Health literacy profile

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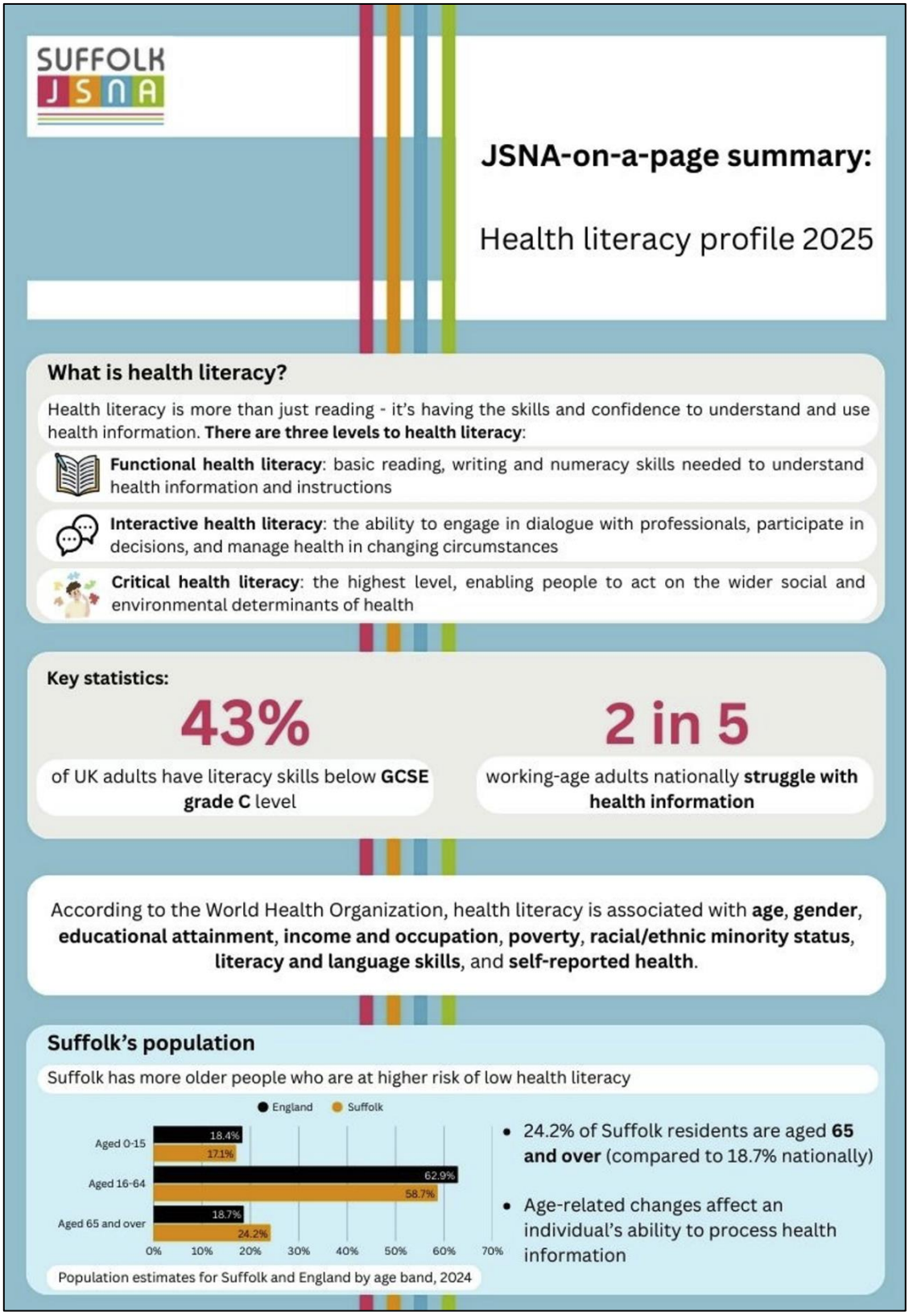
Contents

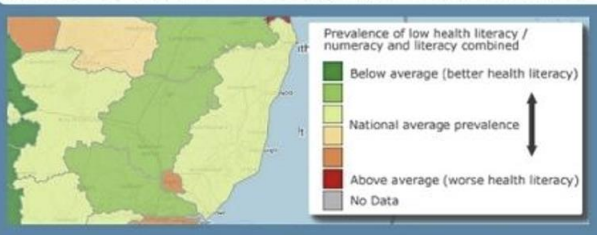
AI: Some information in our JSNA products may have been summarised with the help of artificial intelligence tools. Everything is carefully checked by our team to make sure it's accurate.

JSNA-on-a-page summary



Geographic gaps

Where you live in Suffolk affects your access to health services and information



- Northern parts of Suffolk has some gaps in GP practice coverage
- Rural areas of the county face extra challenges: **limited transport** and **digital exclusion**
- **Ipswich has the highest estimated prevalence of low health literacy**

Hidden disadvantage

Suffolk performs better overall compared to the England average, but pockets of disadvantage create health literacy risks

- Over 75,000 Suffolk residents live in the **most deprived** areas nationally in 2019
- Suffolk's school **Attainment 8 scores** in 2023/24 (43.6) are below the England average (46.2)
- 18.3% of Suffolk residents are **disabled** according to the 2021 census (higher than the average for England (17.3%)

Health behaviour risks

Health literacy is one of several factors influencing health choices

- In 2023/24, 67.2% of Suffolk adults are **overweight and/or obese** (higher than England's 64.5%)
- Suffolk does better on **physical activity**, with 70.3% of adults classified as active in 2023/24 (67.4% across England)
- Only 1 in 3 (35.9%) of Suffolk adults eat **5-a-day portions of fruit and vegetables**

Next steps/support

Improving health literacy needs action at multiple levels - individual, professional and system wide

- Train staff to use plain English and check understanding
- Make services easier to navigate and use
- Target support for most disadvantaged groups
- Both individual skills and system changes are needed

What's the issue?

Literacy is the ability to read, write, speak and listen to a level that enables a person to communicate effectively, understand written information, and participate fully in society[1]. In the UK, around 43% of adults have literacy skills below Level 2 (equivalent to GCSE grade C[2]), and 15% have skills at Entry Level 3 or below (equivalent to Key Stage 2)[3]. Adults at this level may struggle with basic tasks such as understanding food labels or paying household bills[4].

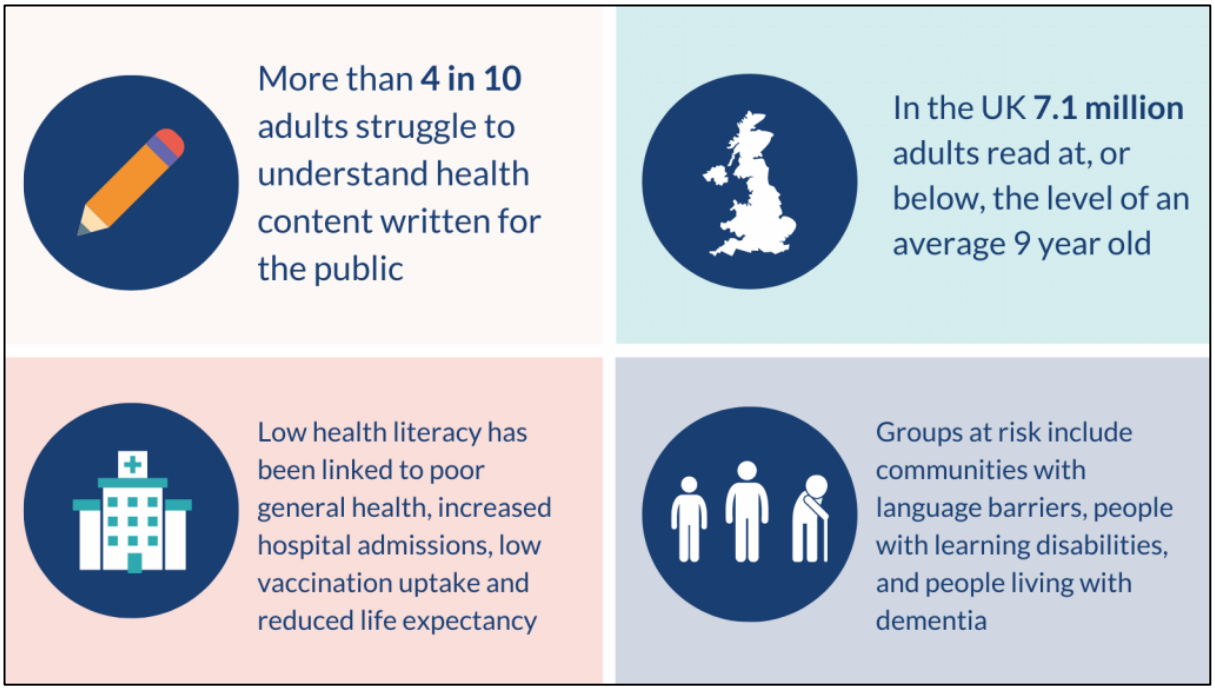
Health literacy goes beyond basic literacy. It is the bridge between individuals and health systems, encompassing the skills (language, literacy, numeracy), knowledge, understanding and confidence people need to access, understand, evaluate, and use health and social care information and services[1]. High levels of health literacy empowers people to play an active role in their own health, the care of their families, and their wider communities[1].

The most disadvantaged groups in society are most likely to have limited health literacy. Efforts to improve health literacy could therefore reduce health inequalities[5].

People with high levels of health literacy are better able to:

- communicate their health needs and understand advice from professionals
- find and use health information in a range of formats
- navigate services and get appropriate support
- make informed decisions about their care and lifestyle choices
- exercise more control over the factors that influence their health[3,6]

Figure 1. How health literacy widens inequalities infographic



Source: National Institute for Health and Care Research (2022)

Conversely, low levels of health literacy create barriers. Low levels of health literacy have been linked to poor general health, increased hospital admissions, low use of preventative services (such as vaccination and screening) and reduced life expectancy[1,5]. This can leave them less informed, less able to make healthy choices, and more dependent on professionals[1].

Real world impacts caused by low levels of health literacy:

- a woman who sprayed her inhaler on her neck because she had been told to spray it on her "throat"
- a man who did not turn up for cancer tests because he did not know Radiology and X-ray department were the same thing
- a man with diabetes who decided to stop taking his medicine because he had trouble understanding the instructions
- a woman who thought chemotherapy would not help because it was given into a vein on the other side of the body to where her cancer was[7]

Groups at risk include communities with language and cultural barriers, and people with conditions that affect comprehension (such as learning disability and dementia)[5]. A large proportion of health information is available online, reducing access to information of digitally excluded groups[8].

Health literacy is not just an individual issue; while individual skills are important, health literacy also depends on the responsiveness of health and care systems. Services and information that are inaccessible, overly complex, or poorly communicated can widen inequalities[2]. As a result, some systems have shifted the emphasis away from “fixing” individuals, towards ensuring services are easy to understand, navigate, and use[9].

Health literacy is a complex and dynamic concept, with no singular definition – a systematic review identified 17 different definitions of health literacy multiple conceptual models[10]. However, it must also be considered that a recent academic review pointed to the difficulty in developing tools to comprehensively measure health literacy, and how to effectively improve health literacy at both an individual and populational level[11].

The Public Health England (now the Office for Health Improvement and Disparities) resource on improving health literacy to reduce health inequalities therefore described health literacy at three levels:

- **Functional health literacy**: basic reading, writing and numeracy skills needed to understand health information and instructions[1]

Functional health literacy is linked to educational attainment[12] and general literacy[13]. Limited reading and numeracy skills can restrict access to health information and the ability to understand and use it effectively[14].

Functional health literacy is not always equivalent to level of education, despite the correlation[15]. A well-educated and literate person can have low health literacy when required to understand and act upon unfamiliar terminology and concepts in unfamiliar healthcare settings and when navigating health information online[16]. Basic literacy and numeracy skills are required for adequate literacy but are not sufficient alone. Functional health literacy extends beyond proficiency in reading, writing, and numeracy to include interpretation of images and oral communication[17].

- **Interactive health literacy**: the ability to engage in dialogue with professionals, participate in decisions, and manage health in changing circumstances[1]

Interactive health literacy means having the skills and confidence to talk with health professionals and take an active role in treatment choices[14]. Interactive health literacy allows individuals to actively participate in their healthcare decisions as situations change over time[2].

- **Critical health literacy**: the highest level, enabling people to act on the wider social and environmental determinants of health[1]

Critical health literacy involves advanced cognitive skills, which, together with social skills, help individuals address factors that influence their health. This process includes recognising potential barriers in their environment - such as limited access to green spaces - and then responding accordingly[18].

These dimensions highlight that health literacy is both a personal capability and a system responsibility. As a result, improving health literacy is a key strategy in reducing health inequalities and promoting health equity[1]. However, it must also be considered that a recent academic review pointed to the difficulty in developing tools to comprehensively measure health literacy, and how to effectively improve health literacy at both an individual and populational level[11].

Causes and risk factors

Age

Rates of limited health literacy are higher among elderly persons, with a study on British adults indicating that the risk of having limitations in health literacy increase as an individual ages[19,20]. Limited health literacy is a significant issue for older adults, who frequently require access to comprehensive health information and services to support their ongoing health and wellbeing[21].

There are several different age-related changes that could contribute to the decrease in health literacy in older adults. Although the rate and severity of these age-related changes vary among individuals, these should be considered when assessing an older adult's health literacy[22]. A study from Germany found that 66.3% of all respondents aged 65 years and above had limited health literacy, especially prevalent among respondents above 76 years of age[23]. The authors noted that limited health literacy in older age is often linked to factors such as cognitive decline, sensory impairments, and the increasing complexity of health information. Other research also highlights the role of financial deprivation, which was the strongest predictor in this study.

Limited health literacy among older adults includes incorrect taking of prescription medication, poor chronic disease management, low use of preventive health services, and increased risk of overall mortality[24].

