Three Rivers

Health Inequalities JSNA

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Acronyms

- **ACE** – Adverse Childhood Experience
- **APMS** – Adult Psychiatric Morbidity Survey
- **BAME** – Black and Minority Ethnic
- **BMI** – Body Mass Index
- **CBT** – Cognitive Behavioural Therapy
- **COL** – Cost of Living
- **CMD** – Common Mental Disorder
- **CVD** – Cardiovascular Disease
- **CYP**- Children and Young People
- **GP** – General Practitioner
- **JSNA** – Joint Strategic Needs Assessment
- **LGBTQ** - Lesbian, Gay, Bisexual, Transexual and/or Questioning
- **LSOA** - Lower Layer Super Output Areas
- **ONS** – the Office for National Statistics
- **PTSD** – Post-Traumatic Stress Disorder
- **QOF** – Quality Outcomes Framework
- **SMI** – Severe Mental Illness

Contents

1.0 Purpose

- The purpose of this Joint Strategic Needs Assessment (JSNA) is to identify health needs impacted by inequality within the district of Three Rivers across all age groups. The JSNA will focus on the following five identified key themes:
    - Long-term health conditions (including cardiovascular disease (CVD), diabetes and chronic pain (including fibromyalgia))
    - Mental health and wellbeing
    - Healthy weight (including obesity and eating disorders)
    - Frailty and older people
    - Cancer

- The JSNA will achieve this by exploring relevant national and local data, reviewing academic research on causes and risk factors, and providing an overview of local strategies and interventions for each of these health themes. The findings from this JSNA will be used to develop the place-based health inequalities workstream of the Three Rivers Health and Wellbeing Partnership Group.

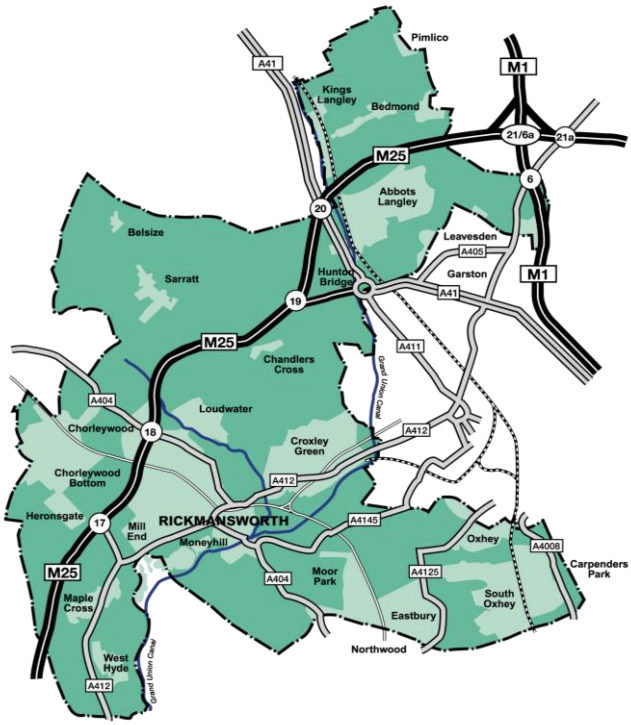
- This JSNA makes several recommendations based on the available evidence and guidance examined throughout this document. These recommendations are intended to inform strategic planning and local service provision in reducing health inequalities and improving health outcomes for this cohort.

2.0 Background

2.1 Overview

- Three Rivers is a local government district located within the county of Hertfordshire in the East of England. It is situated in southwest Hertfordshire, bordering Greater London to the south and Buckinghamshire to the west. Three Rivers is broken down into 13 wards, with the council building based in Rickmansworth.
- Three Rivers is well connected by motorways, including the M1 and M25, and train and rail links, including the West Coast Main Line, Chiltern and the Metropolitan tube lines. It is also in close proximity to several hospitals, including Watford General Hospital, St Albans City Hospital, and Hemel Hempstead Hospital.

***Figure 1**: Map of Three Rivers district*



Source: Three Rivers District Council and [Save the High Street](#).

2.2 Population

2.2.1 Age and sex

- The 2021 Census estimates that the population of Three Rivers is 93,800, with a split of 49% males and 51% females. The majority of residents are aged 15-64 years (63%), with 19% of the population aged 0-14 years, and 18% aged 65+. According to ONS 2018-based population estimates, it is projected that the number of people aged 65+ in Three Rivers will increase by 7% by mid-2043.[1]

- The most common age of Three Rivers residents was 40-59 years and 5-14 years, of which Three Rivers had a higher proportion of the population in these age brackets compared to the regional and national averages. However, Three Rivers had a lower proportion of males and females aged 20-34 than regional and national averages (see *Figure 2*).

***Figure 2**: Sex and age population profile of Three Rivers residents, compared to regional and national benchmarks (2021)*

Source: Office of Health Improvement and Disparities (OHID) Fingertips website, Census 2021.

- South Oxley had the highest proportion of 0-14 year olds (20.5%) and lowest proportion of people aged 65+ (11.3%). In contrast, Chorleywood North & Sarratt had the highest proportion of people aged 65+ (25.3%), followed by Moor Park & Eastbury (22.8%) and Carpenders Park (22.7%).
- Moor Park & Eastbury was the only ward in Three Rivers to have a higher proportion of males (50.1%) than females (49.9%).

2.2.2 Ethnicity

- As of March 2021, 77% of residents in Three Rivers identified as White and 23% identified as being from an ethnic minority group (see *Table 1*).

***Table 1**: Ethnic group populations for Three Rivers residents, by ward (2021)*

Ward	White	Asian	Mixed	Black	Other
Abbots Langley & Bedmond	90.4%	4.6%	3.0%	1.3%	0.7%
Carpenders Park	69.4%	22.6%	2.8%	2.5%	2.7%
Chorleywood North & Sarratt	71.6%	21.6%	3.4%	1.7%	1.7%
Chorleywood South & Maple Cross	86.3%	7.2%	4.1%	1.0%	1.4%
Dickinsons	79.0%	13.9%	3.9%	1.7%	1.4%
Durrants	83.9%	10.5%	3.1%	1.2%	1.3%
Gade Valley	86.2%	5.5%	4.0%	3.0%	1.4%
Leavesden	74.1%	15.4%	4.2%	4.6%	1.6%
Moor Park & Eastbury	41.1%	50.1%	3.4%	2.3%	3.1%
Oxhey Hall & Hayling	76.2%	15.1%	3.5%	3.3%	1.9%
Penn & Mill End	83.3%	10.0%	4.1%	1.3%	1.2%
Rickmansworth Town	82.3%	11.2%	3.6%	1.5%	1.4%
South Oxhey	74.3%	15.3%	3.5%	4.9%	2.0%
Three Rivers (%)	**77.1%**	**15.2%**	**3.6%**	**2.4%**	**1.7%**
Three Rivers (count)	**72,316**	**14,265**	**3,390**	**2,233**	**1,568**

Source: Office for National Statistics, Census 2021.
Note: Dark yellow shaded boxes indicate the highest wards and light yellow boxes indicate the lowest wards.

