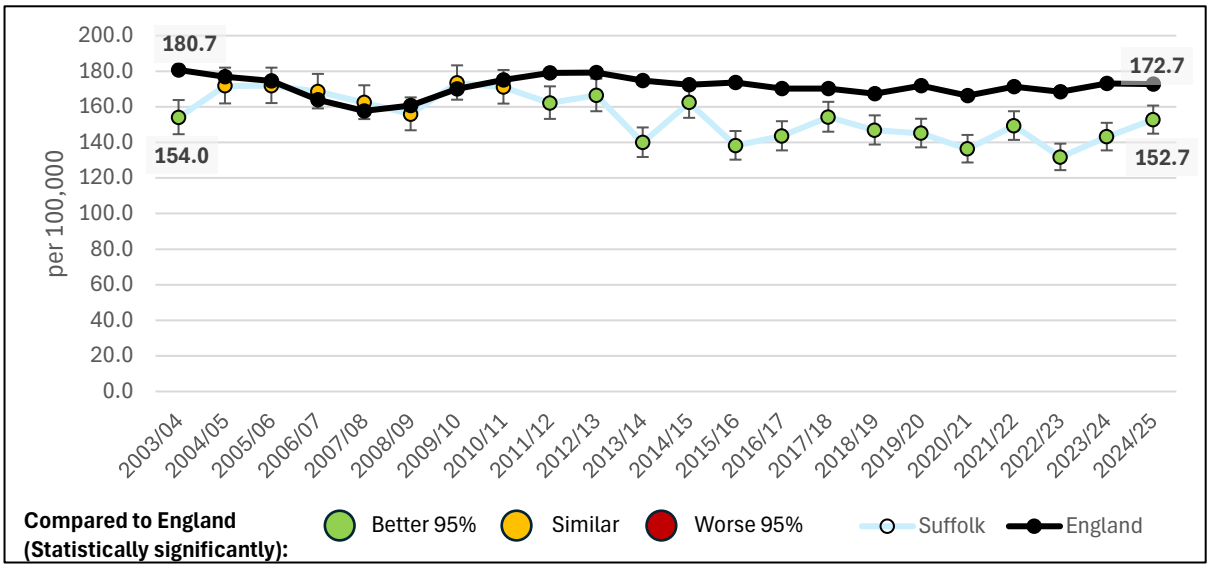
Figure 26. Stroke: Quality and Outcomes Framework percentage, Suffolk and England, 2012/13 to 24/25



Source: Office for Health Improvement and Disparities (2025)

In 2024/25, there were 1,490 hospital admissions due to stroke in Suffolk, equating to a rate of 152.7 per 100,000, which was statistically significantly lower than England during the same period (172.7 per 100,000).

Figure 27. Hospital admissions due to stroke per 100,000, Suffolk and England, 2002/04 to 2024/25

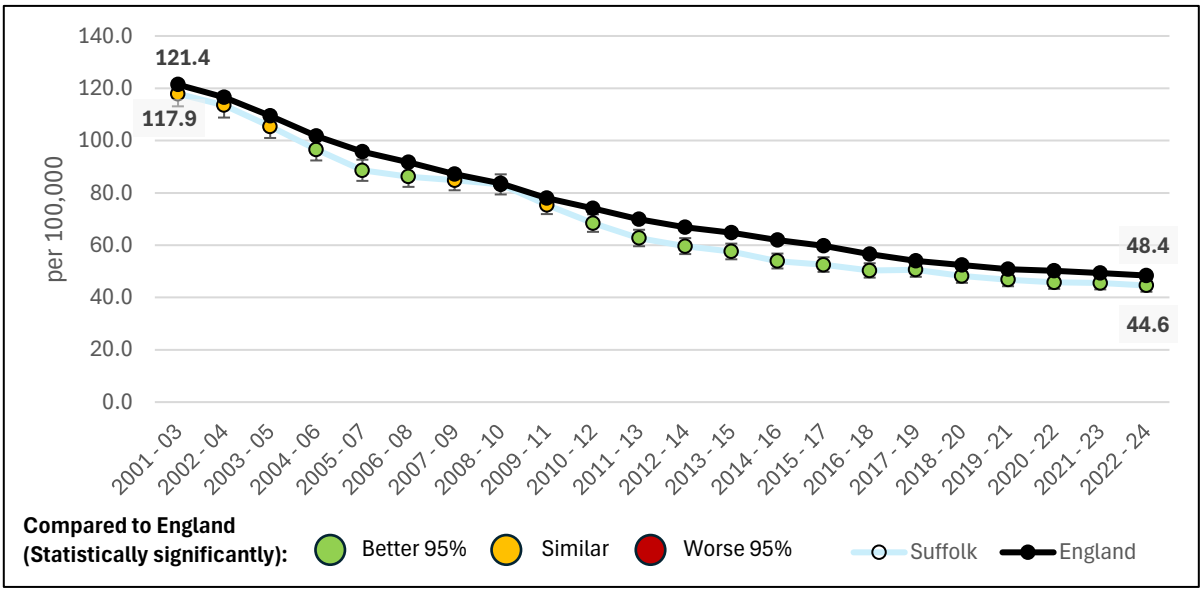


Source: Office for Health Improvement and Disparities (2025)

Significant progress has been made in recent decades regarding stroke treatment and health behaviour improvements. However, to further decrease premature mortality rates from stroke, it is essential to implement coordinated efforts in both prevention and treatment[48].

Between 2022-24, Suffolk recorded 1,338 deaths from stroke across all ages, resulting in a directly standardised mortality rate of 44.6 per 100,000. Suffolk's stroke mortality rate is statistically significantly lower when compared to the England average of 48.4 per 100,000.