"Fluid" cognitive abilities consider verbal fluency, working memory and reasoning; they are essential to health literacy skills, but also experience mild decline during ageing (in the absence of dementia) as early as mid-adulthood. "Crystallised" abilities such as generalised knowledge and vocabulary are more stable with age[21,25]. As a result, an individual's performance on health literacy tests that use fluid cognitive abilities may decline with age[26], whereas tests assessing health literacy as medical vocabulary may not experience a substantial decline in performance with age[21].

One study also found that functional health literacy was markedly lower among older age groups, even when adjusting for differences in reading frequency, health status, and visual acuity[27].

A reduction in cognitive functioning among older adults may impact their capacity to understand and remember new information[28,29]. Physical impairments such as hearing and vision loss can also reduce the ability to process health information[30]. As physical and cognitive differences between younger and older generations increase, communication becomes less effective, which can worsen health literacy in older adults[30].

It is essential for professionals involved in the care of older adults to recognise the significance of health literacy and the unique factors that influence this population[22].

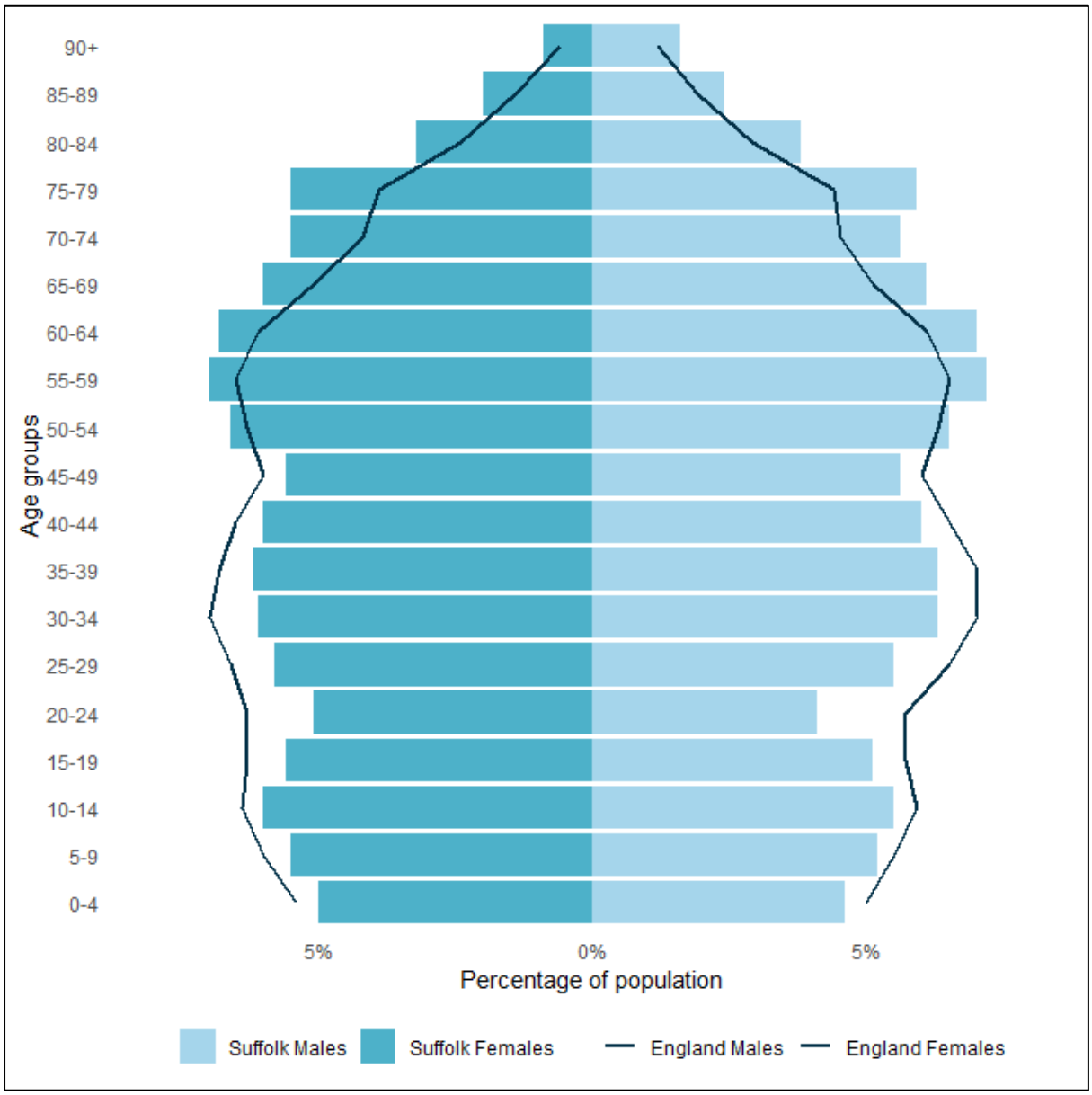
Based on the mid-2024 population estimates for England and Suffolk, Suffolk has a higher proportion of older males and females compared to England, which has implications for the county's health literacy.

Among males aged 55 to 59, Suffolk accounts for 7.0% compared to 6.5% nationally, while females in this age group account for 7.2% compared to 6.5% in England. This pattern is more pronounced in older age groups, with Suffolk males aged 70-74 representing 5.5% of the population compared to 4.2% nationally, and females in the same age band accounting for 5.6% versus 4.5% in England.

The overrepresentation of older adults is particularly noticeable in the 75 and over age groups; Suffolk males aged 75 to 79 make up 5.5% of the male population, compared to 3.9% nationally, while females represent 5.9% compared to 4.4% across England. Even in the oldest age categories, Suffolk has higher proportions of the population, with males aged 90 and over representing 0.9% of the Suffolk male population compared to 0.6% across England, and 1.6% for Suffolk females compared to 1.2% across England.

Conversely, Suffolk has a deficit in younger age groups, particularly among working-age adults. Males aged 20 to 24 represent 5.1% of Suffolk's male population, compared to 6.3% nationally, with females aged 20 to 24 having an even greater difference at 4.1% in Suffolk compared to 5.7% nationally. This pattern continues through the 25 to 29 and 30 to 34 age groups, where Suffolk has consistently lower proportions than the England average.

Figure 2. Population age structure by five year age band and sex for Suffolk males and females, compared to England, 2024

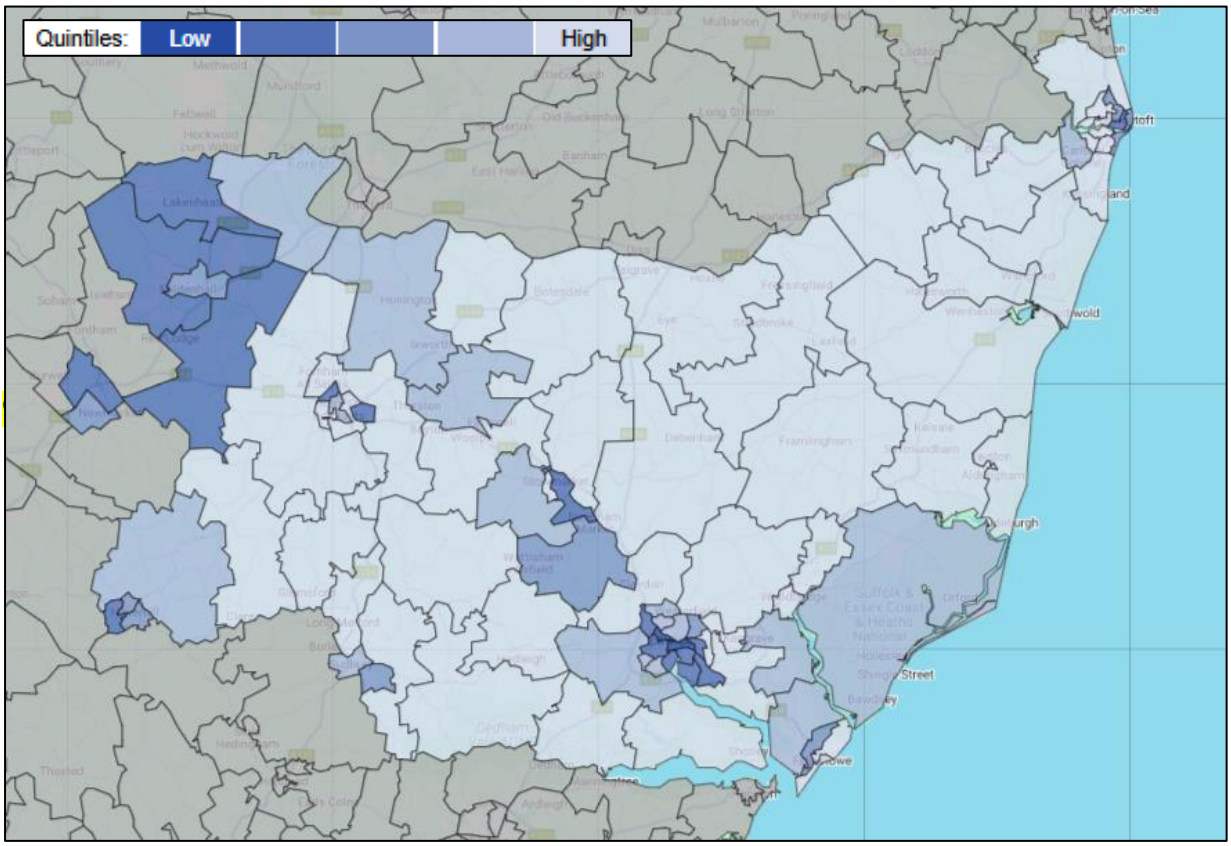


Source: Office for National Statistics (2025)

The following figure shows the middle super output areas (MSOAs) within Suffolk with the highest proportion of the population aged 65 and over. Overall in Suffolk, 190,540 people (almost 1 in 4/24.2%) were aged 65 years and over in 2024 (compared to 18.9% nationally). However, the proportion of individuals aged 65 and over is highest in Felixstowe East (41.1%), Yoxford, Wenhaston and Walberswick (37.7%), and Southwold, Reydon and Wrentham (37.5%).

The areas of the county with a lower proportion of adults aged 65 and over are concentrated in urban areas, with the lowest levels in the following LSOAs within Ipswich; Westgate (9.3%), Ipswich Central (9.3%) and Maidenhall, Stoke & Port (13.1%).

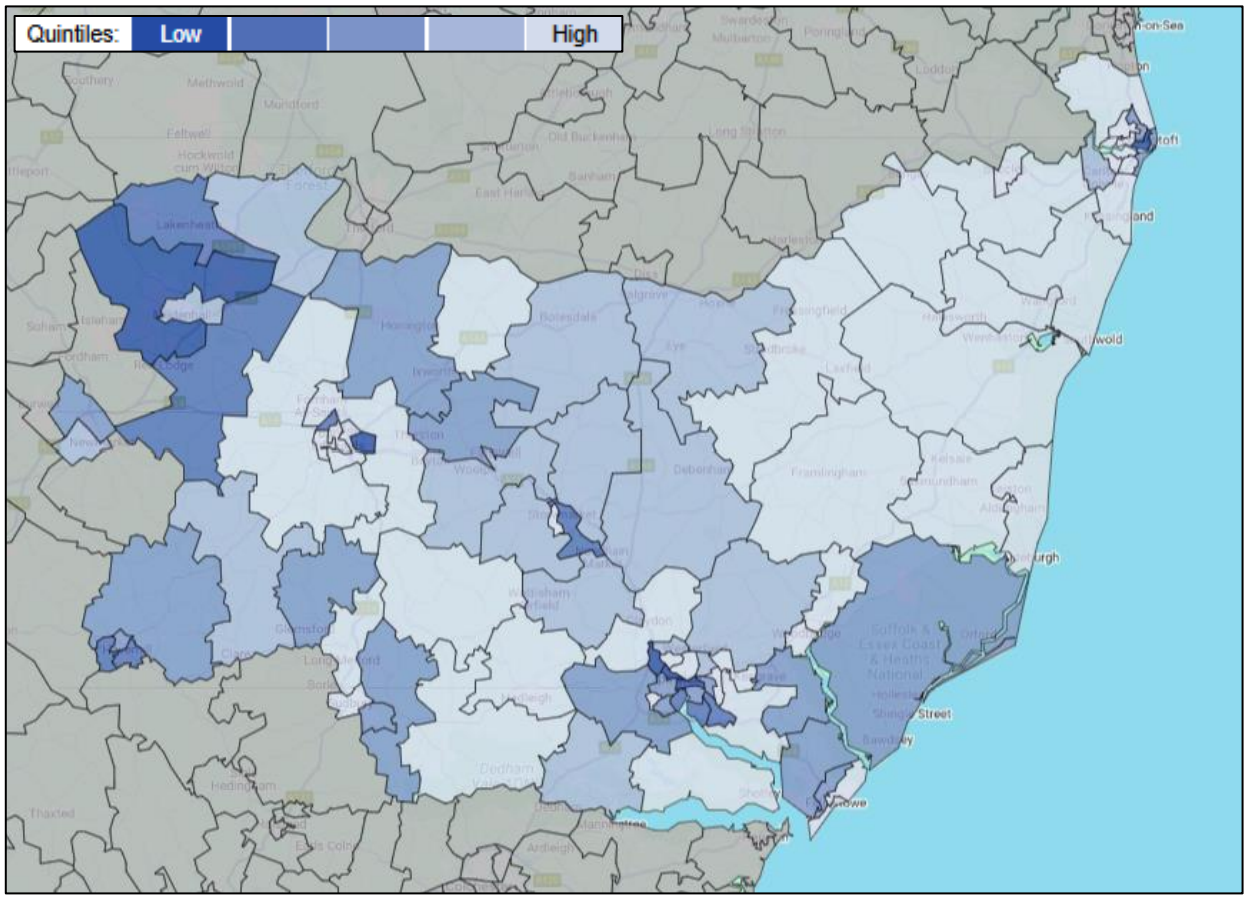
Figure 3. Percentage of the resident population aged 65 and over, Suffolk Lower Super Output Areas (LSOAs), 2022



Source: Office for Health Improvement and Disparities (2025)

For individuals aged 85 and over, the MSOAs within the county with the highest proportion of adults aged 85 and over include Woodbridge (7.5%), Felixstowe East (6.2%), Eastgate and Southgate (6.2%), and Southwold, Reydon and Wrentham (6.2%). Again, the LSOAs within Suffolk with the lowest proportion of older adults (aged 85 and over) are in urban areas such as Ipswich, with Westgate (0.6%), Ipswich Central (0.8%) and Beck Row, Eriswell and Barton Mills (0.9%) having the lowest proportion of older adults within their LSOA.