- The wards with the greatest ethnic diversity include Moor Park and Eastbury (58.9% of population are non-White), Carpenders Park (30.6% are non-White), and Chorleywood North & Sarratt (28.4% are non-White).
- In Moor Park and Eastbury, 50.1% of the population were from the Asian/Asian British ethnic group, making it the only ward in Three Rivers where the White ethnicity was not the most prevalent ethnic group.

2.2.3 Other population demographics

- According to the latest Census in 2021:
    - **Sexual orientation:** 91.5% of Three Rivers residents identified as heterosexual, 1.9% identified as non-heterosexual, and 6.6% did not answer the question. *Please note this data was not available at ward level.*
    - **Disability:** 13.5% of Three Rivers residents had a disability as defined under the Equality Act. This proportion was highest in the South Oxhey ward.
    - **Unpaid carers:** 8.1% of Three Rivers residents were providing unpaid care. This proportion was highest in the Carpenders Park ward.
    - **Military veterans:** 2.2% of Three Rivers residents have served in the UK armed forces. This proportion was highest in the Chorleywood North & Sarratt, Durrants and Rickmansworth Town wards.
- *Table 2* below summarises the proportion of Three Rivers residents in each ward that have protected characteristics. Please note that sexual orientation is not currently available at ward level and is therefore not included within this table.

Table 2: Protected characteristics for Three Rivers residents, by ward (2021)

Ward	Disabled (%)	Unpaid carers (%)	Military veterans (%)
Abbots Langley & Bedmond	16.0%	8.9%	2.5%
Carpenders Park	15.8%	9.3%	2.4%
Chorleywood North & Sarratt	11.8%	8.4%	2.7%
Chorleywood South & Maple Cross	12.9%	8.4%	2.2%
Dickinsons	12.5%	7.9%	2.4%
Durrants	11.0%	7.7%	2.7%
Gade Valley	13.9%	8.3%	1.9%
Leavesden	12.1%	7.1%	1.6%
Moor Park & Eastbury	10.8%	8.7%	1.6%
Oxhey Hall & Hayling	14.0%	8.7%	1.9%
Penn & Mill End	14.5%	7.4%	1.8%
Rickmansworth Town	12.7%	7.5%	2.7%
South Oxhey	17.6%	7.8%	1.7%
Three Rivers (%)	**13.5%**	**8.1%**	**2.2%**
Three Rivers (count)	**12,690**	**7,624**	**2,019**

Source: Office for National Statistics, Census 2021.
Note: Dark yellow shaded boxes indicate the highest wards and light yellow boxes indicate the lowest wards.

- More detailed information on population demographics for Three Rivers is available on the Three Rivers diversity profile.

2.3 Life expectancy

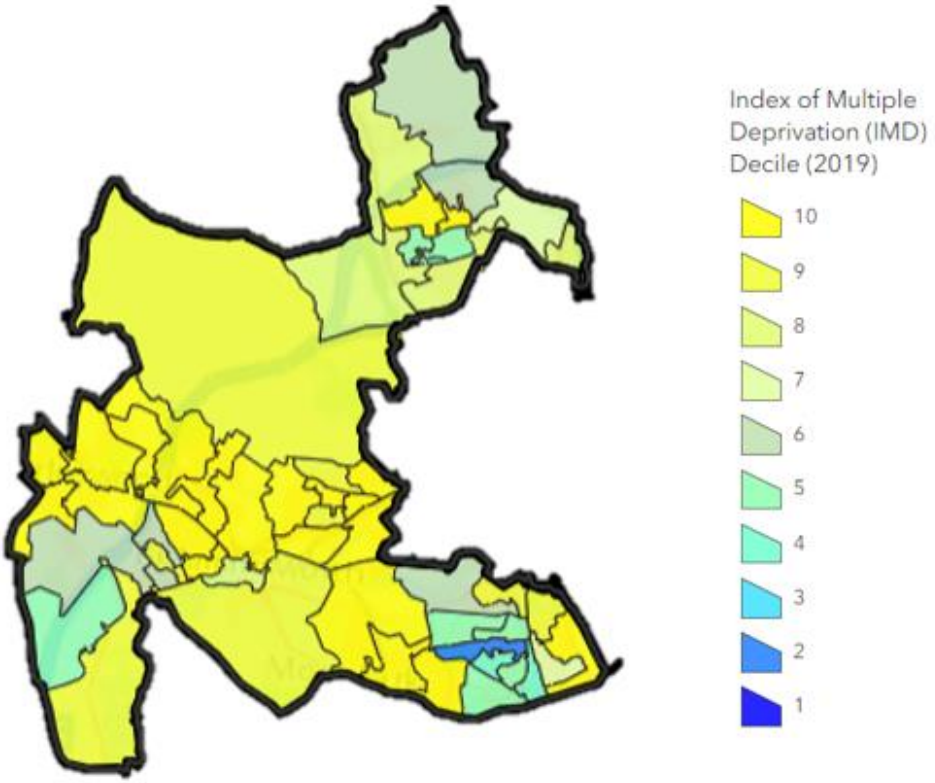
- Life expectancy in Three Rivers is higher than both the Hertfordshire and National averages. Data from the Office for National Statistics (ONS) show that the average life expectancy at birth for a resident in Three Rivers in 2020 was 82.8 years (81.2 for men and 84.4 for women) compared to 82.0 years in Hertfordshire and 80.7 years in England. Similarly, the life expectancy at 65 for a resident in Three Rivers was 20.5 years (19.4 years for men and 21.5 years for women) compared to 19.9 years in Hertfordshire and 19.4 years in England.[2]

2.4 Deprivation and inequality

- Three Rivers is ranked among the least deprived 10% of Lower Tier Local Authorities in England. In the 2019 Index of Multiple Deprivation (IMD) rankings, Three Rivers had a deprivation score of 9.9, making it the third least deprived district in Hertfordshire.[3]
- In Three Rivers, 66.0% of Lower Layer Super Output Areas (LSOAs) were in IMD deciles 8-10 (least deprived) and 1.9% of LSOAs were in IMD deciles 1-3 (most deprived).

- The most deprived LSOAs In Three Rivers are in the South Oxhey ward (see *Figure 3*), with 60.5% of households in South Oxhey being deprived in at least one dimension. In contrast, the least deprived ward was Moor Pool & Eastbury, with 30.7% of households being deprived in at least one dimension.

***Figure 3**: Index of Multiple Deprivation Decile, Three Rivers (2019)*



Source: DLUHC, Indicies of Deprivation, 2019

- In Three Rivers in 2021, the difference between life expectancy at birth for those in the most deprived areas (decile 1) and the least deprived areas (decile 10) was 5.6 years for males and 5.3 years for females.[2]

2.5 Work and education

- According to the 2021-22 Annual Population Survey, a higher proportion of working adults in Three Rivers had no qualifications (6.6%) compared to the Hertfordshire average (4.4%), and a lower proportion were qualified at degree level or above (35.2%) compared to the Hertfordshire average (41.5%).[4]
- Of the estimated working age population of Three Rivers, 4.0% were unemployed in 2022 and 2.2% were claiming Universal Credit or Jobseeker's Allowance. The unemployment rate in Three Rivers was higher than in Hertfordshire (2.4%) and England (3.8%).[4]

More information on the population of Three Rivers can be found on the Herts Insight website.