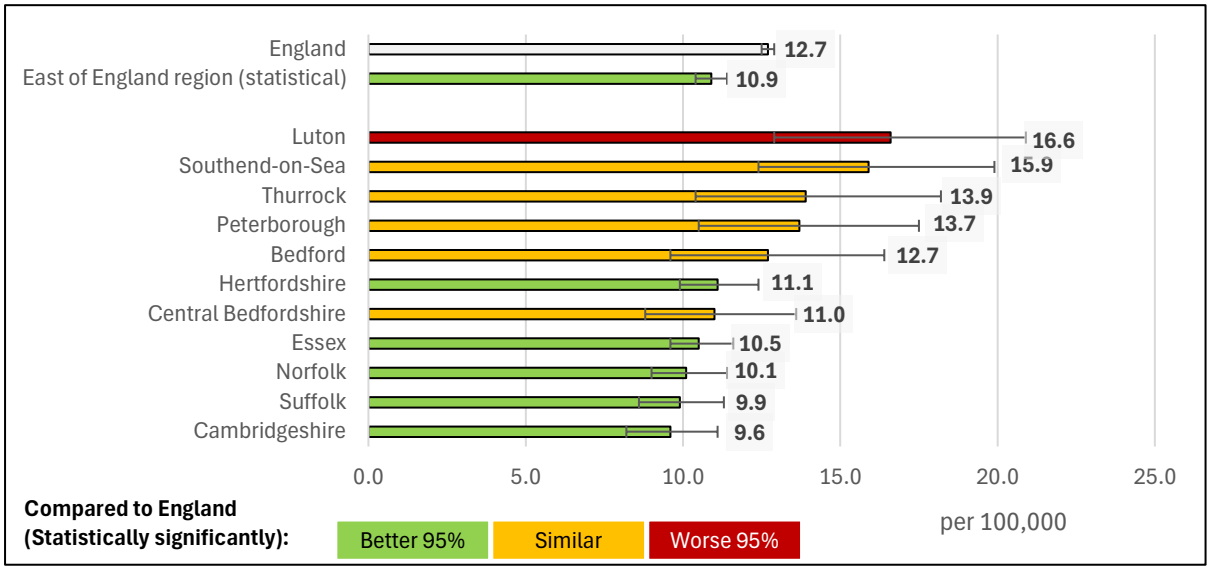
Figure 28. Mortality rate from stroke per 100,000, all ages (Persons), Suffolk and England, 2001-03 to 2022-24



Source: Office for Health Improvement and Disparities (2025)

In Suffolk between 2022-24, there were 225 deaths from stroke for individuals aged under 75. This produces a rate of 9.9 under 75 deaths from stroke per 100,000 for Suffolk in 2022-24, statistically significantly lower than the average across England over the same period (12.7 per 100,000).

Figure 29. Under 75 mortality rate per 100,000 from stroke (persons) in Suffolk and East of England region neighbours, 2022-24



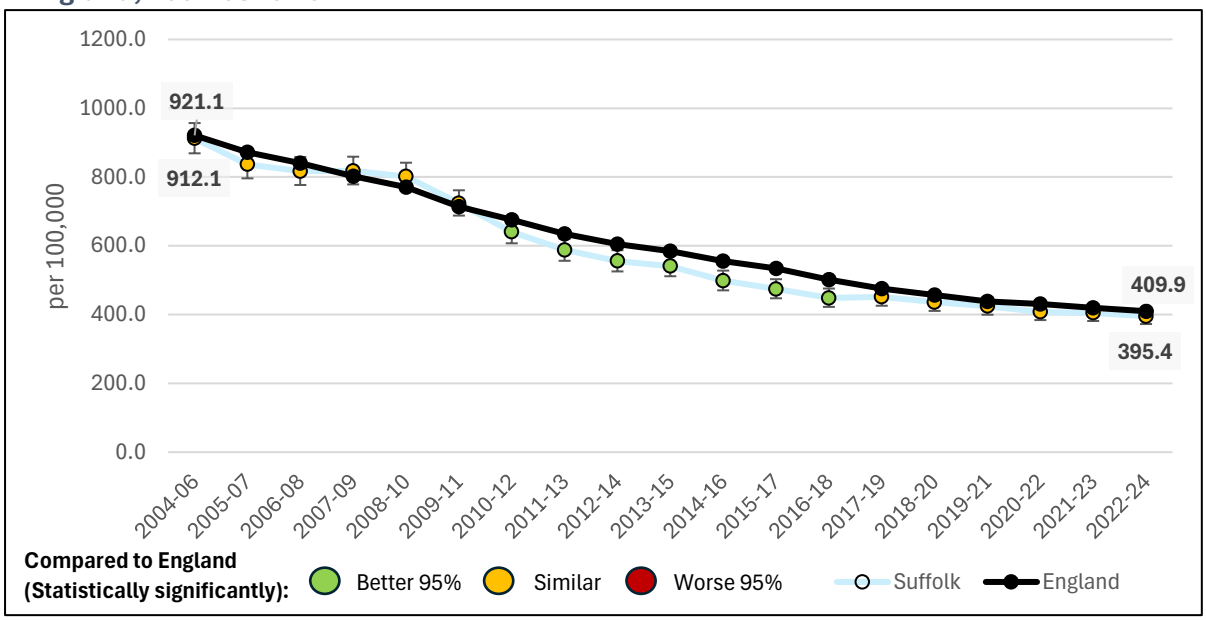
Source: Office for Health Improvement and Disparities (2025)

Between 2022-24, Suffolk recorded 1,113 deaths from stroke in the population aged 74 years and older, resulting in a directly standardised mortality rate of 395.4 per 100,000. Suffolk's stroke mortality rate is statistically similar to the England average of 409.9 per 100,000. The over 74 mortality rate per 100,000 from stroke has statistically significantly decreased and more than halved since 2004-06 from 912.1 per 100,000 in Suffolk and 921.1 per 100,000 across England, to 395.4 per 100,000 in Suffolk, and 409.9 per 100,000 across England.