Figure 4. Percentage of the resident population aged 85 and over, Suffolk Lower Super Output Areas (LSOAs), 2022



Source: Office for Health Improvement and Disparities (2025)

More disadvantaged socioeconomic groups and low educational attainment

Low socioeconomic status, particularly low educational attainment, is the most important determinant of health literacy[31,32]. Factors such as lower income or education have been found to be associated with lower levels of health literacy[20,33], indicating that people who experience social disparities, with associated negative health outcomes, are also generally found to have lower levels of health literacy[34].

Also, health literacy has been shown to mediate the association between socioeconomic disadvantage, health outcomes, behaviours, and access and use of healthcare[35]. Improving health literacy in disadvantaged groups can help to reduce health inequalities, which can arise because groups in more favourable socioeconomic positions have better access to health information, and are more skilled in its use[35].

While very relevant, there is a lack of research addressing health literacy interventions in general, with even fewer looking at disadvantaged groups[1,36]. A scoping review of interventions to improve health and health-related scientific literacy across different disadvantaged groups found previous programmes target functional health literacy, rather than improving interactive or critical health literacy, with a recommendation for future programmes focusing on scalability[37].

Disadvantaged social and socioeconomic conditions contribute to low health literacy levels, whereby lower socioeconomic status and particularly educational attainment is the most important determinant of health literacy. Health literacy also mediates the relationship between socioeconomic status and health status, quality of life, specific health-related outcomes, health behaviours and use of preventive services[35]. Improving health literacy in the population and/or making health services more accessible could lead to greater equity in health[35].

Overall, Suffolk has lower levels of relative deprivation compared to the England average, though pockets of disadvantage remain that present risks for health literacy challenges.

The county's overall deprivation levels are notably lower than the England average. Suffolk's Index of Multiple Deprivation (IMD) score of 18.5 is lower than the England average of 21.7, indicating a lower concentration of disadvantage across the county. This is reflected in the proportion of areas classified as deprived, with 10.1% of Suffolk's population living in the most deprived quintile nationally, compared to 12.9% across England. However, this still represents over 75,000 Suffolk residents experiencing significant socioeconomic disadvantage.

Child poverty levels in Suffolk are statistically significantly lower than national averages but remain a substantial challenge. The Income Deprivation Affecting Children Index indicates that 13.5% of Suffolk's children aged 0 to 15 (18,110 children) live in income-deprived households, compared to 17.1% across England. Furthermore, 20.4% of children in Suffolk (27,143) are living in relative low-income families in 2023/24. Despite being lower than the England figure (22.1%), the Suffolk figure has statistically significantly increased from 13.4% in 2014/15. This is particularly important for health literacy development, as educational attainment is a strong predictor of health literacy, and is closely linked to early childhood socioeconomic circumstances[38].

Among older adults, Suffolk has a more favourable position, with 10.4% experiencing income deprivation, statistically significantly lower compared to 14.2% across England, yet this still represents 22,056 individuals aged 60 and over in Suffolk in 2019. This group faces additional

health literacy challenges, as age-related cognitive changes and socioeconomic disadvantage creates vulnerabilities in navigating complex health information and systems[22].

Fuel poverty affects 11.1% of Suffolk households (38,629 households) in 2023, close to the national rate of 11.4%. This is particularly relevant to health literacy as it reflects broader economic pressures that may limit individuals' ability to access health services, purchase medications, or engage with health-promoting behaviour.

While Suffolk's broad socioeconomic profile appears positive (with statistically significantly fewer younger and older people living in deprivation), the absolute numbers of Suffolk residents experiencing disadvantage remain significant. Given the relationship between socioeconomic status and health literacy, these population segments remain priority groups for targeted health literacy interventions. The concentration of disadvantage in specific geographic areas within Suffolk may create challenges where low levels of health literacy are compounded with limited access to health services and resources, with the possibility of exacerbating health inequalities within the county.

Table 1. Summary indicators for deprivation, Suffolk compared to England

Indicator	Period	Suffolk Count	Suffolk Value	England Value	England worst/Lowest	England Best/Highest
Poverty: Index of Multiple Deprivation	2019	-	18.5	21.7	5.8	45
Poverty: English Indices of Deprivation	2019	75,058	10.1%	12.9%	25.1%	2.9%
Children in poverty: Income Deprivation Affecting Children Index (IDACI) (aged 0 to 15)	2019	18,110	13.5%	17.1%	32.7%	3.2%
Children in relative low income families (under 16s)	2023/24	27,143	20.4%	22.1%	44.2%	5.6%
Older people in poverty: Income Deprivation Affecting Older People Index (IDAOPI) (aged 60 and over)	2019	22,056	10.4%	14.2%	44.0%	5.0%
Fuel poverty (low income, low energy efficiency methodology)	2023	38,629	11.1%	11.4%	21.3%	4.6%

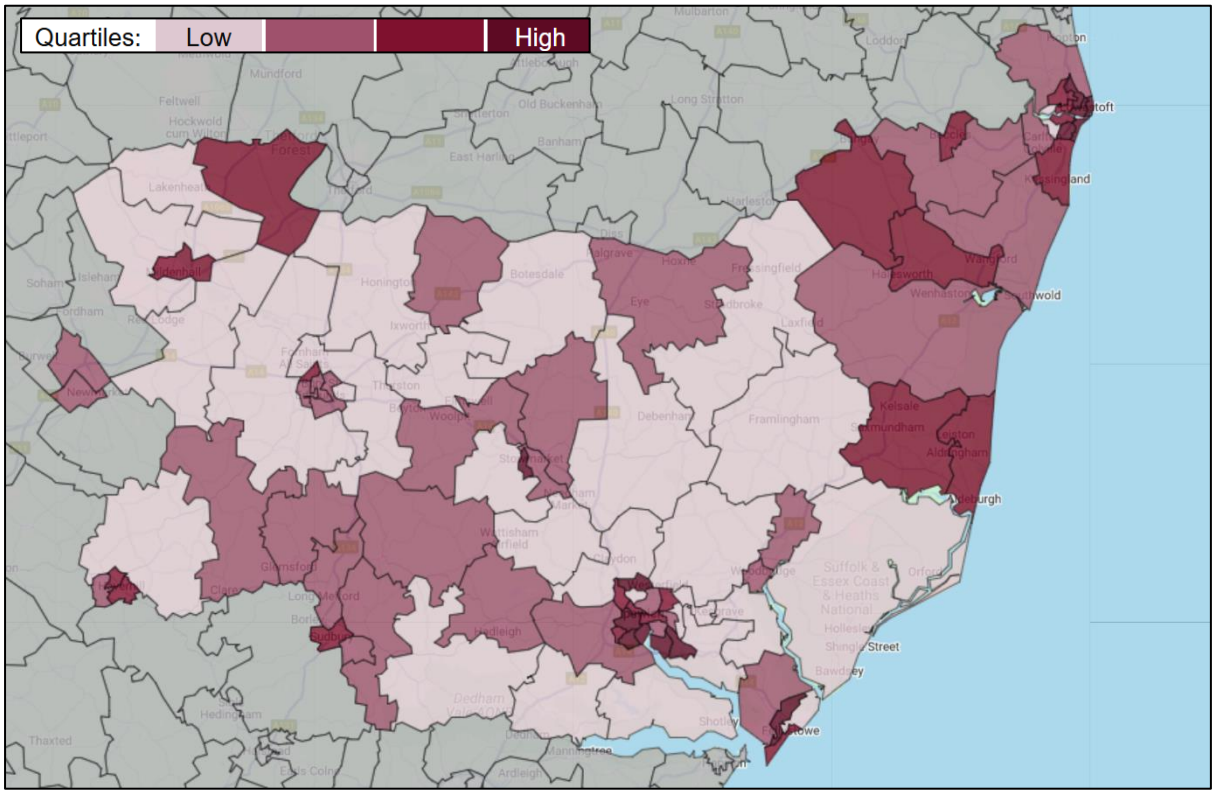
Compared to England (statistically significantly):

Better 95% Similar Worse 95% Not applicable Quintiles: Best: Worst

Source: Office for Health Improvement and Disparities (2025)

Income Deprivation measures the proportion of the population in an area experiencing deprivation relating to low income. The definition of low income used includes both those people that are out of work, and those that are in work but who have low earnings (and who satisfy the respective means tests). The following figure highlights the Middle Super Output Areas (MSOAs) within Suffolk with the highest levels of poverty, including Lowestoft Harbour and Kirkley (31.9%), Lowestoft Central (27.6%), Gunton West (25.2%), and Pakefield North (21.2%).

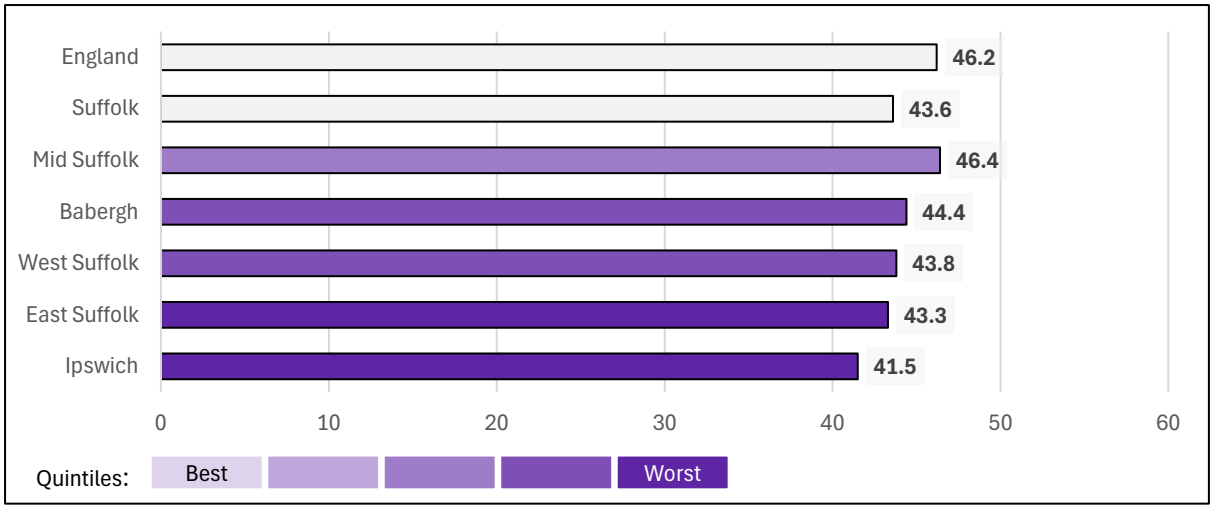
Figure 5. Proportion of each Suffolk MSOA area living in poverty according to the English Indices of Deprivation, and national quartile, 2019



Source: Office for Health Improvement and Disparities (2022)

For educational attainment in Suffolk, total Attainment 8 scores of pupils at the end of key stage 4 in all maintained secondary schools, academies and free schools, measure the achievement of pupils across 8 qualifications. In 2022/23, Suffolk pupils had a lower Attainment 8 score (43.6) compared to the England average (46.2), with variation across the districts and boroughs. Ipswich (41.5) and East Suffolk (43.3) had average Attainment 8 scores in the lowest quintile nationally.

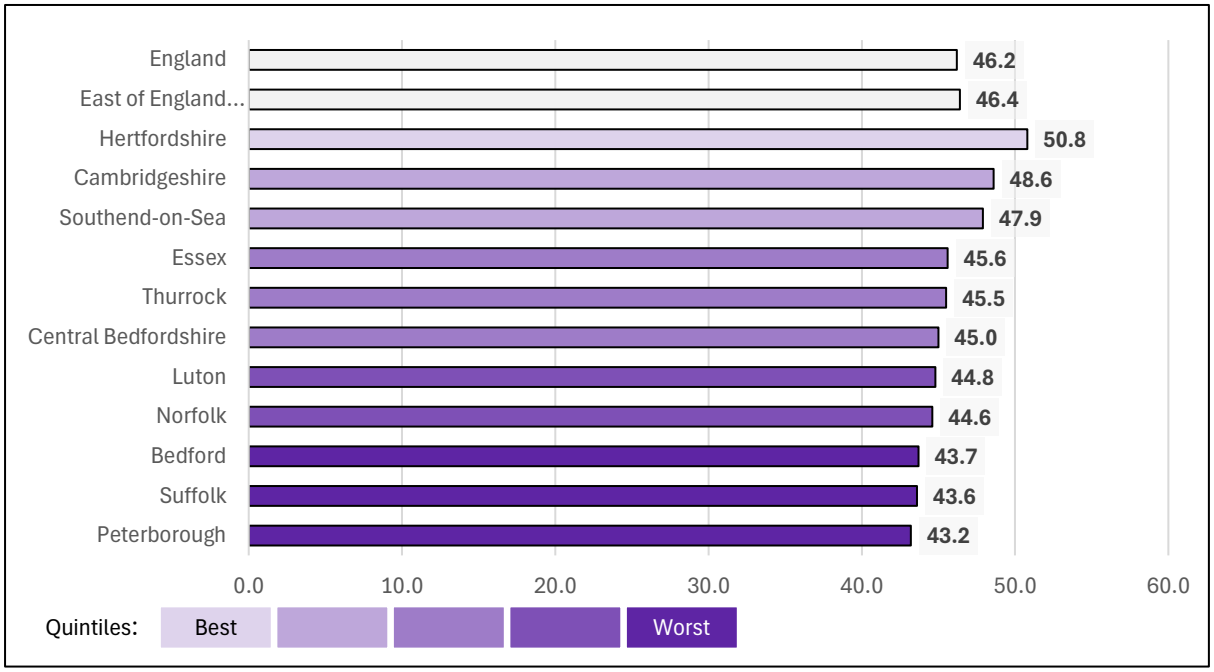
Figure 6. Average Attainment 8 score for England, Suffolk, and Suffolk's districts and boroughs, 2022/23



Source: Office for Health Improvement and Disparities (2024)

Across Suffolk's East of England neighbours, the attainment 8 score for Suffolk is second lowest, only above Peterborough (43.2) is 2022/23. The average Attainment 8 score varies widely across the region, with the highest value (50.8) in Hertfordshire.