3.0 Causes and Risk Factors

This section explores some of the key risk factors identified through academic research that increase the likelihood of people developing the conditions of focus within this JSNA.

3.1 Long-term conditions

3.1.1 Cardiovascular disease

- Cardiovascular disease (CVD) is a general term for conditions affecting the heart or blood vessels, with the four main types being coronary heart disease, strokes, peripheral arterial disease, and aortic disease. CVD is a key cause of death and disability in the UK but can often be largely prevented by lifestyle modifications.[5]

Non-modifiable risk factors

- **Sex:** Men have a higher risk of CVD than women at all ages compared to women, and on average, develop CVD around 10 years earlier than women.[6] However, research suggest that women who have heart attacks receive poorer care than males during diagnosis, treatment and aftercare which may affect health outcomes.[7]
- **Age:** The risk of developing CVD increases with age, with it being most common in individuals over the age of 50.[8]
- **Ethnicity:** In the UK, South Asian, Black African and African Caribbean ethnicities have an elevated risk of developing CVD.[9] Specifically, South Asian groups have the highest mortality from heart disease and stroke, while Black groups in the UK have a significantly lower risk of heart disease compared to the general population but have higher incidence of and mortality from hypertension and stroke.[10]

Modifiable risk factors

- **Smoking**: Tobacco use is a leading behavioural risk factor for CVD, with it being estimated to contribute to at least 15,000 CVD-related deaths in the UK each year.[11]
- **Diet and physical activity:** A poor quality diet – i.e., excessive intake of sodium and processed foods, added sugar, and unhealthy fats – and physical inactivity increase the risk of high blood pressure, high cholesterol and being overweight, and thus are both associated with an increased risk of CVD.[12,13]

Other risk factors

- **Socioeconomic status:** Lower socioeconomic status is associated with an increased risk of cardiovascular disease. In 2017 the mortality rate from CVD was 3.7 times higher for males and 4.5 times higher for females living in the most deprived areas compared to males and females living in the least deprived areas.[14]

- **Comorbidities**: A wide range of comorbidities exist which can increase an individual's risk of developing CVD. Hypertension is one of the most important risk factors for CVD as it can damage an individual's blood vessels. Some other important comorbidities include type 2 diabetes, dyslipidaemia, chronic kidney disease, atrial fibrillation, and serious mental health problems.[8]
- More information can be found in the Tobacco Control JSNA and Overweight and Obesity JSNA.

3.1.2 Diabetes

- Diabetes is a chronic metabolic disease which affects the body's ability to produce and utilise insulin and leads to hyperglycaemia, which is linked to a plethora of complications. Diabetes has three main subtypes:
    - **Type 1** (T1DM) is autoimmune in origin and onset usually occurs early in life. Individuals are unable to produce insulin due to the destruction of pancreatic cell.[15]
    - **Type 2** (T2DM) is the most prevalent type which accounts for up to 90% of diagnoses and has a gradual onset due to reduced insulin synthesis and insulin resistance in cells.[16] Prior to full development of type 2 diabetes, a 'prediabetes' diagnosis may be made when the patient has elevated blood glucose which has not yet reached a diagnostic value.[17]
    - **Gestational diabetes mellitus (GDM**) is characterised by abnormal blood glucose in pregnancy and effects around 4-5% of pregnancies.[18]
- Risk factors are often shared between subtypes and include:
    - **Demographics:** T2DM prevalence increases with increasing levels of deprivation.[19] Increasing age is associated with an increased prevalence of pre-diabetes and T2DM,[20,21] whilst type T1DM typically peaks around puberty.[22] A cross-sectional analysis of the Health Improvement Network Primary Care Database found that minority ethnic groups were more likely to have a type 2 diabetes diagnosis compared to white individuals.[23]
    - **Weight and lifestyle factors:** Being overweight or obese is associated with both prediabetes and T2DM.[24] The risk of T2DM may be over 7 times higher in those who have obesity compared to those with 'normal' weight.[25] Low physical activity levels and high consumption of processed and unprocessed red meat can also increase the risk of T2DM.[26,27]
    - **Family history and genetics:** Family history is associated with an increased risk of prediabetes,[28] TD2M[29] and GDM[30]. Genetic factors are also important in the development of T1DM, with studies indicating that the human leukocyte antigen complex is associated with susceptibility for T1DM.[28]

- **Comorbidities:** There are many comorbidities involved in the development of prediabetes and T2DM. Polycystic ovary syndrome is linked to prediabetes,[31] T2DM[32,33] and GDM.[34] Hypertension has been indicated with both prediabetes[35] and T2DM, with one meta-analysis concluding that a 20mm Hg increase in systolic blood pressure and 10mmg Hg increase in diastolic blood pressure was associated with a 58% and 52% increased risk of new-onset diabetes respectively.[36]

- More information can be found in the Diabetes JSNA, Diabetes Lite Bite, and Overweight and Obesity JSNA.

3.1.3 Chronic pain (including fibromyalgia)

- Chronic pain is defined as chronic or persistent pain that continues for more than 12 weeks despite medication or treatment.[37] The most common types of pain are back pain (53%), headache (48%) and joint pain (46%)[38], with low back pain being the second most leading cause of disability adjusted life years in Hertfordshire.[39] Chronic pain may be caused by an acute injury, an ongoing degenerative illness, localised or regional disease, chronic systemic conditions, or surgery or medical interventions.[40]

Fibromyalgia

- Fibromyalgia is a long-term condition that causes pain all over the body.[41] Most individuals with fibromyalgia are diagnosed in middle age, and individuals with either rheumatoid arthritis or lupus as an existing comorbidity are at higher risk.[42] Some factors that are thought to contribute to the condition include:

    - **Sex:** Fibromyalgia mainly affects women (typically between 80-90% of cases are female). While the psychosocial impacts of fibromyalgia have been shown to be similar, men have been shown to have significantly more comorbidities (except for gastrointestinal disorders which are higher in women) and are more likely to delay seeking medical help.[43]

    - **Genetics:** Studies indicate that genetic factors are possibly responsible for up to 50% of fibromyalgia susceptibility. A gene-environmental interaction has also been proposed as a triggering mechanism.[44]

    - **Possible triggers:** Fibromyalgia is often triggered by an event that causes physical or psychological stress. Triggers may include a serious injury, an infection, having a major operation, or significant emotional trauma.[41]

    - **Associated conditions** generally include rhematic conditions (affecting the joints, muscles and bones), such as osteoarthritis or rheumatoid arthritis.[41]

Arthritis

- Arthritis is a common condition that causes pain and inflammation in a joint, affecting people of all ages, including children. Osteoarthritis and rheumatoid

arthritis are the two most common types. Arthritis is most commonly caused by wear and tear of cartilage in joints, metabolic abnormalities, infection, autoimmune disease, or injury.[45] Risk factors for arthritis include:

- **Demographic:** Osteoarthritis typically develops in individuals in 45 years older and above, while rheumatoid arthritis often starts between the age of 30 and 50. Both types of arthritis are more common in females than males.[45]
- **Obesity** is the greatest modifiable risk factor for osteoarthritis, particularly of the knee, increasing the load on weight-bearing joints and accelerating disease progression.[46]
- **Genetic:** There is some evidence that rheumatoid arthritis may have a genetic basis, with the risk of developing rheumatoid arthritis being most significantly associated with HLA-DRB1 alleles.[47]

3.2 Mental health and wellbeing

- Mental ill health may include a large variety of conditions including common mental health disorders (such as depression, anxiety and post-traumatic stress disorder), severe mental illness (including schizophrenia and bipolar disorder), and eating disorders (such as bulimia and anorexia). Poor mental health is also the most significant risk factor for self-harm and suicide among children and adults.
- Mental disorders represent the second leading cause of disability in the UK across all ages, with half of all mental health conditions beginning before the age of 14.[48,49]

3.2.1 Children and young people (CYP)

- **Demographics**: A national survey of children and young people's mental health found that the prevalence of mental health disorders was highest among 11- to 16-year-olds, and among children of a White British or Mixed/other ethnic background compared to those from Asian/Asian British and Black/Black British backgrounds. Mental health disorders were also found to be more common among boys aged 6 to 10 years compared to girls, but more prevalent among 17-23 year old women compared to men.[50]
- **Family-related**: Factors that have been found to increase the risk of CYP having a mental health disorder include having parents with poor mental health; living in unhealthy functioning families; and having lone parents.[50] Domestic violence and abuse, parental substance misuse, homelessness and being in social care are also linked to reduced childhood mental wellbeing.[51]
- **Socioeconomic**: Substantial evidence suggests that socioeconomically disadvantaged CYP are more likely to have poor mental health.[50,52] Furthermore, research suggests that crisis referrals for mental health are more common among CYP in the most deprived areas, indicating a higher severity of mental health support needs.[53]

- More information can be found in the Mental Health and Wellbeing in Children and Young People JSNA

3.2.2 Adults

- Mental ill health can result from a cumulative effect of disadvantages over the life course or from new issues that may develop during adulthood.
- **Demographics**: Women are reported to have a higher rate of all types of common mental health disorders, although suicide is more common among men (particularly those aged 40-59 years).[54,55] Research suggests that people from BAME communities are at higher risk of developing a mental health problem in adulthood, but are less likely to receive support.[54] Barriers to BAME people accessing mental health support include cultural attitudes and stigma towards mental health (particularly among males), language barriers, lack of awareness and information of services, and discrimination when accessing and interacting with mental health services .[56]
- **Sexual orientation**: People who identify as non-heterosexual are more likely to develop mental health problems including depression, anxiety, eating disorders, self-harm, suicidal feelings and misuse of drugs or alcohol.[57] This is related to the fact that many LGBTQ+ people are more likely to experience stigma and/or discrimination, social isolation, exclusion, rejection and inequality.[57–59]
- **Socioeconomic**: Social disadvantage and poverty are both a consequence and cause of common and severe mental illness. Housing issues, food insecurity, and debt are frequently cited as negatively impacting mental health[60], which has been further exacerbated by the Cost of Living Crisis (see Cost of Living JSNA Lite Bite).
- **Lifestyle and health**: Smoking, drug and/or alcohol use, and excessive stress are all associated with poor mental health.[61,62] Evidence suggests there is a two-way causal relationship between mental health and long-term conditions like CVD, diabetes, chronic obstructive pulmonary disease, and musculoskeletal disorders.[63]
- **Adverse Childhood Experiences (ACEs):** ACEs include childhood abuse or neglect and growing up in a household where there are issues such as domestic abuse, long-term mental health conditions, criminal behaviour or imprisonment. Compared to 18% of adults with no ACEs, 25% and 35% of adults with 2-3 and 4+ ACEs respectively, report poor mental wellbeing.[64]
- **Other groups**: Groups identified as being at particular risk of poor mental health include carers[65], veterans[66], refugees and asylum seekers[67], people with learning disabilities[68], and women during the perinatal period[69].

More information can be found in the Mental Health and Wellbeing in Adults JSNA and Mental Health and Wellbeing Perinatal JSNA

3.3 Healthy weight

- In England, obesity has been recognized as a public health issue across all age groups, with 26% of adults in 2021 and 23% of year 6 children in 2021/22 classified as obese.[70,71] Being overweight or obese is associated with an increased risk of several major diseases, including type 2 diabetes, cancer and coronary heart disease.[72]
- Body mass index (BMI) is a widely used measure to determine whether somebody is a healthy weight. A BMI of under 18.5 is considered underweight, a BMI of 18.5 to 24.9 is considered to be in the healthy weight range, a BMI of 25-29.9 is considered overweight, and a BMI of 30+ is considered to be in the obese range.[72]

3.3.1 Overweight and obesity

- Although a direct lack of physical activity and poor diet (i.e., high in sugar and fat) plays a large role in obesity, there are other physiological, social, and environmental determinants that also affect the risk of obesity. For example, economic drivers and the obesogenic environment – including availability and accessibility of different food types and physical activity opportunities – can influence the prevalence of obesity across different communities.[73] As such, no one factor should be considered alone.
- Research shows that certain groups of people are at greater risk of obesity. These include people with rare genetic conditions (e.g., Prader Willi syndrome) or endocrine disorders (e.g., hypothyroidism), and people who are on medication associated with weight gain (including corticosteroids, anti-epileptic drugs, and antipsychotics).[74]
- Findings from the 2021 Health Survey for England highlight that both children and adults living in the most deprived areas of England are substantially more likely to be obese than those in the least deprived areas. It also found that men, people aged 45-74, people from the Black ethnic group, and disabled people are at higher risk for overweight and obesity.[70]
- Obesity during pregnancy can cause health problems for both the mother and child, including increased risk of maternal death; miscarriage; gestational diabetes; blood clots; pre-eclampsia; post-partum haemorrhage; still birth; foetal abnormality and increased risk of the baby becoming obese in adulthood.[75,76]

More information can be found in the Overweight and Obesity JSNA.

3.3.2 Eating disorders

- In 2019, 16% of adults aged over 16 in England screened positive for a possible eating disorder.[77] Research suggests that eating disorders such as anorexia nervosa, bulimia nervosa, and binge eating disorder are more prevalent among women than men and typically develop in people during their late teens and mid-twenties.[78,79]

- An umbrella review of meta-analyses found evidence to support the association between appearance-related teasing victimisation for any eating disorder and childhood sexual abuse as a risk factor for bulimia nervosa.[80] Another review identified sociocultural influences (such as media exposure, pressures for thinness, and thin-ideal internalisation) and personality characteristics (such as perfectionism, negative emotionality/neuroticism, and negative urgency) as risk factors for disordered eating.[81]

More information on eating disorders can be found in the Mental Health of Children and Young People JSNA and Body Positivity JSNA Lite Bite.