Figure 30. Over 74 mortality rate per 100,000 from stroke in Suffolk and East of England region neighbours, 2022-24

Source: Office for Health Improvement and Disparities (2024)

Figure 31. Over 74 mortality rate per 100,000 from stroke in Suffolk compared to England, 2001-03 to 2022-24



Source: Office for Health Improvement and Disparities (2024)

In 2024/25, the Quality and Outcomes Framework recorded stroke prevalence at 2.1% across Suffolk and North East Essex ICB GP registered patients (23,011 individuals), statistically significantly higher than the England average of 1.9%. This indicator includes the percentage of patients with stroke or transient ischaemic attack recorded on practice disease registers.

Blood pressure control among stroke patients varied by age group across SNEE ICB. For patients under 80 years with a history of stroke or TIA, 74.0% (10,242 patients) had their last blood pressure reading at or below the target of 140/90 mmHg in the last 12 months, statistically significantly above the England average of 73.3%. For patients aged 80 and over, 84.5% (7,495 patients) achieved the higher threshold of 150/90 mmHg, also statistically significantly similar to the England rate of 84.3%.

Secondary prevention medication uptake was strong across SNEE ICB. In 2024/25, 91.5% of patients with stroke (15,891 individuals) had a record of taking an anti-platelet agent or anti-coagulant, statistically similar to the England average of 91.1%.

Atrial fibrillation prevalence across ICB was 2.8% in 2024/25 (30,608 patients), statistically significantly higher than the England average of 2.2% and among the higher values for ICBs nationally (highest: 3.4%). Among patients with atrial fibrillation at higher risk of stroke (CHADS2DS2-VASc score ≥2), 91.6% (23,667 patients) were treated with anti-coagulation therapy, statistically significantly higher than the England rate of 90.6%.

Also to note, over 1 in 4 (25.6%) of stroke admissions with a history of atrial fibrillation (88 patients) were not prescribed anticoagulation prior to their stroke in 2023/24. This represents a missed opportunity for prevention, as the best performing areas achieved rates as low as 17.4%.

The Sentinel Stroke National Audit Programme recorded 1,712 stroke admissions across SNEE ICB in 2023/24. Post-stroke follow-up care showed room for improvement, with only 34.3% of

stroke patients (430 individuals) assessed at 6 months, below the England average of 37.9% and below the best performing area (85.1%).

Premature mortality from stroke across SNEE ICB showed a better trend. The under 75 mortality rate was 8.6 per 100,000 in 2024 (83 deaths), statistically significantly lower than the England average of 12.7 per 100,000. Over the three-year period 2022-24, the rate was 10.2 per 100,000 (296 deaths), statistically significantly below the England average of 12.7 per 100,000. Please note values in the SNEE ICB Value column without a colour shading have not been compared for statistical significance.

Table 7. Rates of stroke and associated indicators from Fingertips for Suffolk and North East Essex ICB registered patients, compared to England, 2024/25

Indicator	Period	SNEE ICB Count	SNEE ICB Value	England Value	England Worst/ Lowest	England Best/ Highest
Stroke: QOF prevalence	2024/25	23,911	2.1%	1.9%	1.0%	3.1%
Atrial fibrillation: QOF prevalence (All ages)	2024/25	30,608	2.8%	2.2%	0.9%	3.4%
Last BP reading of patients (<80 yrs, with a history of stroke or TIA) in the last 12 months is <= 140/90 mmHg (denominator incl. PCAs)	2024/25	10,242	74.0%	73.3%	68.8%	76.9%
Last BP reading of patients (80+ yrs, with a history of stroke or TIA) in the last 12 months is <= 150/90 mmHg (denominator incl. PCAs)	2024/25	7,746	84.5%	84.3%	80.4%	88.1%
For patients with stroke a record exists that an anti-platelet agent or an anti-coagulant is taken (denominator incl. PCAs)	2024/25	15,891	91.5%	91.1%	88.2%	92.6%
Patients with AF who are treated w anti-coag. Therapy (CHADS2DS2-VASc >=2) (denominator incl. PCAs)	2024/25	23,667	91.6%	90.6%	88.1%	93.2%
Stoke admissions (Sentinel Stroke National Audit Programme)	2023/24	-	1,712	86,015	-	-
Stroke patients who are assessed at 6 months	2023/24	430	34.3%	37.9%	10.5%	85.1%
Stroke admissions with history of atrial fibrillation not prescribed anticoagulation prior to stroke	2023/24	88	25.6%	28.3%	17.4%	41.7%
Under 75 mortality rate from stroke (1 year range)	2024	83	8.6	12.7	18.8	7.8
Under 75 mortality rate from stroke (3 year range)	2022-24	296	10.2	12.7	16.4	8.7