Figure 7. Average Attainment 8 score for England, Suffolk, and Suffolk's East of England neighbours, 2022/23



Source: Office for Health Improvement and Disparities (2024)

Migrants and people from ethnic minorities

Rates of limited health literacy are higher among non-native English speakers[39]. Recent statistics highlight that individuals from ethnic minorities are more likely to report poor health and face difficulties accessing healthcare compared to their white counterparts[40]. Factors such as language barriers, diverse health beliefs, and lower educational attainment contribute to the lower health literacy levels observed in these communities[40].

Other research explores communication preferences with women from certain ethnic groups, which found no direct translation for breast screening terminology in some women's first languages such as Punjabi or Urdu[41], meaning that simply translating letters would not be beneficial[5]. The study also found that using family members for translation meant some details were omitted due to embarrassment, and a lack of awareness that translators could be provided by the NHS, while also being hesitant to speak to male healthcare professionals[41].

Additional research explores how members of Black and South Asian communities access health information, with many preferring to acquire health information from experts within their community that are considered reputable and credible (local GPs, community groups), or younger family members[5]. Lived experience was also valued, but visual formats and videos are also able to overcome language and literacy barriers[5].

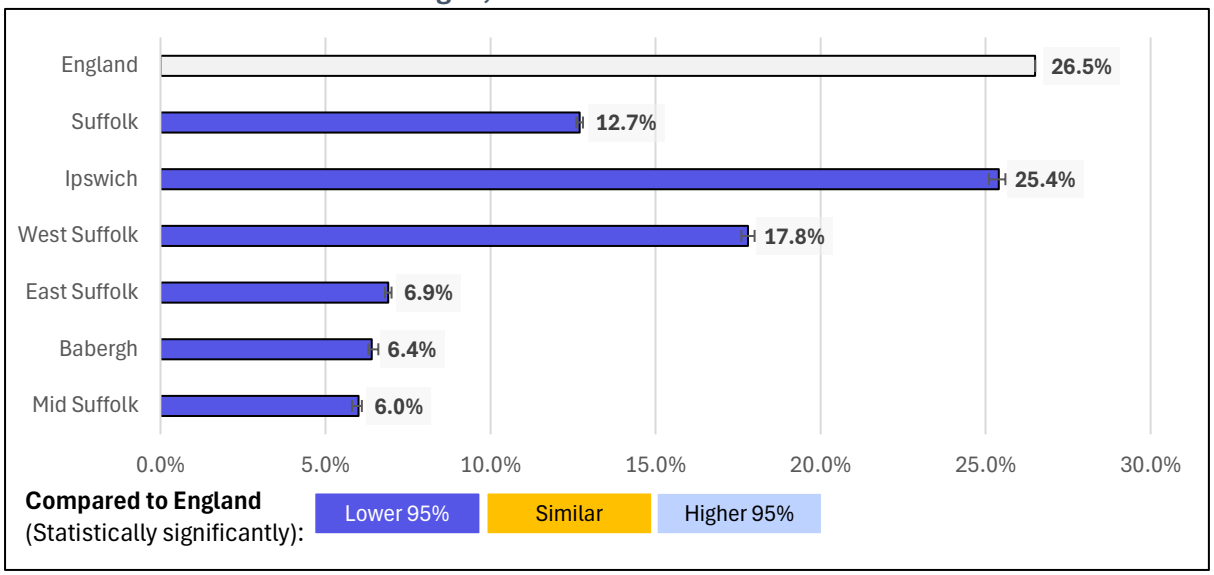
Ethnic minorities and recent migrants often face challenges with health literacy, digital skills, and navigating systems. For instance, since the NHS app is only in English, language barriers can make digital exclusion worse, despite patients with language barriers being able to use the website version NHS App Online. While AI and digital tools have great potential for managing chronic conditions like diabetes, they also risk increasing digital exclusion or fostering dependence on others for help[42].

A study in the Netherlands assessed the risk of adverse events for hospitalised patients of non-Western, ethnic origin in comparison to native Dutch patients seeking hospitalised care; highlighting that the quality of care migrants receive tends to be worse than that which the majority of the population receives[43]. This difference in quality of care is likely to contribute to health inequalities and poorer health outcomes[44].

The following data contains the number of people identifying themselves as from an ethnic minority background (that is, not from the White British group which includes White English, Welsh, Scottish or Northern Irish groups) as per the 2021 census categories. Ethnic minority groups include the following census ethnicity descriptions: Asian or Asian British group; Black, Black British, Caribbean or African group; Mixed or Multiple ethnic group; Other ethnic group; White Gypsy or Irish Traveller group; White Irish group; White Roma group; White Other group.

According to the 2021, 12.7% of the Suffolk population (96,478) in 2021 were from a minority ethnic background, statistically significantly lower than the England average of 26.5%. This varies across Suffolk, where over 1 in 4 of the population in Ipswich (25.4%/35,429 individuals) in Ipswich are from an ethnic minority background, compared to only 6.0% in Mid Suffolk (6,118), 6.4% in Babergh (5,924), 6.9% in East Suffolk (17,001), and 17.8% in West Suffolk (32,012).

Figure 8. Percentage of population from an ethnic minority background, England, Suffolk and districts and boroughs, 2021

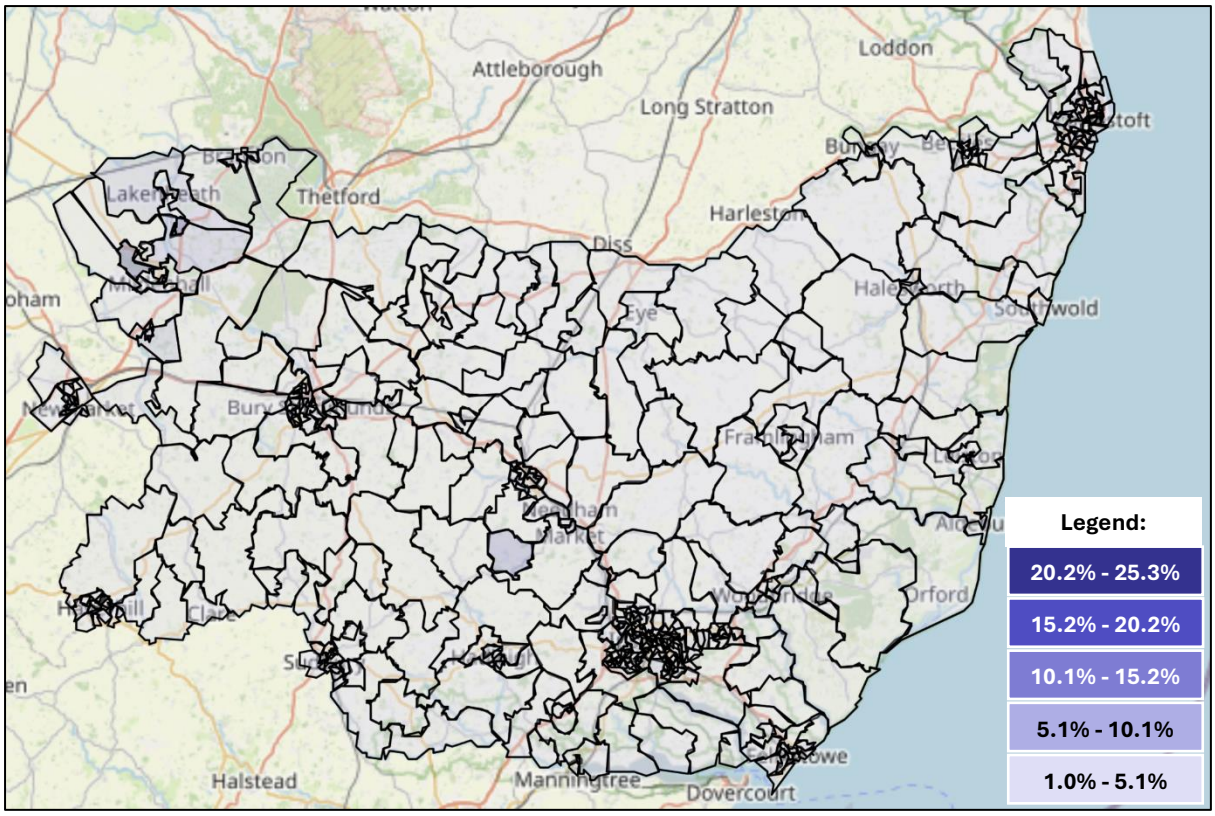


Source: Office for Health Improvement and Disparities (2025)

Census 2021 data provides figures on the number and proportion of the population within Suffolk classified as a migrant from outside the UK, where their address one year ago was outside the UK. As of census day 2021, 0.9% of the total Suffolk population (6,891 individuals) were migrants from outside the UK, where their address one year ago was outside the UK.

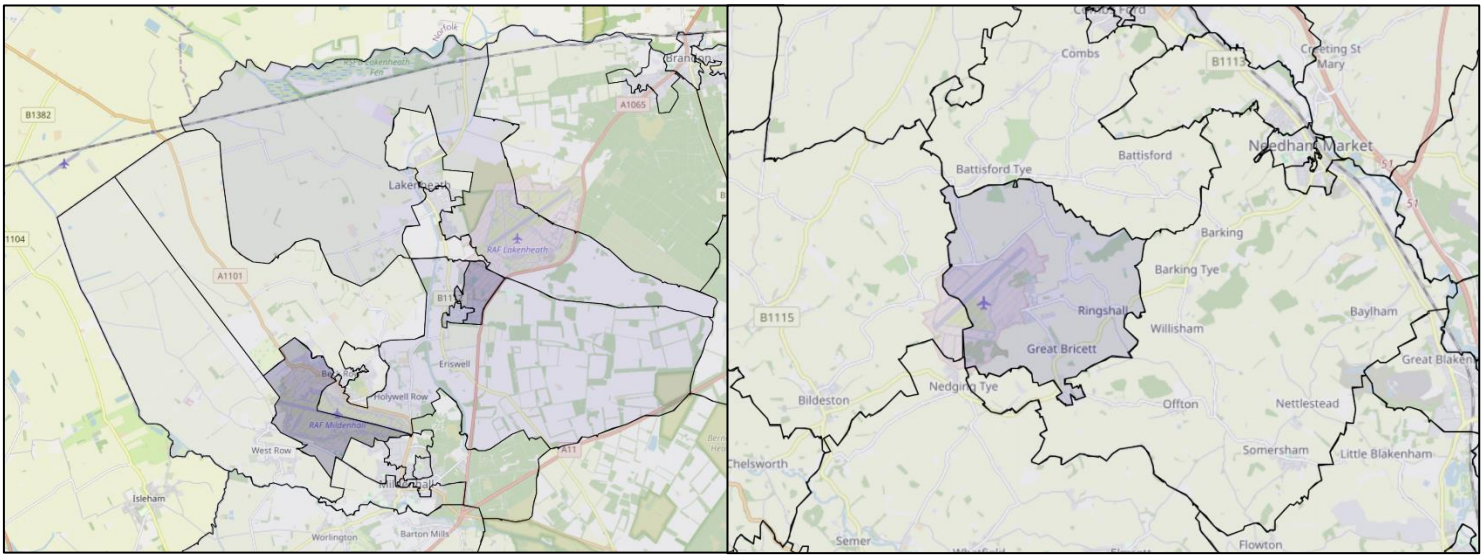
This was highest for the following Lower Super Output Areas (LSOAs): West Suffolk 001D at 25.3%/635 individuals (within Lakenheath, influenced by the US Air Force base), West Suffolk 003B (part of the Beck Row, Eriswell & Barton Mills MSOA) at 20.8%/450 individuals, Mid Suffolk 011E (part of Needham Market South & Great Blakenham MSOA, influenced by RAF Wattisham) at 11.2%/206 individuals, and West Suffolk 001E (also a part of the Lakenheath MSOA) at 10.5%/134 individuals.

Figure 9. Percentage of population where individuals were a migrant from outside the UK, with their address one year ago being outside the UK, Suffolk LSOAs, 2021



Source: NOMIS (2021)

Figure 10. Percentage of population where individuals were a migrant from outside the UK, with their address one year ago being outside the UK, focus on Lakenheath and Wattisham LSOAs, 2021



Source: NOMIS (2021)

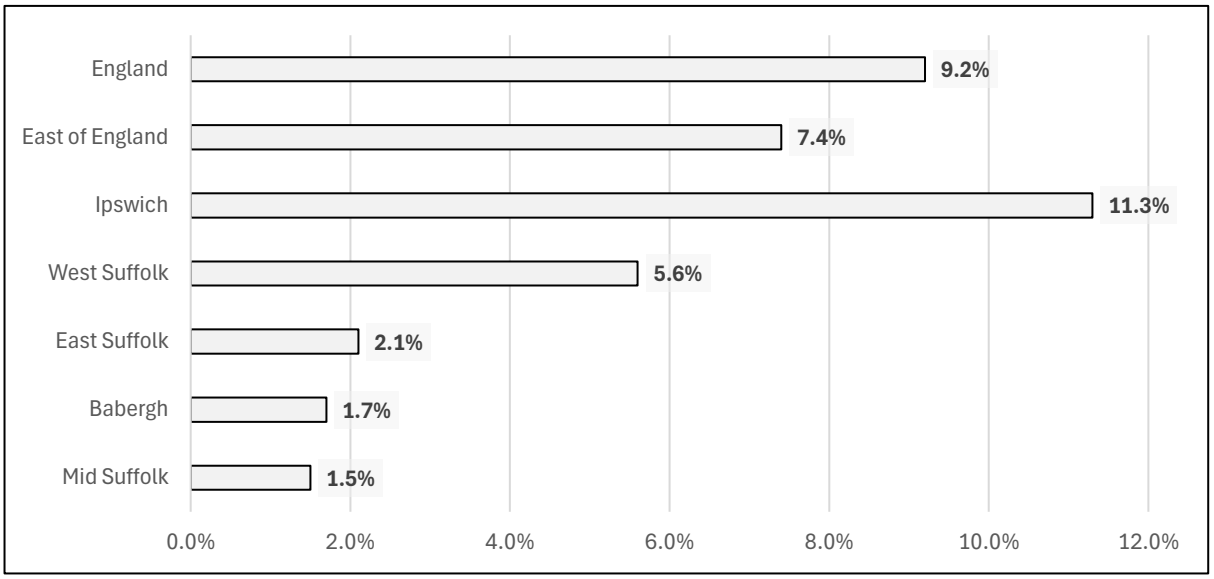
Data from the Suffolk Gypsy, Roma, and Traveller (GRT) Heath Needs Assessment states that internal data as of June 2023 indicates a total of 32 GRT sites across Suffolk. West Suffolk has the largest number, with 12 – and Ipswich has the fewest, with 2.