3.4 Frailty

- Frailty, characterised by a decline in functioning across multiple organ systems, is emerging as a global health burden, with it being associated with a greater risk of adverse outcomes including falls and fractures, admissions to long-term care, and premature mortality.[82]
- Frailty is multidimensional, with a range of modifiable and non-modifiable risk factors covering sociodemographic, clinical, lifestyle-related, and biological domains. A systematic review of longitudinal studies identified the following risk factors for frailty:[83]
    - **Sociodemographic**: Older age, female gender, and lower socioeconomic position are all positively significantly associated with frailty.
    - **Clinical**: BMI, obesity, reduced functions of extremities, and higher allostatic load (i.e., exposure to chronic stress) were all significantly positively associated with frailty.
    - **Lifestyle**: Significant positive associations have been reported between frailty and smoking and significant negative associations reported between frailty and higher consumption of fruit, vegetables and protein. However, findings were mixed.
    - **Psychological**: Significant positive associations have been found between frailty and higher levels of depression.
- Physical activity and nutrition are important modifiable risk factors that are often targeted in frailty prevention efforts. Physical activity can help to maintain mobility and muscular strength, whilst inactivity can lead to a range of health conditions, including CVD, cerebrovascular disease, T2DM, dementia, all of which can result in the development or progression of frailty. Insufficient calorie intake, inadequate protein intake, and vitamin D deficiency are all positively associated with frailty.[84]

More information on frailty can be found in the Physical Activity JSNA briefing.

3.5 Cancer

- Cancer is a condition where cells in a specific part of the body grow and reproduce uncontrollably. There are over 200 different types of cancer, all of which are diagnosed and treated in a particular way. In England, the four most common types of cancer are breast cancer, lung cancer, prostate cancer, and colorectal cancer.[85] Cancer is the cause of over 25% of all deaths in England in a typical year.[86,87] However, according to the World Health Organization, at least 40% of all cancer cases could be prevented with effective primary prevention measures.[88]

Non-modifiable risk factors

- **Age**: Increasing age is an important risk factor for cancer, with overall cancer incidence rates rising as age increases. In the UK, the peak rate of cancer cases is among people aged 85-89 years. Despite this, certain types of cancer are more common in children and young people, including brain and spinal tumours and leukaemia.[89]

- **Sex**: In general, cancer incidence is higher among men than women. However, this pattern differs by age in England, with common cancers that affect women (including breast and cervical cancer) more likely to develop in younger people compared to cancers that mainly affect men (such as prostate cancer).[86]

- **Sexual orientation:** LGBT people are less likely to attend for cancer screening, in part due to fear of discrimination by health care workers. Furthermore, some people identifying as transgender are less likely to access sex-specific screening such as cervical or breast cancer screening because in some cases they have been omitted from the register due to their recorded gender.[90,91]

- **Ethnicity:** Cancer incidence rates vary by ethnic group. A recent 2022 study in England found that people of non-White ethnicity generally have lower cancer risk than the White population, with some notable exceptions. Some exceptions included prostate cancer (2 times higher in Black ethnic groups), myeloma (3 times higher in Black ethnic groups) and several gastrointestinal cancers (1.1–1.9 times higher in Black ethnic groups and 1.4–2.2 times higher in Asian ethnic groups).[92]

- **Genetic**: Between 5– 10% of cancers are linked to inherited gene mutations.[93,94] For example, faulty BRCA1 and BRAC2 genes increase the risk of developing breast, ovarian, pancreatic and prostate cancer.[95]

Modifiable risk factors

- A study of cancer cases in the UK found that tobacco smoking (15.1%) contributed the largest proportion of attributable cancer cases, followed by overweight/obesity (6.3%). Other common modifiable risk factors included overexposure to ultraviolet radiation, occupational risks, exposure to infections, drinking alcohol, and insufficient dietary fibre.[96]

- The relative impact of different modifiable risk factors depends on the type of cancer. For example, lung cancer is strongly associated with tobacco-smoke exposure and workplace exposure; breast cancer is strongly associated with overweight and obesity; and melanoma skin cancer is strongly associated with exposure to UV radiation.[97]

More information on the different types of cancer can be found in the Cancer JSNA.

4.0 What do the statistics show?

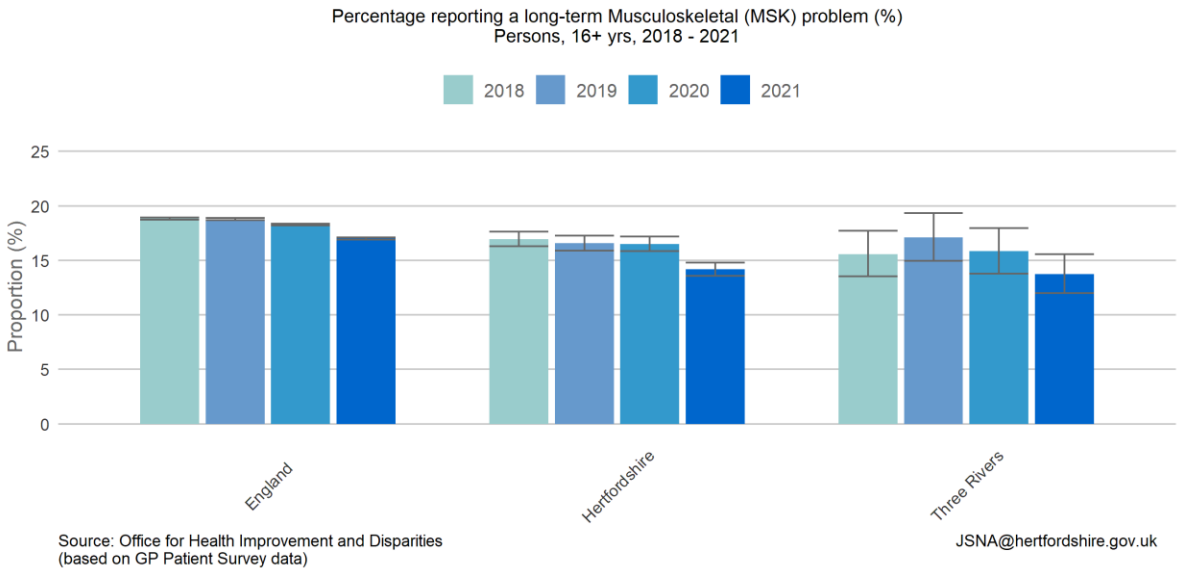
This section explores local data for Three Rivers on a range of indicators grouped by the five key themes outlined at the beginning of this document. Where possible, trend data and comparator areas have been included to allow for benchmarking and trend comparisons. Confidence intervals have also been included where possible as a measure of statistical significance (see Appendix B for guidance on interpreting confidence intervals and statistical significance).

Some indicators have recently been updated but have been calculated using revised mid-year population estimates based on the 2021 Census and so are not directly comparable to past years. In these cases, the graphs show the trend data for the previous five years, and the updated figures are included in the text.