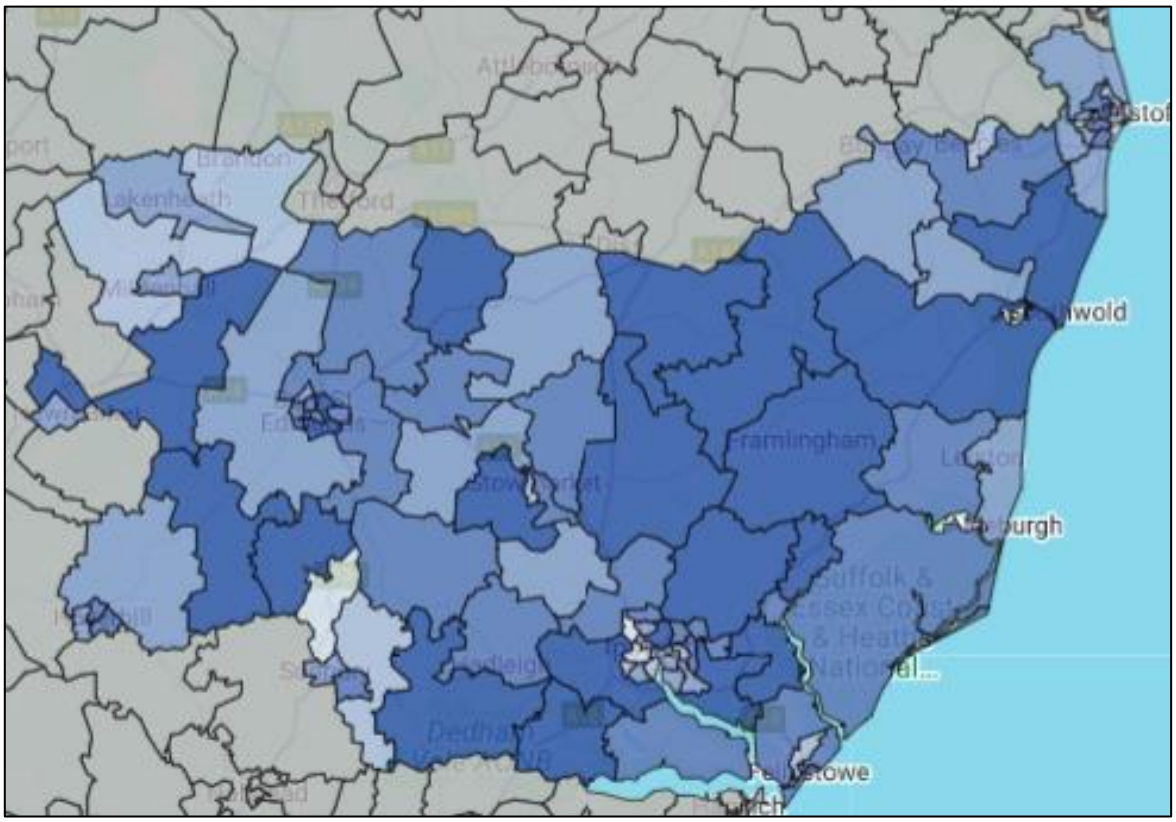
Compared to England (Statistically significantly): Higher 99.8% | Similar | Lower 99.8% | Better 95% | Similar | Worse 95% | Better 99.8% | Similar | Worse 99.8%

Source: Office for Health Improvement and Disparities (2025)

Emergency hospital admissions for stroke between 2016/17 and 2020/21 showed large variation across the county. While the county overall recorded an indirectly standardised ratio of 90.5, statistically significantly below the England average of 100.0, this masked considerable differences at a local level. Lowestoft Harbour & Kirkley experienced the highest rate at 136.8, 37% above the England average, with Whitehouse (131.3), Gipping & Chantry Park (126.9), and

North Sudbury & Long Melford (126.5) also recording higher ratios. Multiple urban neighbourhoods in Ipswich and Lowestoft featured among areas with higher emergency admission ratios. In contrast, rural communities such as Glemsford & Lawshall (46.0), Kesgrave East & Martlesham (63.7), and Fressingfield, Laxfield & Worlingworth (64.8) experienced rates at least 35% below the national average. This pattern likely reflects underlying inequalities, with the clustering of stroke risk factors and deprivation in specific urban and coastal areas.

Figure 32. Stroke emergency hospital admissions, indirectly standardised ratio per 100, Suffolk MSOAs, 2016/17 – 2020/21



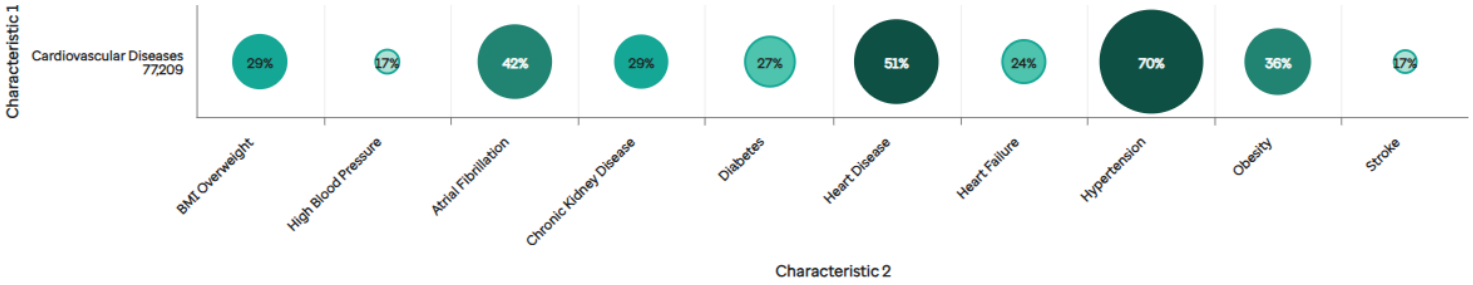
Source: Office for Health Improvement and Disparities (2022)

Comorbidities

Comorbidity is common prevalent among people living with cardiovascular disease and a significant driver of much of the complexity of care demand across the system. Population Health Management data for Suffolk and North East Essex ICB show that among the 77,209 adults identified with cardiovascular diseases, co-existing long-term conditions are the norm. Hypertension is present in 70% of this cohort, and over one-third are living with obesity (36%). Cardiovascular conditions frequently cluster, with 51% having heart disease, 42% atrial fibrillation, 24% heart failure and 17% a history of stroke. Metabolic and renal comorbidities are also common, including diabetes (27%) and chronic kidney disease (29%). Respiratory conditions such as asthma (15%) and COPD (13%), along with current smoking (11%), further add to the overall risk profile. These patterns demonstrate the overlap between cardiovascular, metabolic and respiratory disease, highlighting the importance of integrated and earlier prevention, earlier detection and targeted management approaches.

This PHM analysis is based on Suffolk and North East Essex ICB data (rather than Suffolk-only), but provides a robust picture of comorbidity patterns across the local population.