Census datasets remain the key data source for estimates of the GRT population, but this is recognised as likely to be an underestimate of the true GRT population. This is likely due to lower literacy levels in GRT communities, and a mistrust by some GRT community members of services/government organisations.

According to the 2021 census, 1,892 people said they were Gypsy Roma or Traveller in Suffolk, representing 0.3% of the total Suffolk population. This is an increase of 1,288 people (213.25% increase) compared to the 2011 Census (604 people). This increase (mirrored nationally) is mainly attributed to the inclusion of 'White: Roma' as a distinct ethnic classification for the first time, with the first official population of Roma heritage in Suffolk recorded at 987.

Also, the census 2021 revealed the number and proportion of individuals in Suffolk (aged 3 and over) who had a main language other than English. As of census day 2021, 95.5% of Suffolk residents had a main language of English, with 4.5% having a main language of any other language. This varied across Suffolk's districts and boroughs as follows, with 11.3% of Ipswich residents having a main language other than English, followed by West Suffolk (5.6%), East Suffolk (2.1%), Babergh (1.7%), and Mid Suffolk (1.5%). This compares to 9.2% of people across England having a main language other than English, and 7.4% across the East of England.

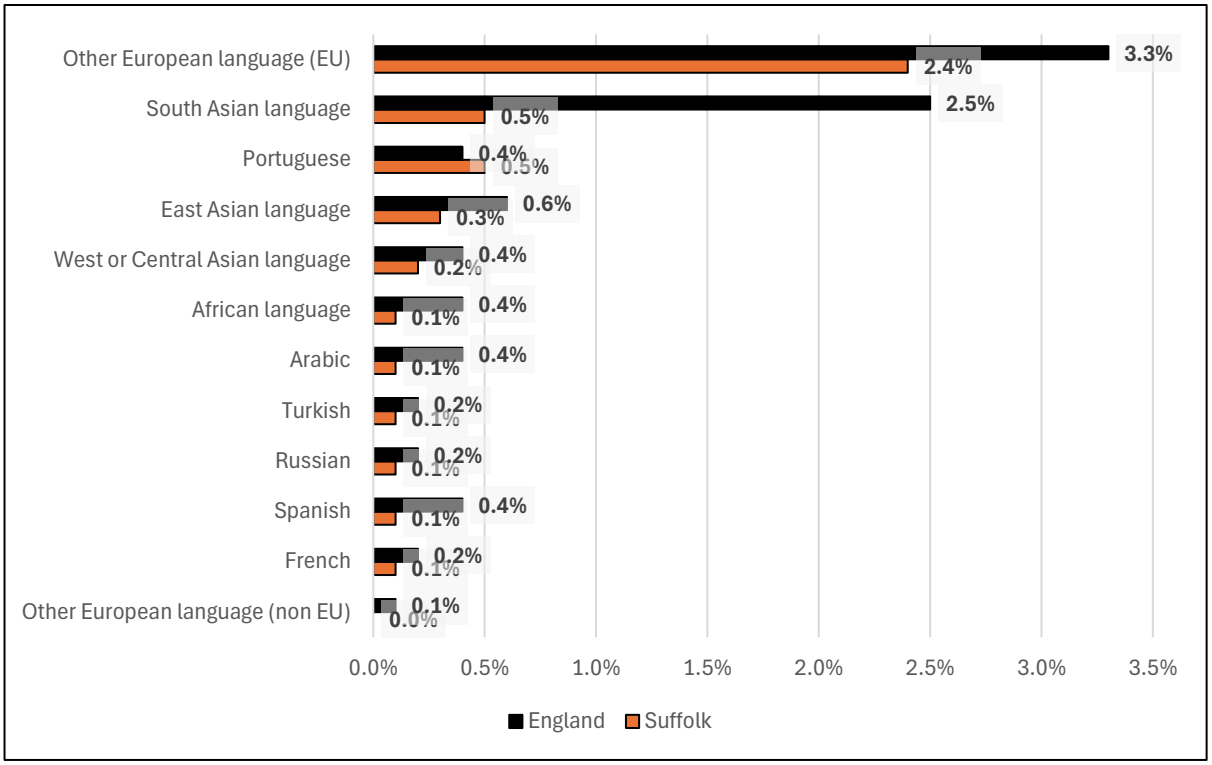
Figure 11. Percentage of usual residents (aged 3 and over) with a main language other than English, as of census day 2021



Source: NOMIS (2021)

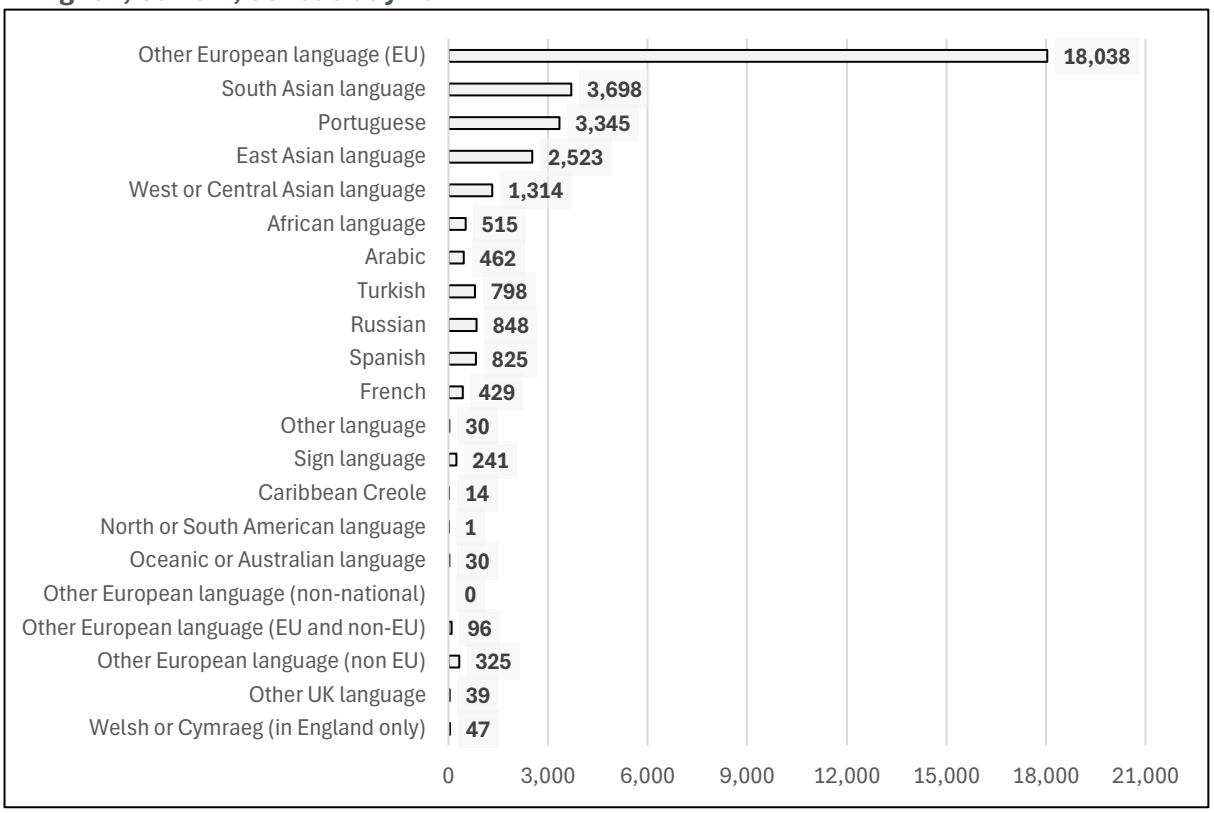
The below figures show the breakdown of all usual residents (aged 3 and over) with a main language other than English in Suffolk and England as of census day 2021. Please note, languages below 0.1% of all usual residents are not displayed on the below figure but counts of other main languages follows. Other European language is the second most common primary language in Suffolk as of census day 2021 at 2.3% (18,038 Suffolk residents aged 3 and over), followed by South Asian language (0.5%/3,698 people), and Portuguese (0.5%/3,345 people).

Figure 12. Percentage of usual residents (aged 3 and over) with a main language other than English, Suffolk and England, census day 2021



Source: NOMIS (2021)

Figure 13. Number of usual residents (aged 3 and over) with a main language other than English, Suffolk, census day 2021



Source: NOMIS (2021)

Obesity, diet, physical activity and health literacy

Health literacy influences obesity, diet, and exercise through people's ability to access, understand, and apply health information in daily decisions. Making weight loss, exercise, and diet education programs accessible and available to individuals with limited health literacy is essential[45]. For instance, in Spanish-speaking individuals living in the United States of America with limited English skills, higher health literacy has been associated with increased levels of physical activity, and fruit and vegetable consumption[46].

A systematic scoping review highlights that health literacy is a modifiable factor influencing obesity. Higher levels of health literacy are associated with better weight management, healthier dietary choices, and increased physical activity. The review identifies three key domains: nutritional knowledge, psychological knowledge, and knowledge about physical activity. However, there is a lack of validated tools that holistically assess these domains in obesity contexts[47].

Another review of 39 studies found significant evidence that health literacy determines obesity outcomes in both children and adults. Limited health literacy is linked to higher Body Mass Index (BMI) and poorer obesity management. This review recommends integrating health literacy into school curriculums and community programmes to address obesity at a population level[48].

Regarding dietary choices, one systematic review on health literacy and dietary intake found mixed evidence for sugar consumption (some studies showed low levels of health literacy linked to higher sugar intake), but no strong association for salt and fat. However, high levels of health literacy are associated with better use of food labels, portion control and overall diet quality, essential for obesity prevention[49].

For physical activity, another systematic review concluded that higher levels of health literacy are associated with higher levels of physical activity. Individuals with higher levels of health literacy are more likely to meet recommended physical activity guidelines, reducing the risk of chronic diseases and obesity[50].

Health literacy should be integrated into obesity prevention strategies, including school-based programmes, community education, and primary care interventions. Programmes improving knowledge and skills (health literacy) for weight loss (covering diet, physical activity, and behaviour change) led to significant reductions in BMI[51].

The following data from the adult Active Lives Survey records the number of adults aged 18 and over with a BMI classified as overweight (including obesity), calculated from the adjusted height and weight variables. Adults are defined as obese if their body mass index (BMI) is greater than or equal to 25kg/m^2. As of 2023/24, 67.2% of the Suffolk adult population were classified as overweight (including obesity), statistically significantly higher than the England average of 64.5%.

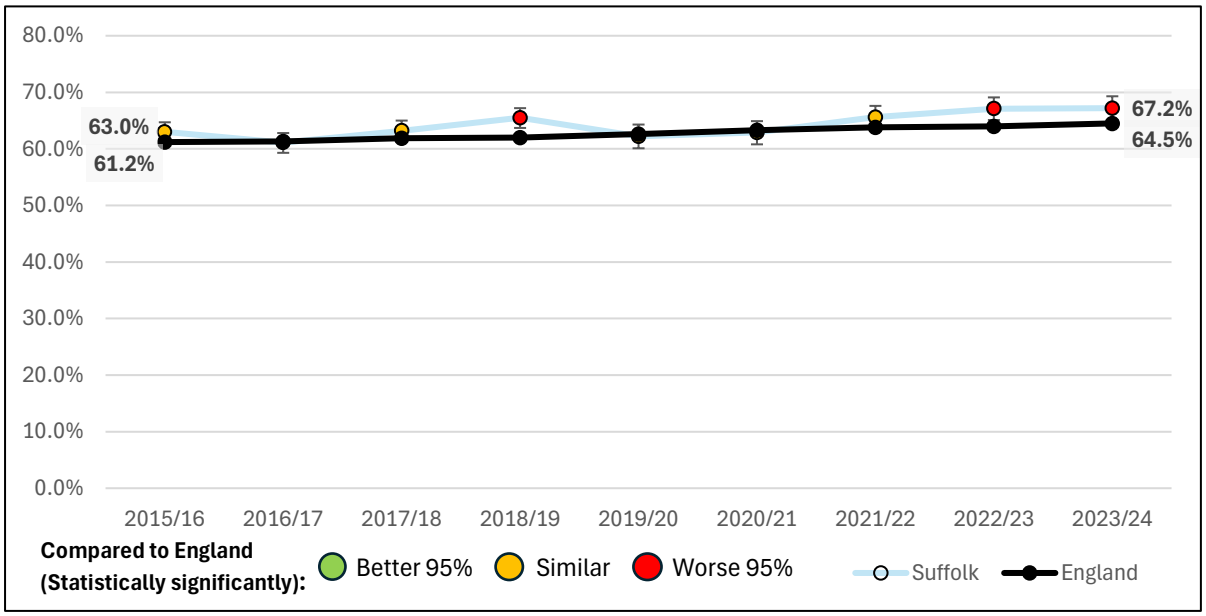
There is also variation across the county; in Mid Suffolk, 71.3% of adults were classified as overweight (including obesity), statistically significantly higher than the England average. West Suffolk (68.3%), Ipswich (67.1%), East Suffolk (65.5%) and Babergh (63.8%) were all statistically similar to the England value.