Additionally, there are some ward level maps contained in Appendix C for some of the key indicators which are statistically worse or similar to the national average.

4.1 Long-term conditions

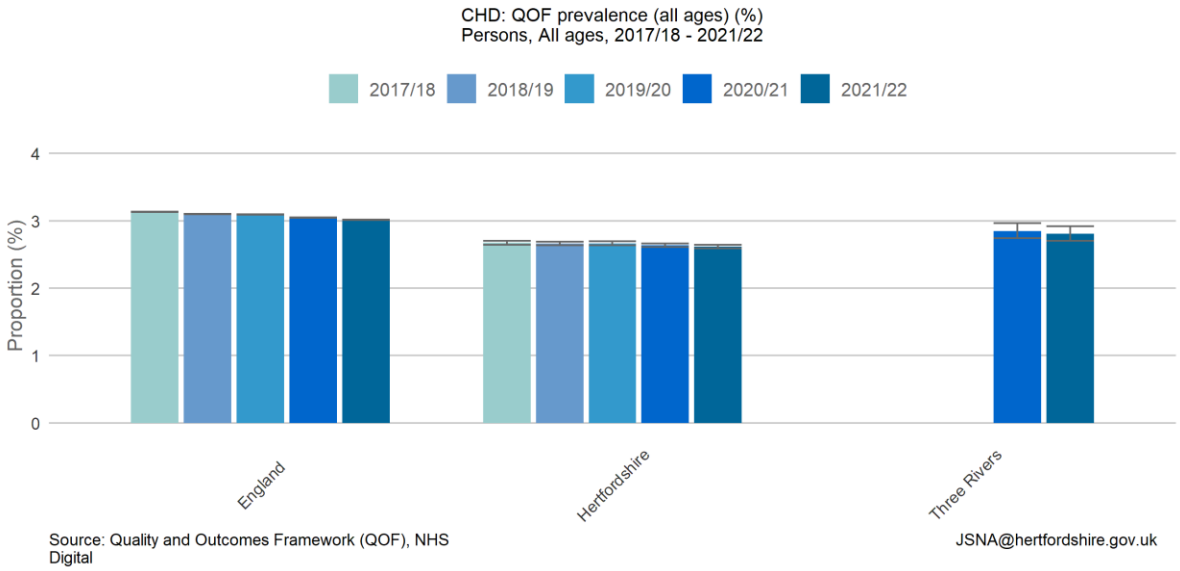
4.1.1 Long-term musculoskeletal problem



- In 2021 in Three Rivers, 13.8% of the population aged 16+ reported a long-term musculoskeletal (MSK) problem through the GP Patient Survey, which was statistically similar to the Hertfordshire proportion (14.2%) and statistically significantly lower than the England proportion (17.0%).
- In Three Rivers, this proportion has remained statistically similar between 2018 (15.6%) and 2021 (13.8%), however has been decreasing over the last two years in line with the England and Hertfordshire trend.

- In Three Rivers in 2022, 16.1% of the population reported a long-term MSK problem which was statistically similar to the Hertfordshire (15.6%) and England (17.6%) proportions.
- Although local data was not available, in England in 2022, a statistically significantly higher proportion of females (20.1%) reported a long-term MSK problem compared to males (14.9%). There was a statistically significantly higher proportion of people in the most deprived decile (18.2%) reporting a long-term MSK problem compared to the least deprived decile (14.8%).

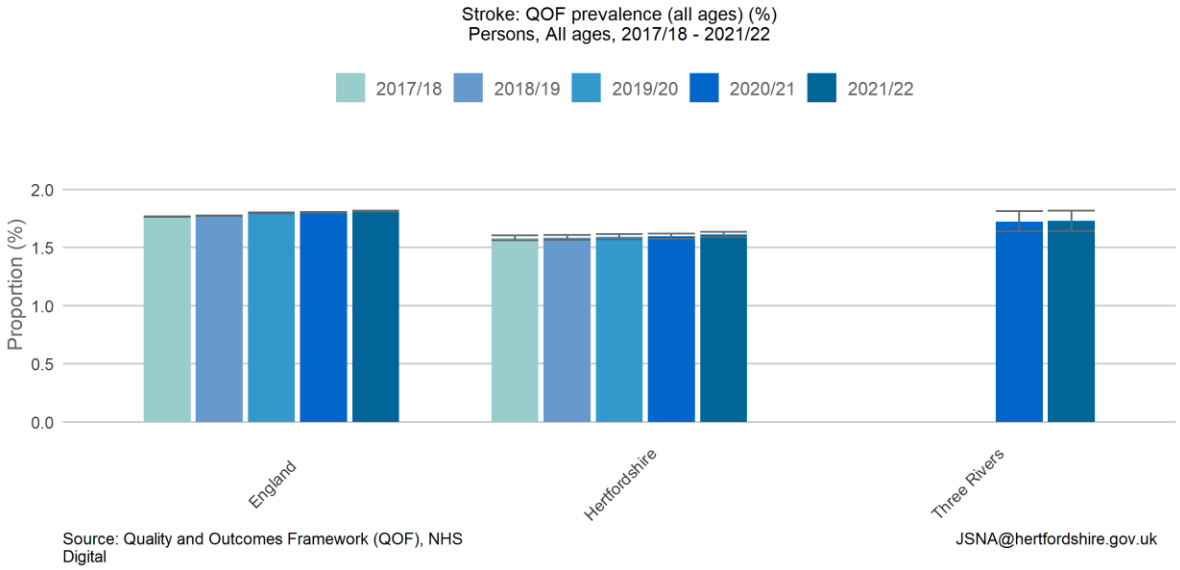
4.1.2 Coronary heart disease (CHD)



Note: There is no data for 2017/18, 2018/19 or 2019/20 for Three Rivers as the indicator was not aggregated to district level for these years.

- In 2021/22 in Three Rivers, the prevalence of coronary heart disease was 2.8%, which was statistically significantly higher than Hertfordshire (2.6%) but statistically significantly lower than England (3.0%).
- In Three Rivers, the prevalence of CHD has remained statistically similar between 2020/21 and 2021/22, although it has been decreasing in line with the Hertfordshire and England trend. There was no data available prior to 2020/21 at district level.