Figure 33. Comorbidity and the prevalence of conditions for Suffolk and North East Essex ICB registered patients with cardiovascular diseases, Aug 24 – Jul 25

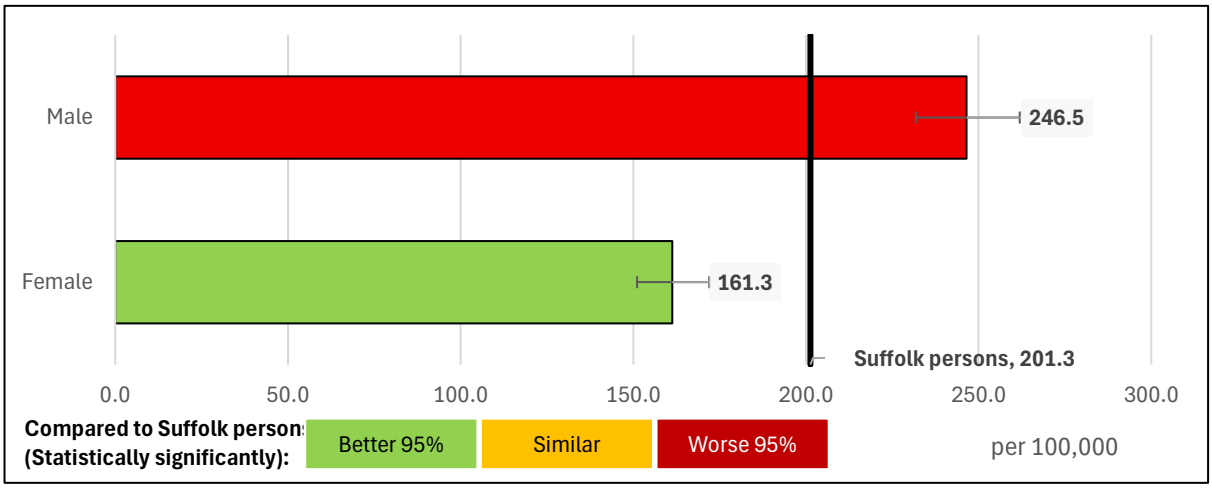


Source: Optum Pathfinder (2025)

Inequalities

There are significant inequalities in mortality rates from cardiovascular disease across Suffolk. In 2024, the mortality rate from cardiovascular disease for males (246.5 per 100,000) was statistically significantly higher than for females (161.3 per 100,000) in Suffolk.

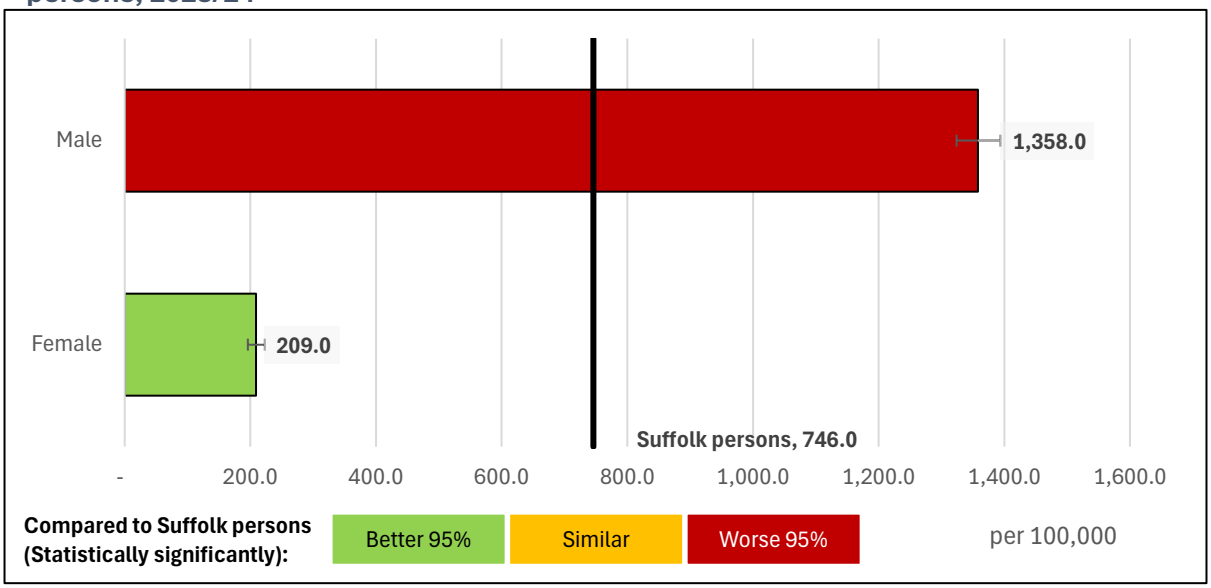
Figure 34. Mortality rate per 100,000 from cardiovascular disease, all ages (persons, 1 year range), for Suffolk males and females compared to Suffolk persons, 2024



Source: Office for Health Improvement and Disparities (2025)

In Suffolk in 2023/24 there were 6,909 hospital admissions for alcohol-related cardiovascular disease. Males were much more likely to be admitted for alcohol-related cardiovascular disease, with 5,919 admissions (85.7% of all alcohol-related cardiovascular disease admissions in 2023/24), compared to 990 admissions for females (14.3% of all alcohol-related cardiovascular disease admissions).