Figure 14. Overweight (including obesity) prevalence in adults, (using adjusted self-reported height and weight) (18+ yrs), England, Suffolk and districts and boroughs, 2023/24

Source: Office for Health Improvement and Disparities (2025)

The figure for Suffolk in 2023/24 is also statistically significantly higher than the value in 2015/16, where 63.0% of the Suffolk adult population were classified as overweight (including obesity).

Figure 15. Overweight (including obesity) prevalence in adults, (using adjusted self-reported height and weight) (18+ yrs), England and Suffolk, 2015/16 to 2023/24



Source: Office for Health Improvement and Disparities (2025)

Suffolk performs well for adult physical activity, with 70.3% of adults aged 19 and over meeting the Chief Medical Officer's recommendations of at least 150 minutes of moderate intensity equivalent physical activity per week. This places Suffolk statistically significantly above both the East of England regional average (68.2%) and the England average (67.4%) in 2023/24.

All of Suffolk's districts and boroughs have a statistically similar proportion of adults classified as physically active compared to the England average in 2023/24; despite Suffolk having a statistically significantly higher proportion of adults classified as physically active. This reflects the larger sample size at county level producing narrower confidence intervals compared to the smaller sample sizes for individual districts and boroughs.

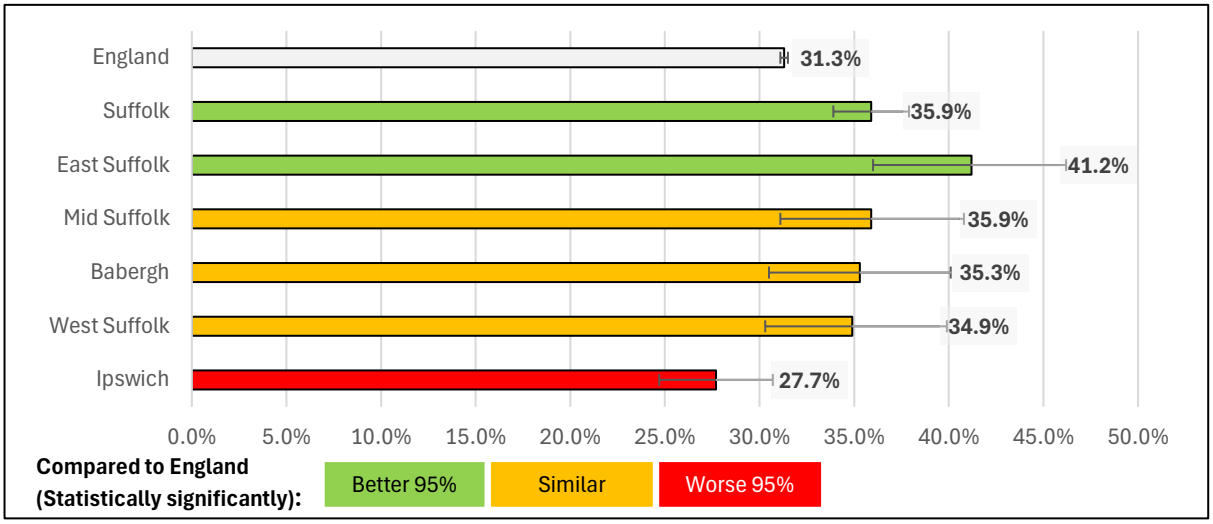
Figure 16. Percentage of physically active adults (aged 19 and over, including gardening) in Suffolk's districts and boroughs compared to England, 2023/24

Source: Office for Health Improvement and Disparities (2025)

The following data reports the percentage of respondents aged 16 and over who reported they had eaten 5 or more portions of fruit and vegetables on the previous day, from the Sport England Active Lives Survey. The survey provides self-reported fruit and vegetable consumption, which can be used to produce estimates of those meeting the '5-a-day' fruit and vegetable consumption recommendations.

Across Suffolk in 2023/24, just over 1 in 3/35.9% of adults were meeting the '5-a-day' requirement for fruit and vegetable consumption, statistically significantly higher than the average across England (31.3%). Across the county, fruit and vegetable consumption was highest in East Suffolk, with 41.2% of adults meeting the '5-a-day' recommendations (statistically significantly higher than the England average), whereas only 27.7% of Ipswich residents were meeting the recommendations (statistically significantly lower than the England average).

Figure 17. Percentage of adults meeting the '5-a-day' fruit and vegetable consumption recommendations, Suffolk and districts and boroughs compared to England, 2023/24

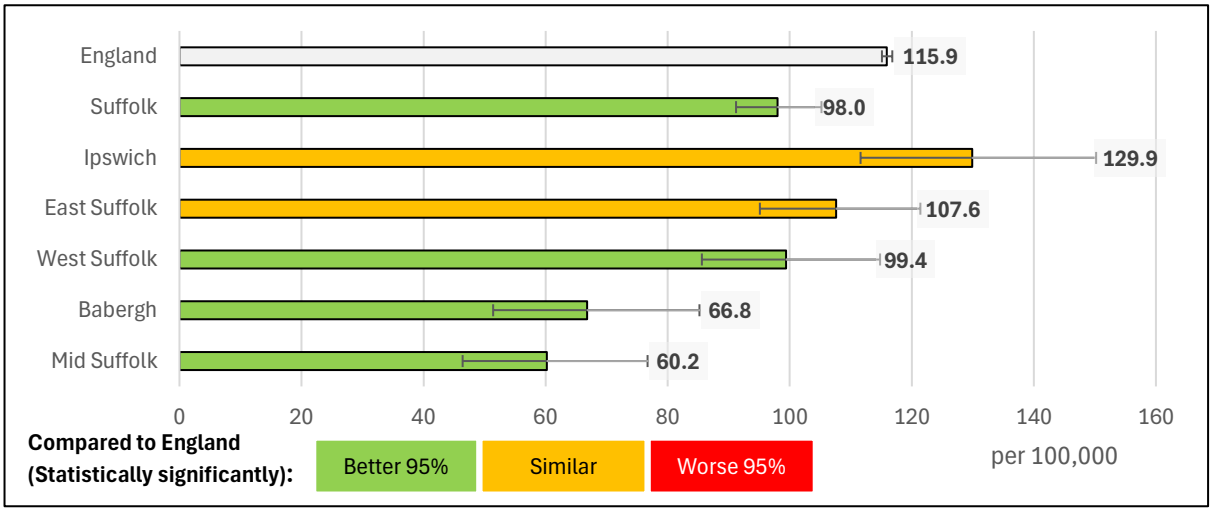


Source: Office for Health Improvement and Disparities (2025)

Meals eaten outside of the home tend to be associated with higher calories, with portions sizes typically larger, making it more challenging to eat healthily[52,53]. Fast food is more readily available in the most deprived areas of England where obesity in children and adults and the associated health conditions such as type 2 diabetes, hypertension, and heart disease are most prevalent[54,55]. The following data considers the number of fast food outlets in an area while taking the size of the population into account. In Suffolk in 2024, there were 761 fast food outlets, producing a rate of 98.0 per 100,000 people. This rate was statistically significantly lower than the England average. Rates were highest in Ipswich and East Suffolk (129.9/181 units and 107.6/266 units of fast-food outlets per 100,000 people respectively) – both statistically similar to the England average (115.9 per 100,000).

West Suffolk (99.4 per 100,000/185 units), Babergh (66.8 per 100,000/64 units), and Mid Suffolk (60.2 per 100,000/65 units) were all statistically significantly lower than the England average in 2024.

Figure 18. Fast food outlets per 100,000 population, Suffolk and districts and boroughs compared to England, 2024



Source: Office for Health Improvement and Disparities (2025)

Disabled people (including those with long-term physical, mental, intellectual or sensory impairment)

Evidence on the relationship between disability and health literacy is mixed and varies across different types of disability. One study found that adults with disabilities reported higher levels of health literacy than those without, though they also faced greater barriers in accessing and using health information, particularly around digital tools and healthcare navigation[56]. Other research highlights that people with certain disabilities, especially those affecting cognition, communication, or sensory function may require additional effort to find and interpret health information and can experience frustration in the process[57].

Such challenges can contribute to barriers in accessing care, understanding treatment options, and engaging in preventive health behaviours. It is important to recognise this diversity, as tailored approaches to improving health literacy for different groups of disabled people may help to reduce inequalities and improve health outcomes.

One survey found that individuals with disabilities reported greater difficulty finding necessary health information and also greater frustration during searches, although they did not perceive the information as harder to understand[58]. This suggests that access and navigation challenges are key issues rather than comprehension alone.

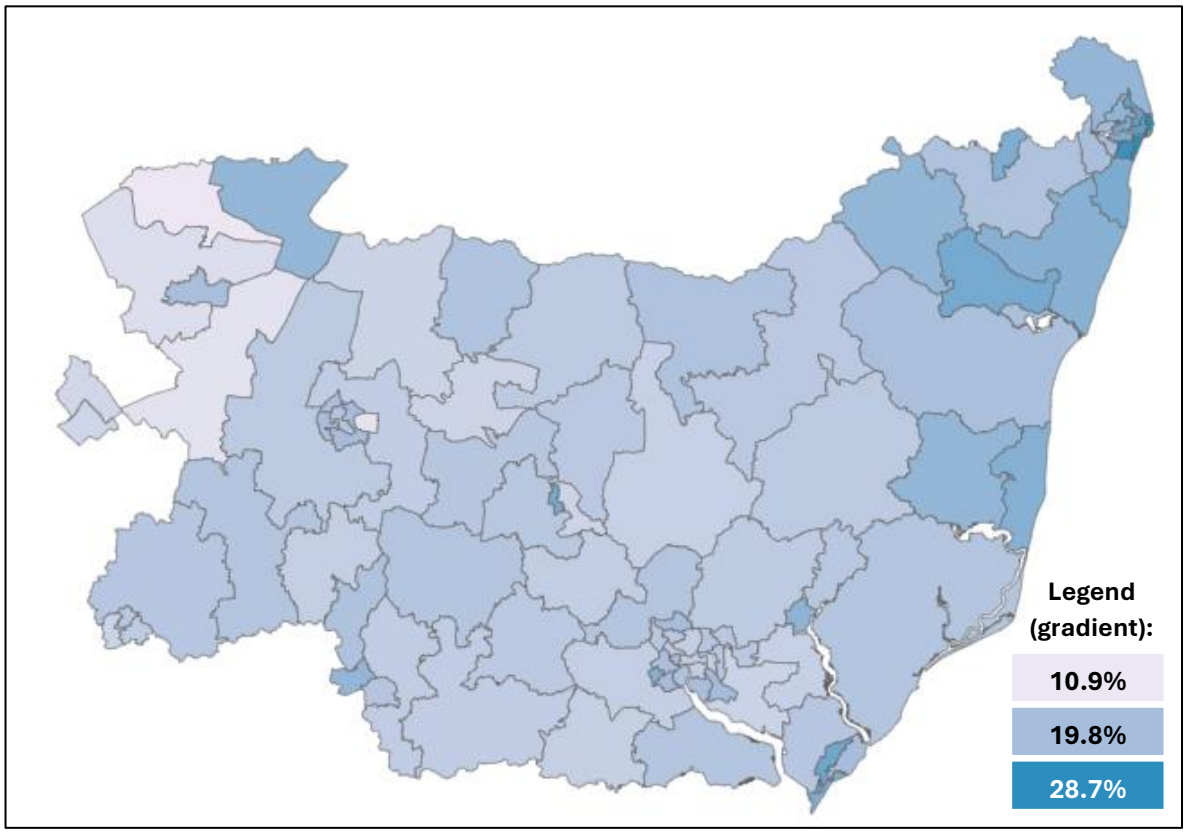
For individuals with spinal cord injury, stroke, or traumatic brain injuries, research also demonstrates that higher levels of health literacy correlate with better mobility, less anxiety, and improved overall health[59]. Interventions should therefore consider cognitive and sensory limitations and provide accessible formats, such as multimedia and plain language[59].

People with intellectual disabilities face unique challenges, including limited functional literacy, communication barriers, and a lack of tailored health information[60]. Approaches using easy-read materials, pictures, and supported decision making can improve engagement. For this cohort, health literacy should be considered a distributed resource, involving carers and support networks, rather than an individual skill[60]. For children with developmental disabilities, family health literacy is vital as evidence suggests mixed associations between parental health literacy and child health outcomes, highlighting the need for family-centred interventions[61].

Using the 2021 census data for Suffolk, 18.3% (138,987) of Suffolk's population self-reported that they were disabled under the Equality Act, higher than the average across England of 17.3%. For Suffolk's districts and boroughs, East Suffolk had the highest percentage of disabled persons at 20.6% (50,749), followed by Ipswich (18.0%/25,165), Babergh (17.5%/16,160), and Mid Suffolk (17.1%/17,539). West Suffolk had the lowest percentage of disabled individuals in Suffolk, at 16.3% (29,375).

For Suffolk's Middle Super Output Areas (MSOAs), the 5 MSOAs with the highest percentage of residents classified as disabled under the Equality Act as of census day 2021, all reside within East Suffolk. For Lowestoft Harbour & Kirkley MSOA, 28.7% of residents self-report themselves as disabled, followed by 27.7% within Pakefield North, 25.1% in Lowestoft Central, and 24.7% in Gunton West. The fifth highest percentage of residents classified as disabled under the Equality Act in Suffolk is also in East Suffolk, with 23.8% of residents in Felixstowe West.