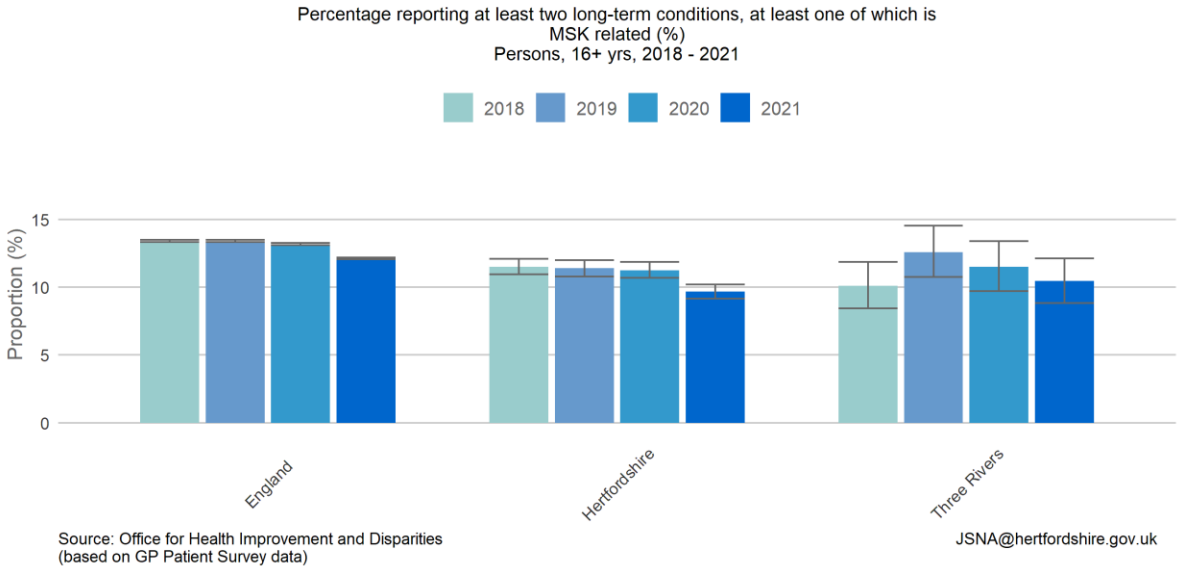
4.1.3 Stroke



There is no data for 2017/18, 2018/19 or 2019/20 for Three Rivers as the indicator was not aggregated to district level for these years.

- In 2021/22 in Three Rivers, the prevalence of stroke was 1.7%, which was statistically significantly higher than Hertfordshire (1.6%) but statistically significantly lower than England (1.8%).
- In Three Rivers, the prevalence of stoke has remained statistically similar between 2020/21 and 2021/22, although it has been increasing in line with the Hertfordshire and England trend. There was no data available prior to 2020/21 at district level.

4.1.4 Multiple long-term conditions (including musculoskeletal)



- In 2021 in Three Rivers, 10.5% of the population aged 16+ reported having at least two long-term conditions, with at least one of them being musculoskeletal (MSK)

related. This was statistically similar to the Hertfordshire (9.7%) and England (12.1%) proportions.

- In Three Rivers, the proportion has not statistically significantly changed between 2018 (10.1%) and 2021 (10.5%), although it has decreased in the last two years in line with the England and Hertfordshire trend.
- Although local data was not available, in England in 2021, a statistically significantly higher proportion of those reporting at least two-long term conditions with at least one being MSK related were female (13.8%) compared to male (10.4%). A statistically higher proportion were from the most deprived decile (13.0%) compared to least deprived decile (9.4%).
- In Three Rivers in 2022, 10.8% of the population reported at least two long-term conditions, with at least one being MSK related. This was statistically similar to the Hertfordshire proportion (10.7%) and significantly lower than England (12.8%).

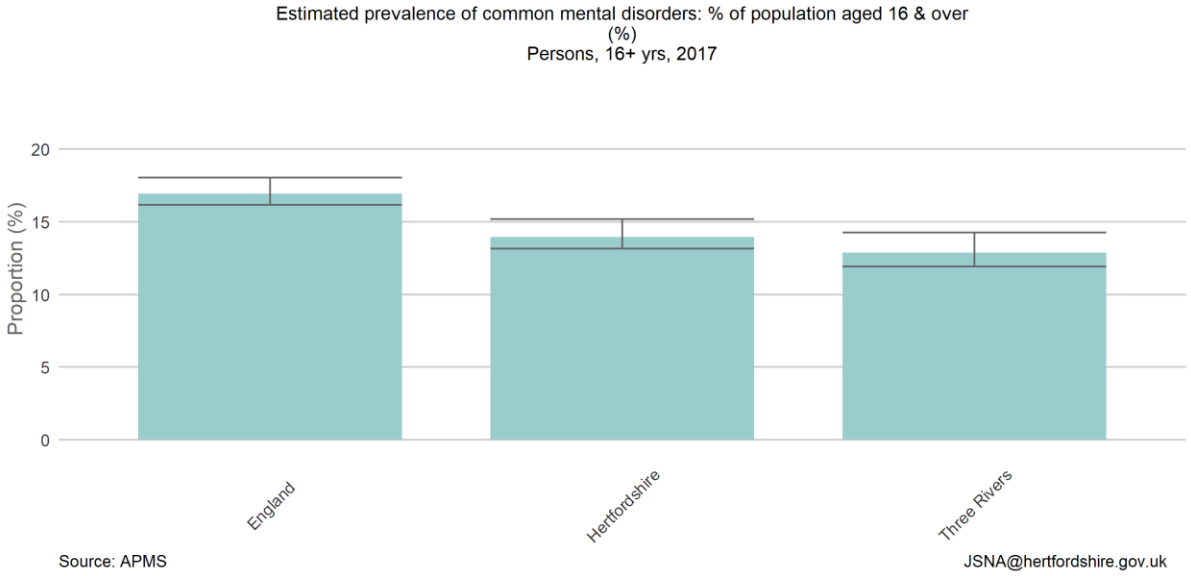
4.1.5 Fibromyalgia

- Clinical Commissioning Group (CCG) data on fibromyalgia admission episodes from the year 2014/15 to 2019/20 show the following:[98]
    - In the East and North Hertfordshire CCG (ENHCCG) there was a gradual increase in admissions due to primary diagnosis of fibromyalgia from 15 in the year 2014/15 to 40 in the year 2019/20. The number of admission episodes where fibromyalgia was the primary or secondary diagnosis increased from 335 episodes in 2014/15 to 1,023 in 2019/20
    - Herts Valleys CCG (HVCCG) had no significant change in the number primary diagnosis admission episodes due to fibromyalgia. The number of episodes recorded was 10 for the years 2014 to 2016 which increased to 15 from the years 2016 to 2019, then decreased back to 10 in 2019/20. The number of admission episodes where fibromyalgia was the primary or secondary diagnosis increased from 255 in 2014/15 to 1,022 in 2019/20.
- Local data on the prevalence of Fibromyalgia is not available for Hertfordshire or district level, however national data on chronic pain is available from the Health Survey for England in 2017, which was published in 2020:[99]
    - **Local prevalence:** The national estimate for chronic pain in England is 34%. When applied to the 2021 Census population findings, this suggests that there are approximately 407,591 people in Hertfordshire reporting chronic pain.
    - **Age:** In 2017, 34% of the respondents reported some level of chronic pain. This proportion was unchanged from 2011. The prevalence of chronic pain increased with age ranging from 18% among those aged 16-34 years to 53% among those 75 years and over.