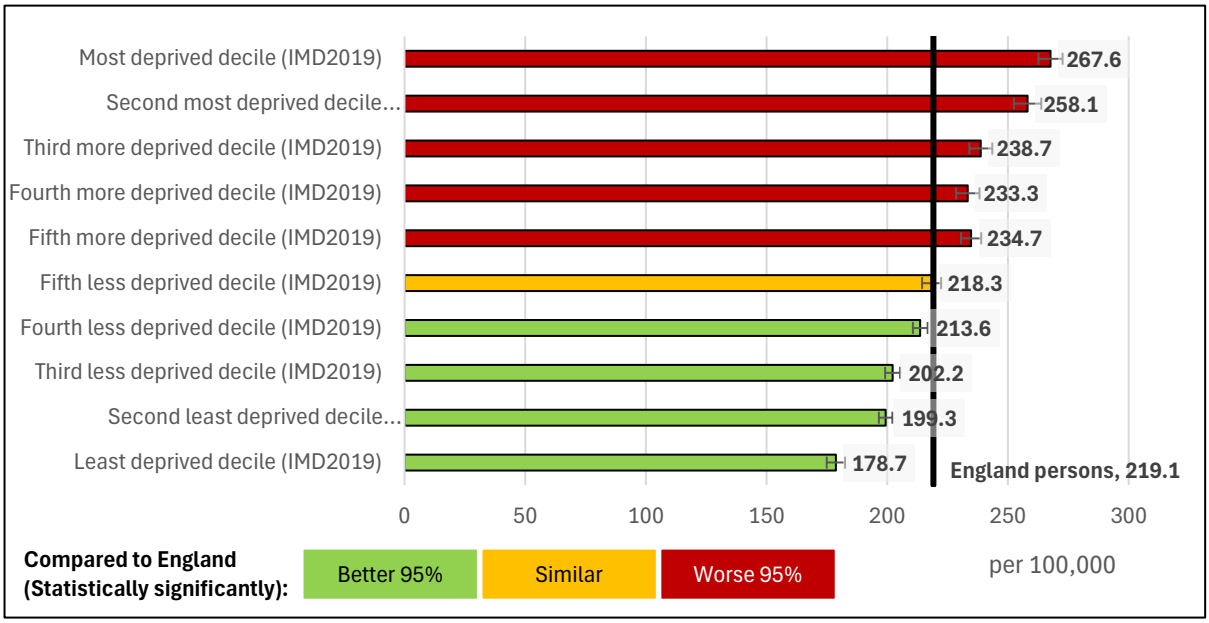
Figure 35. Admission episodes for alcohol-related cardiovascular disease (broad), directly standardised rate per 100,000, Suffolk males and females compared to Suffolk persons, 2023/24



Source: Office for Health Improvement and Disparities (2025)

Deprivation is a major driver of cardiovascular disease inequalities. Nationally in 2024, the most deprived areas of England experienced a CVD mortality rate of 267.6 per 100,000, nearly 50% higher than the least deprived areas at 178.7 per 100,000. This deprivation gradient is consistent across all deciles, with mortality rates progressively decreasing as deprivation reduces. Wider national evidence reinforces this picture: recent ONS and King's Fund analysis shows that people living in the 10% of local authorities with the highest premature mortality rates are almost twice as likely to die before age 75 as those in the 10% with the lowest rates[40,41]. Around 61% of this geographic variation is explained by socioeconomic factors such as education, occupation and area-level deprivation, with a smaller proportion accounted for by ethnicity and migration status. The remaining unexplained variation points to the influence of other determinants, including environmental exposures, access to services and wider community conditions[41]. These findings underline the strong link between social determinants, unequal exposure to risk factors, access to healthcare and the ability to manage long-term conditions.

Figure 36. Mortality rate from cardiovascular disease, all ages (persons, 1 year range), directly standardised rate per 100,000, by 2019 Index of Multiple Deprivation decile, England, 2024

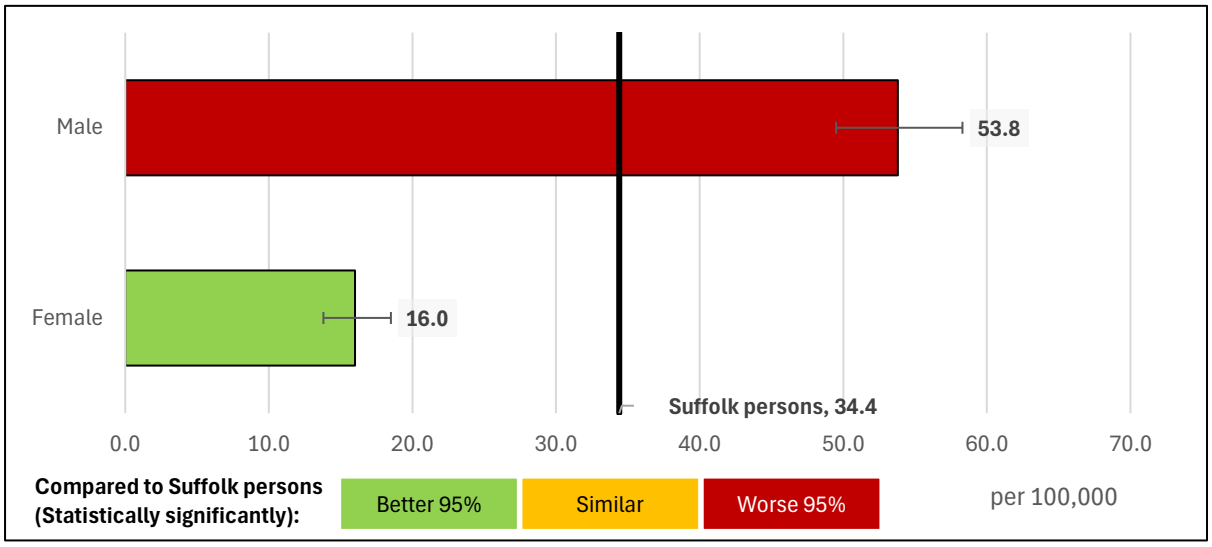


Source: Office for Health Improvement and Disparities (2025)

Between 2022-24, Suffolk recorded 785 premature deaths from ischaemic heart disease in the under 75 population, resulting in a directly standardised mortality rate of 34.4 per 100,000, statistically significantly lower than the average across England (40.6 per 100,000).