Figure 19. Percentage of all usual residents classified as disabled under the Equality Act, as of census day 2021, Suffolk Middle Super Output Areas (MSOAs)

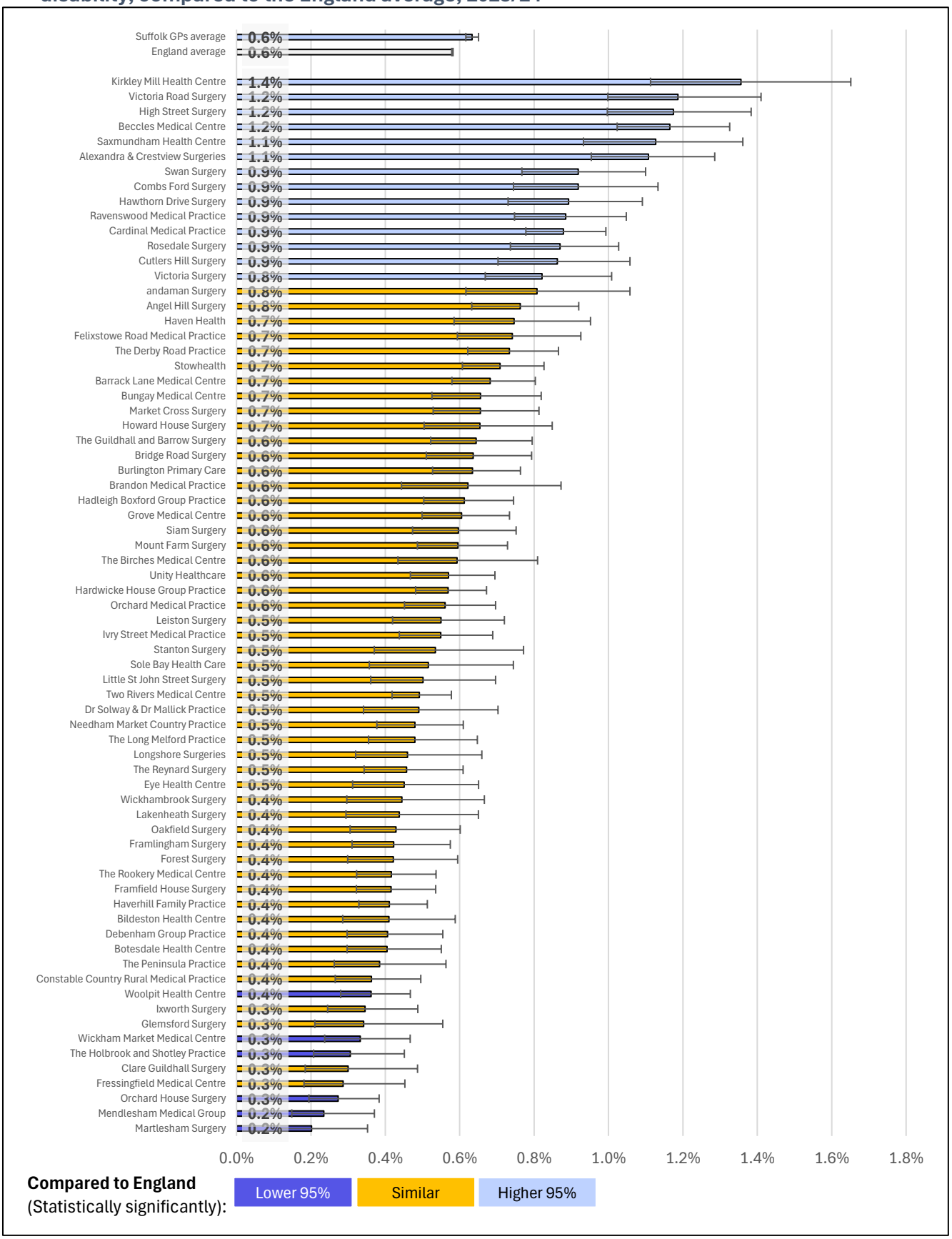


Source: NOMIS (2021)

Using the latest Quality Outcomes Framework (QOF) data for Suffolk, in 2024 there were 5,238 patients with learning disabilities as recorded on practice disease registers. This accounted for 0.6% of all patients in Suffolk on practice disease registers.

The following figure shows the percentage of patients with learning disabilities recorded on each Suffolk GP practice disease register in 2023/24, compared to the England average for statistical significance. The highest percentages in the county were for the following GP practices (all of which are located in Lowestoft): Kirkley Mill Health Centre (1.4%/97 individuals) and Victoria Road Surgery (1.2%/127 individuals), and High Street Surgery (1.2%/141 individuals).

Figure 20. Percentage of patients on Suffolk GP practice registers with a learning disability, compared to the England average, 2023/24



Source: Office for Health Improvement and Disparities (2024)

What do the statistics show?

Health literacy tool

The health literacy estimates presented in this section are derived from a comprehensive analytical tool developed by the University of Southampton in collaboration with NHS England. This tool provides prevalence estimates of low health literacy at local authority level across England, representing the most robust approach currently available for estimating health literacy levels in the absence of recent direct survey data. The estimates are produced at lower-tier local authority/district and borough geographic level.

The estimates indicate the percentage of the population aged 16-65 who would likely have difficulties understanding or interpreting health information they encounter in routine healthcare interactions. For the purpose of this tool, health literacy is defined as the threshold level enabling individuals to understand 70% of health-related materials they are likely to encounter in standard health service settings.

The estimates are based on the Skills for Life Survey 2011, the most recent comprehensive survey of health literacy in England, updated with 2021 Census data and 2019 Index of Multiple Deprivation.

Multilevel small area estimation techniques were used to predict health literacy levels. The models incorporated individual factors such as sex, age, and educational attainment, and area factors including deprivation levels, proportion not speaking English as first language, and ethnic composition. These models were developed using Bayesian methods and applied to generate estimates at Lower Super Output Areas (LSOAs), which were then aggregated to local authorities across England, with 95% confidence intervals applied.

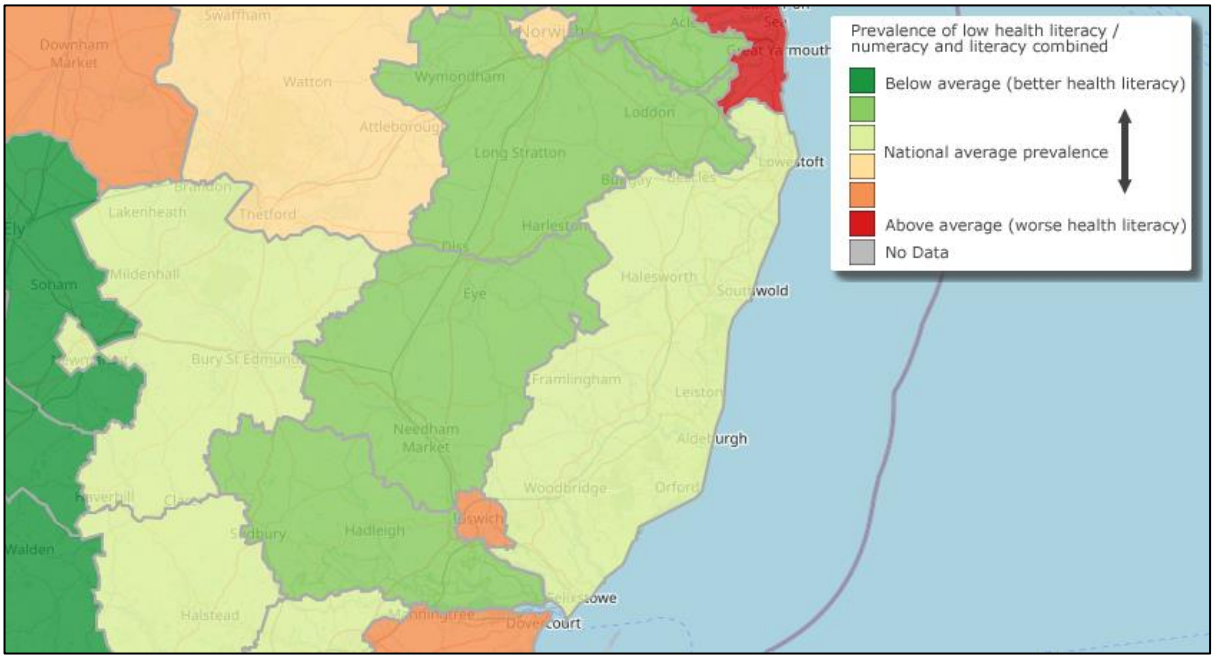
Other limitations and considerations for this tool include:

- Age restriction: Estimates apply only to the population aged 16-65, excluding younger and older age groups who may have different health literacy profiles
- Modelled estimates: These are statistical estimates derived from modelling rather than direct measurement, and should not be interpreted as precise measures
- Geographic variation: Each local authority will contain areas with higher and lower prevalences than the overall estimate suggests
- Temporal considerations: While updated with recent Census and deprivation data, the underlying health literacy relationships are based on 2011 survey responses

The national average prevalence of limited health literacy among the 16-65 age group is estimated at 38.66%, providing a benchmark for Suffolk's local area estimates. This indicates that approximately two in five working-age adults in England face challenges understanding and using health information to make decisions.

Within Suffolk, Ipswich is the only lower-tier local authority estimated to have a prevalence of limited health literacy above the national average (43.56%). In contrast, Babergh (33.55%), East Suffolk (37.00%), Mid Suffolk (33.03%), and West Suffolk (37.26%) all have lower estimated prevalence than the England average (38.66%).

Figure 21. Estimated prevalence of low health literacy in Suffolk's districts and boroughs, compared to the England average, 2023



Source: University of Southampton, NHS England (2023)

Table 2. Estimated prevalence of low health literacy in Suffolk's districts and boroughs, compared to the England average, 2023

Area	Estimated prevalence of low health literacy
England	38.66%
Babergh	33.55%
Ipswich	43.56%
East Suffolk	37.00%
Mid Suffolk	33.03%
West Suffolk	37.26%

Source: University of Southampton, NHS England (2023)

Geographic access to primary care/SHAPEatlas

Analysing GP practice accessibility across Suffolk reveals significant variation in access to primary healthcare services. The first figure uses a 2-4 mile distance radius as a standard measure of access, with the mapping showing distinct patterns that should be considered in relation to implications for health literacy and health outcomes. The second figure displays the distance radius surrounding each Suffolk GP practice between 2-10 miles.

Figures 22 and 23 show a concentration of GP practices in Suffolk's urban areas, particularly around Ipswich, with good coverage extending across the majority of the county. However, there are gaps in coverage within Northern Suffolk, where groups of the county fall outside of a 4-mile radius of their nearest GP practice.

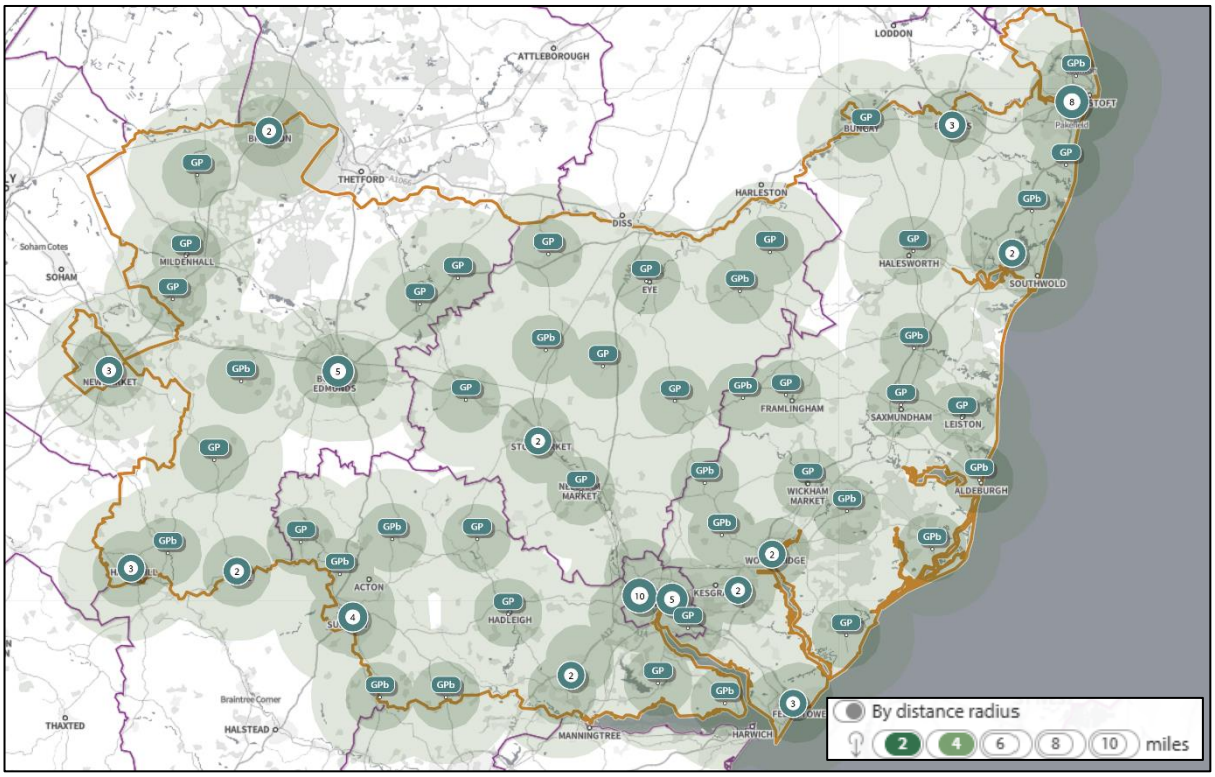
Rural populations in Suffolk face a compound disadvantage where:

- Greater travel distances may discourage routine healthcare management
- Limited transport options particularly affect elderly populations and those without private transport, particularly for the 10.4% of older people (aged 60 and over) in Suffolk classified as living in poverty in 2019 (Office for Health Improvement and Disparities (2025).
- Digital appointment systems may be challenging for those with both low levels of health literacy and limited digital skills (more information is available in Suffolk's digital inclusion profile as part of the JSNA)
- Emergency situations may result in delayed care-seeking due to distance

Areas with poor geographic access to primary care would benefit from enhanced community health services and outreach programmes, as well as targeted health literacy interventions delivered through alternative community venues. Another consideration for these areas is improved transport links and/or mobile healthcare provision, as well as digital health solutions being supported with appropriate training and support.

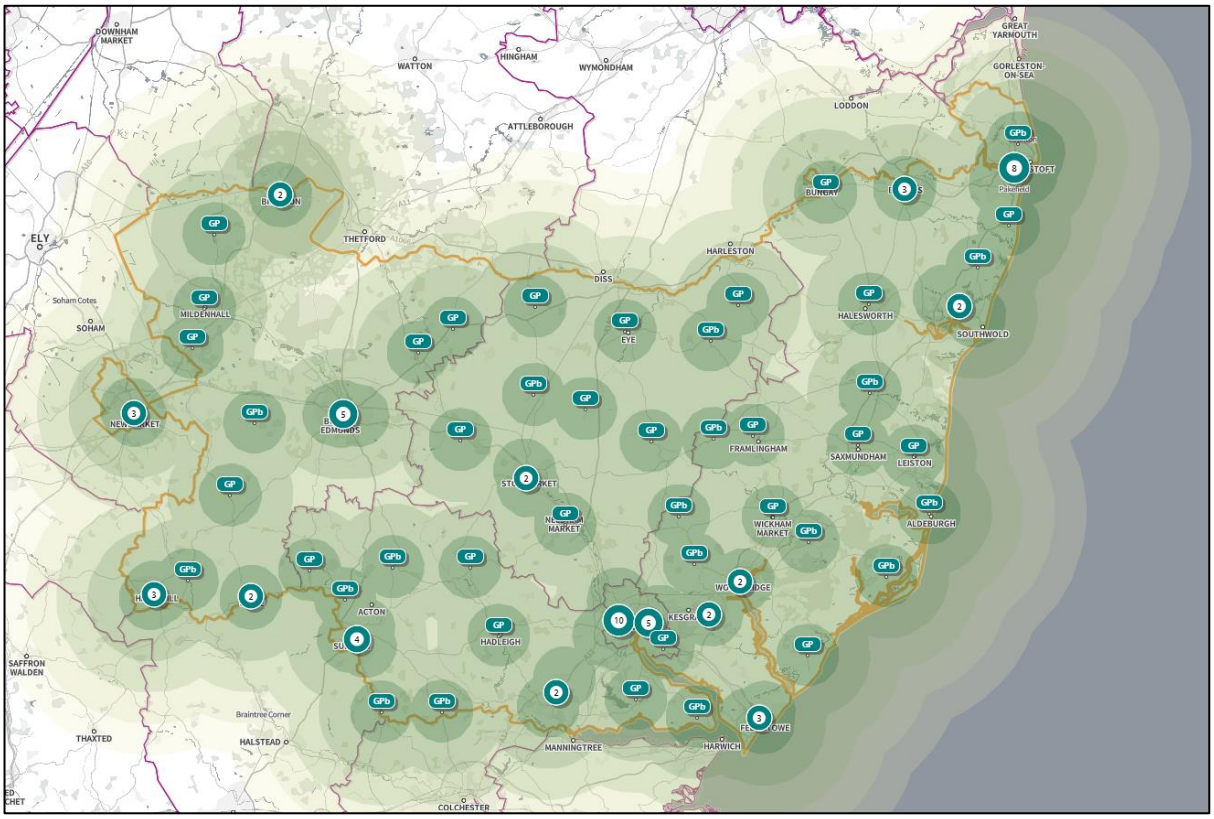
Health literacy interventions cannot be "one-size-fits-all." In rural and coastal communities, they need to be supported by practical measures such as outreach services, accessible transport options, mobile clinics, and digital skills support. Strengthening both service access and health literacy in these areas is key to reducing inequalities in healthcare use and outcomes.

Figure 22. Areas of Suffolk within a 2 and 4 mile radius of Suffolk GP practice, as of September 2025



Source: SHAPEatlas (2025)

Figure 23. Suffolk's GP practices and 2-10 mile distance radius, as of September 2025



Source: SHAPEatlas (2025)

Best practice

Health literacy 'how to' guide: NHS Health Education England

Evidence-based health literacy interventions have demonstrated positive impacts on health behaviours and outcomes for individuals with low health literacy. The most effective approaches operate at both system and practitioner levels, with healthcare providers adopting "universal precautions" that assume no prior understanding and routinely check comprehension with all service users, regardless of their apparent educational or professional background.

The majority of adults function at an 11-14 year reading age level, requiring health communications to be pitched at approximately 11-year-old comprehension levels to be accessible to most of the population[62].

Effective verbal communication techniques centre on confirmation methods that verify understanding rather than simply asking whether information was clear. The 'teach back' method requires patients to repeat or demonstrate their understanding of information provided, using phrases such as "To check that I've explained everything properly, can you explain to me how you are going to take your medicines?" or "Just to make sure that my instructions make sense to you, can you tell me what you are going to do next?" This approach goes beyond asking "Is what I have explained clear?" by requiring active demonstration of understanding[62].

The 'chunk and check' technique complements teach back by breaking information into small, manageable sections with comprehension verified after each segment before proceeding. This prevents information overload and ensures understanding builds progressively. For example, rather than providing all medication instructions at once, information can be segmented into individual medications, dosages, and timing, with understanding confirmed at each stage[62].

Staff should also offer help with forms, directions, and paperwork in a non-stigmatising manner that keeps choices with the individual. Effective approaches include phrases like "You can either fill these out now or our staff can help you fill these out" or "Would you like me to go over the form with you to make sure we get all the information we need?" This routine offering of help avoids the need to identify who might need assistance while ensuring support is available for all[62].

Written health information requires careful attention to both the content and design. Text should use short, familiar words and sentences, active voice rather than passive construction, and conversational tone using 'I', 'we', 'you' rather than third person. Present tense should be used where possible, with any necessary technical terms clearly explained. Design principles include short headings that stand out clearly, large clear fonts of at least size 12, abundant white space to avoid cluttered appearance, and left-justified text rather than full justification. Lists should use bullet points, emphasis should use bold lowercase letters rather than all capitals, and any images should directly support key messages rather than serving decorative purposes. User testing should be routine for all written materials rather than an optional enhancement[62].

Regular feedback should be sought to assess communication effectiveness through simple questions, such as "Did staff members use everyday, plain language today?"; these feedback systems can use simple yes/no response formats that allow anonymous input from service users[62].

NHS England Accessible Information Standard

The NHS England Accessible Information Standard provides a mandatory framework ensuring that people with disabilities, impairments, or sensory loss can access and understand NHS and adult social care information and receive appropriate communication support. All organisations providing publicly funded NHS care or adult social care must comply with this standard, which also supports Equality Act 2010 obligations.

The standard requires six essential steps: identifying individuals' information and communication needs, recording these systematically using standardised terminology, implementing flagging systems to prompt staff action, sharing needs information across care settings, meeting identified needs through accessible formats and communication support, and regularly reviewing requirements. This systematic approach embeds reasonable adjustments in routine care delivery rather than addressing them on an ad hoc basis.

For health and care services, the standard intersects directly with health literacy considerations, as individuals with low health literacy may require similar accommodations including simplified materials, verbal explanations, and additional processing time. Healthwatch Suffolk have covered the new standard for accessible NHS and social care Your Care, Your Way, as well as what it means for patients in Suffolk, and Healthwatch's views on a stronger Accessible Information Standard.

The PIF Tick Quality Mark for Health Information

The PIF TICK is an independent trust mark for health information administered by the Patient Information Forum (PIF), a UK charity representing over 300 health information producers. The scheme was established in 2020 following consumer research showing that eight in ten people would look for a quality mark for health information, with two-thirds of UK adults stating that independent verification would increase their trust in health materials.

Organisations seeking the PIF TICK must demonstrate compliance with ten key steps covering systems, training, evidence base, user involvement, health inequalities considerations, transparency, feedback mechanisms, dissemination, and impact measurement. Particularly relevant is the requirement that information must be written to meet health literacy, digital inclusion, language and accessibility needs of the target audience. The assessment process includes annual reviews with ongoing support from PIF to improve information production processes.

Organisations displaying the PIF TICK mark demonstrate evidence-based content creation, plain language writing, trained staff involvement, and systematic attention to health literacy requirements. For members of the public, the PIF TICK serves as an indicator of trustworthy health information that has been independently verified to meet accessibility and comprehension standards, supporting informed health decision-making across diverse population groups. A list of organisations and individuals meeting the criteria are available online via the PIF tick directory (latest version is August 2025).

Health Literacy Toolkit

The 2023 Health Literacy Toolkit provides a comprehensive collection of freely available tools and techniques for healthcare professionals and public health practitioners to improve health literacy practices. Developed by health knowledge specialists in collaboration with the Community Health and Learning Foundation, Public Health England, Health Education

England, and NHS England, the toolkit addresses both traditional and digital health literacy challenges.

The toolkit organises practical resources across six key areas. Communication tools include literacy and numeracy level guidance, while spoken communication resources cover teach-back methods, chunk-and-check techniques, and specialised e-learning modules. Written information guidance encompasses plain English writing principles, alternative word resources from the Plain English Campaign, jargon busters, and easy read production guides. Readability assessment tools include the Hemingway app, Flesch-Kincaid testing, and the NHS Medical Document Readability Tool for evaluating content accessibility.

Service user involvement receives dedicated attention through co-production methodologies, while design guidance covers both print and digital information requirements, including evidence-based approaches to using images, graphs, and visual elements. The toolkit emphasises user testing and iterative improvement processes to ensure materials meet the needs of intended audiences.

Health Literate Organisation (HLO) Programme

The HLO programme, commissioned by Health Education England and now supported by NHS England, supports health and care organisations to become more health literate in the way they engage with service users. Delivered by Health Literacy Matters, the programme recognises that sustainable improvement requires both individual skills and organisational change. It combines health literacy awareness training for practitioners with tools and expert advice, alongside an organisational change management approach. Central to this model is leadership commitment and system-wide prioritisation, rather than relying on awareness-raising alone.

The framework identifies seven key components of a health literate organisation: leadership accountability and policy; active involvement of service users (particularly underserved groups); staff training tailored to roles; accessible written and verbal communication; supportive physical and online environments; and systematic evaluation of progress. This programme builds on existing influential work[63] and has been adapted for the UK context by Health Literacy Matters.

Conclusion

Health literacy is a critical determinant of health outcomes and health equity. Nationally, around two in five working-age adults have difficulty understanding health information and making health-related decisions. This profile suggests that Suffolk faces similar challenges, while also highlighting opportunities to strengthen health literacy locally.

The demographic profile of Suffolk reveals that the county benefits from lower overall deprivation levels compared to England, while also having a comparatively older population structure that shapes local needs and priorities. According to the 2021 census, with 24.2% of residents aged 65 and over (compared to 18.9% nationally), Suffolk has a higher proportion of individuals at risk of age-related health literacy decline.

The health literacy estimates indicate notable geographic variation across Suffolk's districts and boroughs. Ipswich shows the highest estimated prevalence of low levels of health literacy in 2023 (43.6%), above the national average, while rural districts including Mid Suffolk (33.0%) and Babergh (33.6%) demonstrate lower prevalences. However, these rural areas face compound disadvantages with some limited geographic access to primary care services, with parts of northern Suffolk bordering Norfolk showing gaps in GP practice coverage within reasonable travel distances.

Comparing Suffolk’s socioeconomic data to England can hide the real needs of individuals and the specific areas where disadvantage exists. While 2019 data on child poverty (13.5%) and older adult income deprivation (10.4%) are both statistically significantly lower than national averages, over 75,000 residents still live in the most deprived quintile nationally. Educational attainment data for 2022/23 presents additional concerns, with Suffolk's average Attainment 8 score (43.6) falling below the England average (46.2), particularly in Ipswich and East Suffolk.

Ethnic diversity varies across districts and boroughs. Census data from 2021 states that over 1 in 4 (25.4%) Ipswich residents are from ethnic minority backgrounds compared to only 6.0% in Mid Suffolk. Suffolk’s more diverse areas may face health literacy challenges also linked to language. Further data from the census in 2021 found that 4.5% of Suffolk residents had a main language other than English, with the proportion much higher in Ipswich (11.3%). This reiterates the importance of providing information in accessible formats, while considering cultural preferences in communication - particularly as the NHS App remains English-only.

Health behaviours across Suffolk reveal mixed patterns relevant to health literacy. For 2023/24, physical activity levels (70.3%) and fruit and vegetable consumption (35.9%) exceed national averages, but overweight and obesity prevalence (67.2%) is statistically significantly higher than England's average. While Suffolk has a lower density of fast food outlets which may reduce exposure to les healthy options, other influences such as affordability, transport, and access to fresh food also shape dietary choices. These wider factors may help explain why overweight and obesity rates remain elevated, and also highlight the importance of health literacy in supporting individuals to navigate complex food environments, and indicate potential gaps in health literacy around nutrition and weight management.

Disability prevalence (as measured by activity limitation) from the 2021 census in Suffolk (18.3%) exceeds the national average, with concentrations in East Suffolk's coastal areas. Learning disability prevalence in 2024 (0.6%) mirrors national patterns but with significant variation across GP practices, suggesting potential inequities in identification and support.

Health literacy is a combination of individual's own skills, as well as how well health services work for them. While there is useful guidance such as the NHS Accessible Information Standard, and toolkits for health staff – health literacy problems remain for various population groups.

Rural and coastal areas face additional challenges, with limited access to services and a higher proportion of older adults who are at higher risk of low health literacy. Ipswich on average has higher risks of *low* levels of health literacy, and more people from different ethnic backgrounds. Therefore, different approaches are required to improve health literacy and address language and cultural differences in parts of the county.

Improving health literacy needs work at different levels; helping individuals to build skills, training staff to enhance communication, and making services easier to use. The fact that health literacy problems are estimated to be worst in Suffolk's most disadvantaged area shows how health literacy both causes and results from health inequalities.

Suffolk's health literacy challenges reflect national patterns but are shaped by local factors. The county's older age profile, areas of deprivation, and rural transport barriers make it harder for many residents to access, understand, and act on health information. Targeted improvements in health literacy - for example, supporting older people with digital health tools or tailoring resources for communities experiencing deprivation - could help reduce inequalities and improve health outcomes across Suffolk.

Improving health literacy is more than just supporting individuals – organisations themselves need to communicate clearly and consistently. Lasting change happens when health and care services make health literacy a part of everyday practice, backed by strong leadership. The Health Literate Organisation (HLO) programme shows how this can work in practice, combining staff training with service-user involvement and organisational commitment. Taking this approach gives communities a better chance of receiving information and support they can understand and act upon, reducing health inequalities over time.

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