Consistent with broader cardiovascular disease mortality patterns, there was a substantial disparity between male and female premature deaths from ischaemic heart disease. Males in Suffolk experienced a mortality rate of 53.8 per 100,000 from 596 deaths, more than three times higher than the female rate of 16.0 per 100,000 from 189 deaths. This difference highlights the disproportionate burden of premature ischaemic heart disease mortality among men, reflecting both higher prevalence of risk factors and potential differences in care-seeking behaviour.

Figure 37. Under 75 mortality rate per 100,000 from ischaemic heart disease, directly standardised rate, Suffolk persons, males, females, 2022-24



Source: Office for Health Improvement and Disparities (2025)

Ethnic background is a significant determinant of cardiovascular health, with research funded by the British Heart Foundation showing that people from South Asian, African, and African Caribbean communities in the UK face higher risks of coronary heart disease, hypertension, and type 2 diabetes compared with White European populations[49]. These disparities were first identified in the 1980s, when Professor Sir Michael Marmot's work revealed that first-generation South Asians in the UK had markedly higher rates of coronary heart disease and diabetes. Since then, large-scale studies have deepened understanding of these inequalities. The LOLIPOP study, involving 30,000 participants in West London, has examined genetic and environmental drivers of cardiovascular disease and diabetes, with a particular focus on people of Indian ancestry. Similarly, the SABRE study, which has followed 5,000 participants for more than 30 years, has shown that South Asian and African Caribbean individuals are twice as likely to develop type 2 diabetes before the age of 80 compared with White Europeans.

The Covid-19 pandemic further highlighted and exacerbated these inequalities, with ethnic minority groups disproportionately affected by adverse outcomes. This has reinforced the importance of ensuring equitable access to prevention, treatment, and participation in research. In Suffolk, local health planning should prioritise early detection and management of hypertension and diabetes among high-risk groups, alongside culturally tailored prevention programmes that address diet, physical activity, and health literacy. Ensuring equitable access to cardiovascular services and inclusive approaches to research participation will be essential in reducing the burden of disease.

Segment tool

Analysis from the OHID Segment Tool shows that cardiovascular disease continues to make a major contribution to inequalities in life expectancy in Suffolk. The Segment Tool identifies which causes of death and which age groups drive the differences in life expectancy between the most and least deprived communities within an area. It uses a method of life expectancy decomposition to quantify how much each cause of death contributes to the overall life expectancy gap.

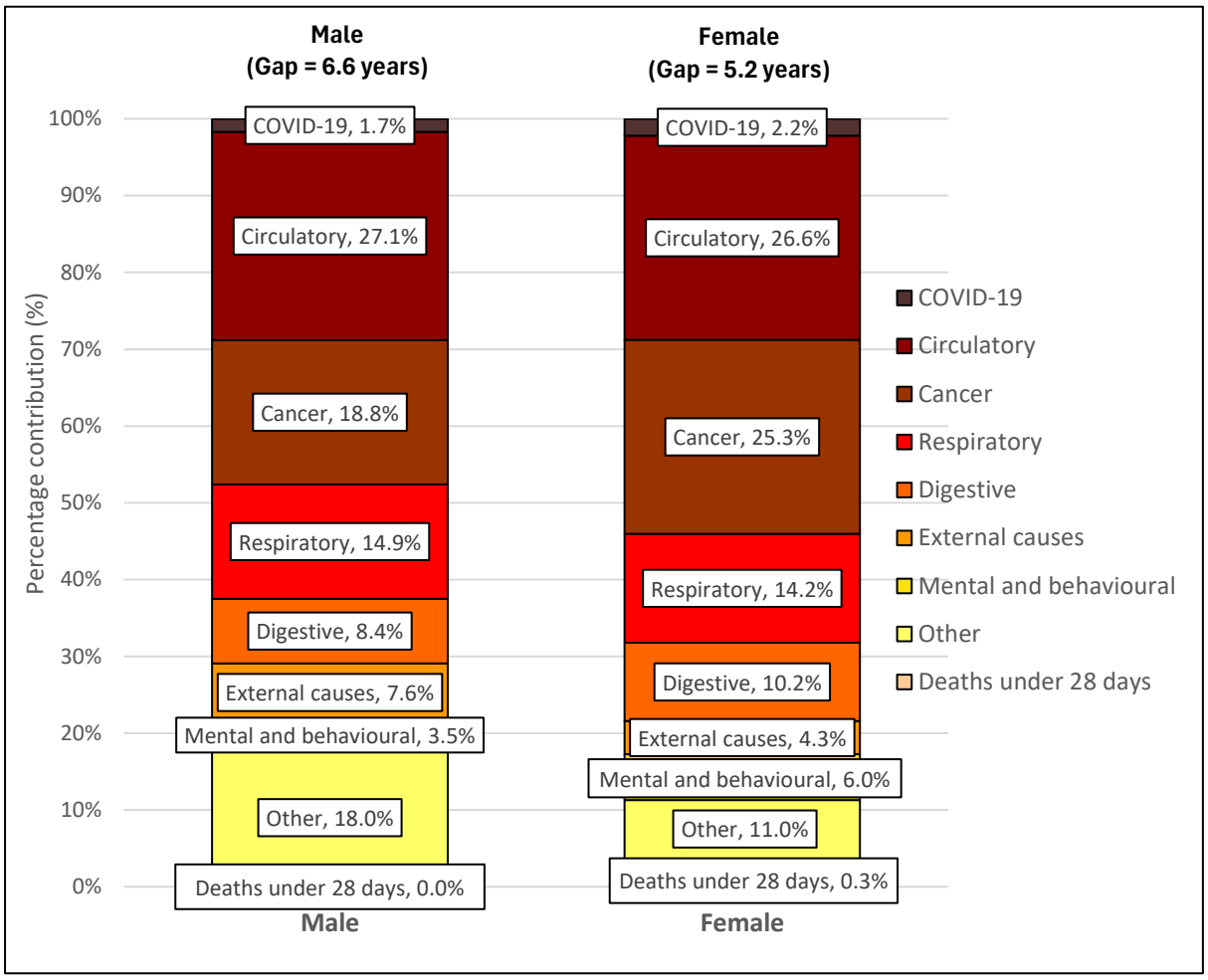
For the period 2022–2023, CVD (classified as circulatory diseases within the tool) accounted for a substantial proportion of the life expectancy gap between the most and least deprived quintiles in Suffolk:

- For males, circulatory diseases accounted for 27.1% (1.3 years of the total 6.6 year life expectancy gap, representing around 168 excess deaths among men in the most deprived areas. This made it the single largest contributor to the life expectancy gap for men.
- For females, circulatory diseases accounted for 26.6% (1.8 years of the total 5.2 year life expectancy gap), with an estimated 138 excess deaths among women in the most deprived quintile.

For both males and females, circulatory disease (including cardiovascular disease) remains the single largest contributor to premature mortality. In females, circulatory disease accounted for 26.6% of the contribution to excess deaths, closely followed by cancer (25.3%) and respiratory disease (14.2%). In males, circulatory disease contributed 27.1%, with cancer (18.8%) and respiratory disease (14.9%) also prominent contributors. Other causes, including digestive diseases, mental and behavioural disorders, external causes (such as injuries and suicides), and COVID-19, contributed smaller but still important proportions of excess deaths.

These findings underline that cardiovascular disease is highly preventable and a key driver of health inequalities in Suffolk. Targeted prevention, early detection, and effective management of modifiable cardiovascular risk factors such as hypertension, high cholesterol, diabetes, smoking, obesity, and physical inactivity remain essential, particularly in communities experiencing higher levels of deprivation. Addressing these underlying risk factors offers a significant opportunity to narrow health inequalities and improve overall life expectancy across the county.

Figure 38. Breakdown of the life expectancy gap between the most and least deprived quintiles of Suffolk by cause of death, 2022 to 2023



Source: OHID Segment Tool (2025)

Conclusion

Cardiovascular disease continues to represent a major public health challenge in Suffolk, despite favourable outcomes for several indicators compared with national averages. Mortality from CVD, including ischaemic heart disease and stroke, remains statistically significantly lower in Suffolk than across England, reflecting strong local health outcomes and effective clinical management. However, the burden of disease remains substantial, with over 2,000 deaths in the county annually and persistent inequalities between different population groups.

Prevalence of key risk factors in Suffolk such as hypertension, diabetes, obesity and physical inactivity have increased over the past decade, mirroring trends nationally. Hypertension, or high blood pressure - affects around one in six adults, with rates in Suffolk statistically significantly higher than the England average, while the prevalence of diabetes and chronic kidney disease has also statistically significantly increased. These conditions, alongside health behaviour factors such as smoking and excess weight, contribute to cardiovascular disease morbidity. Despite lower smoking rates and higher levels of physical activity in Suffolk compared to England overall, overweight and obesity remain widespread and present an ongoing challenge for prevention.

While unavailable for Suffolk, data for Suffolk and North East Essex Integrated Care Board (SNEE ICB) data reveals that the ICB performs strongly on most clinical management and prevention indicators, including blood pressure monitoring, diabetes care processes, and smoking cessation support. However, some gaps persist, particularly for lipid management and the uptake of NHS Health Checks, which remains statistically significantly below the England average in the previous year (despite statistically significantly better performance compared to England over the previous five years). Improving gaps across lipid management and the uptake of NHS Health Checks could help to identify and manage undiagnosed risk factors earlier.

Inequalities in CVD outcomes persist within Suffolk, with higher mortality and admission rates in more deprived and coastal communities such as parts of Ipswich and Lowestoft. Men continue to experience higher rates of premature mortality from CVD than women, and there is evidence of variation in access to preventive services and treatment across geographic and socioeconomic groups. These patterns highlight the need for continued focus on the Core20PLUS5 priority to reduce CVD inequalities and to improve detection and control of high-risk conditions in the most affected communities

In summary, Suffolk's overall CVD outcomes compare favourably with national benchmarks, but the increasing prevalence of risk factors and the persistence of health inequalities indicate that CVD remains a key prevention priority. Strengthening community prevention, improving early diagnosis, addressing modifiable risk factors, and ensuring equitable access to care - particularly for deprived and rural populations - will be essential to sustain and improve cardiovascular health

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Summary table

Modifiable Risk Factors	Non-Modifiable Risk Factors	Other Medical Conditions Increasing CVD Risk
High blood pressure (hypertension)	Age	Chronic kidney disease (CKD)
High non-HDL cholesterol/low HDL	Sex	Chronic inflammatory diseases (e.g., rheumatoid arthritis, other systemic inflammatory disorders)
Diabetes/pre-diabetes/metabolic syndrome	Ethnicity	History of pre-eclampsia
Smoking/tobacco use	Family history/genetics	Early (<40 years) menopause
Obesity/excess weight	Congenital heart conditions (CYP congenital CVD)	Polycystic ovary syndrome (PCOS)
Physical inactivity		HIV/long-term antiretroviral therapy effects
Unhealthy diet		Periodontitis
Harmful alcohol use		Atrial fibrillation
Air pollution		Dyslipidaemia (familial & medication-induced: antipsychotics, immunosuppressants, corticosteroids)
Poor mental health/social isolation		Serious mental illness (schizophrenia, PTSD)
Social determinants: deprivation, environment		Influenza (short-term risk elevation)

Source: NICE Clinical Knowledge Summary (CKS): Cardiovascular disease – risk assessment and reduction (2025); NHS England – Causes of cardiovascular disease (2024–25); British Heart Foundation (BHF) - CVD risk factors (2024)