- **Ethnicity:** All ethnic groups showed similar reporting of chronic pain to the figure for all persons of 34%, except for people in the Black ethnic group who reported a significantly higher prevalence of 44%.
- **Deprivation:** Those living in more deprived areas were more likely to report having chronic pain (41%) than those in the least deprived areas (30%).
- **Disability:** Those that were permanently unable to work because of long-term sickness or disability, and those intending to look for work but prevented by temporary sickness or injury were more likely to report having chronic pain (77% and 66% respectively) compared with those in paid employment (27%).
- **Obesity:** People with a healthy weight reported a lower prevalence of chronic pain (29%) compared with those in the obese (39%) and very obese (54%) categories.
- **Other health conditions:** Among those who reported chronic pain, 36% also reported a long-lasting musculoskeletal condition, 35% reported no long-lasting illness, 15% reported a mental health disorder and 14% reported a heart or circulatory condition.

4.2 Mental health and wellbeing

4.2.1 Common mental health disorders



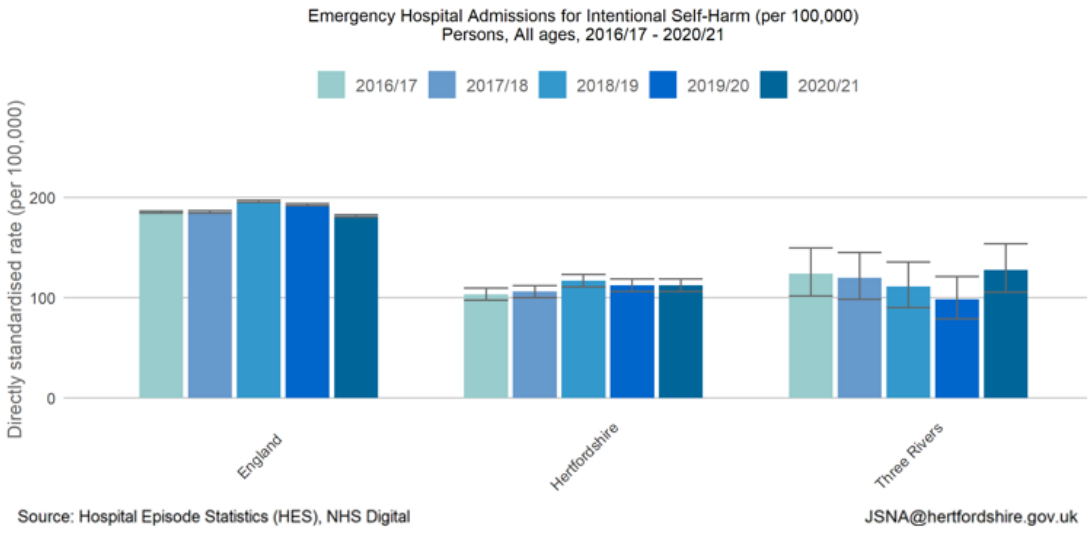
- Based on the 2014 Adult Psychiatric Morbidity Survey, the estimated prevalence of common mental disorders (CMD) in 2017 for people aged 16+ in Three Rivers was 12.9%, which was statistically similar to the Hertfordshire prevalence (14.0%), but statistically significantly lower than the national prevalence (17.0%).
- Findings from the 2014 Adult Psychiatric Morbidity Survey show that women were more likely to have CMD symptoms that men (19.1% compared to 12.2%) and CMDs

were more prevalent among adults who were not in employment or who were in receipt of benefits compared to those in employment or not in receipt of benefits.[100]

4.2.2 Severe mental illness

- In 2018-20, the premature mortality rate in adults with severe mental illness (SMI) (including schizophrenia, bipolar disorder and other psychotic disorders) in Hertfordshire was 76.7 per 100,000, which was significantly lower than the England average (103.6 per 100,000).
- Between 2015-17 and 2018-20, the premature mortality rate in adults with SMI in Hertfordshire significantly increased (from 68.2 per 100,000 to 76.7 per 100,000).
- In Hertfordshire, the rate per 100,000 was statistically significantly higher in males (91.1) compared to females (63.1). Nationally, the rate was statistically significantly higher in the most deprived quintile (200.3) compared to the least deprived quintile (53.9).

4.2.3 Intentional self-harm

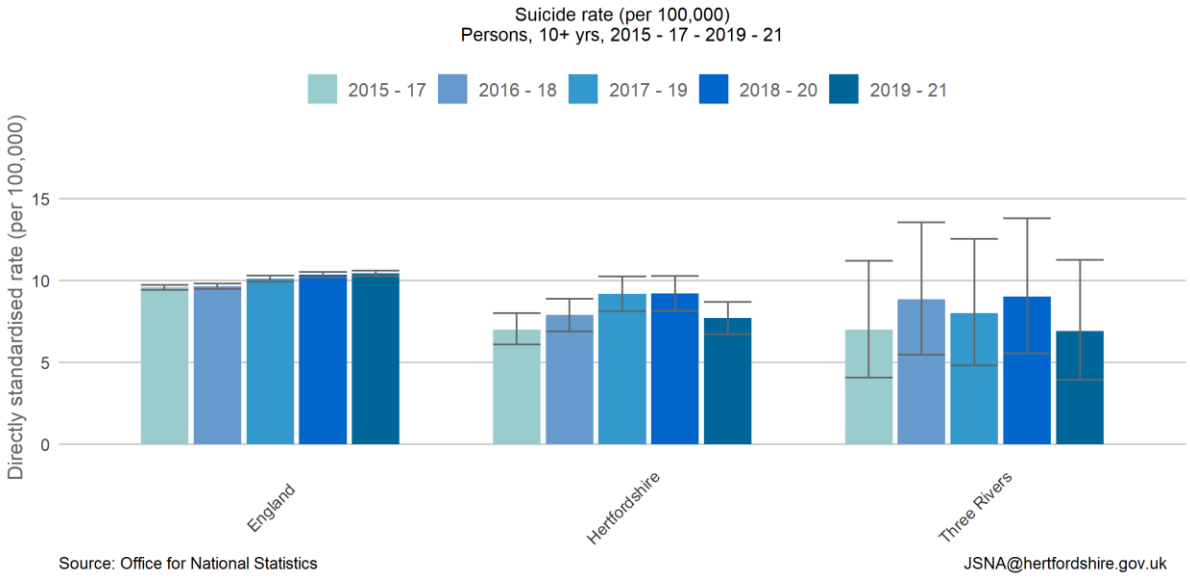


- In 2020/21 in Three Rivers, the directly standardised rate of hospital admissions for self-harm was 127.7 per 100,000, which was statistically similar to Hertfordshire (112.3 per 100,000) and statistically significantly lower than England (181.2 per 100,000).
- The rate of emergency hospital admissions for intentional self-harm has decreased year-on-year before increasing in 2020/21 during the start of the COVID-19 pandemic, although this was not a statistically significant increase.
- In 2021/22, the rate of emergency admissions for intentional self-harm in Three Rivers was 100.6 per 100,000, which was statistically significantly similar to Hertfordshire (114.5 per 100,000) and statistically significantly lower than England (163.9 per 100,000). The rate in Three Rivers was statistically significantly lower

among males (70.0 per 100,000) compared to females (131.6 per 100,000), mirroring the Hertfordshire and national trends.

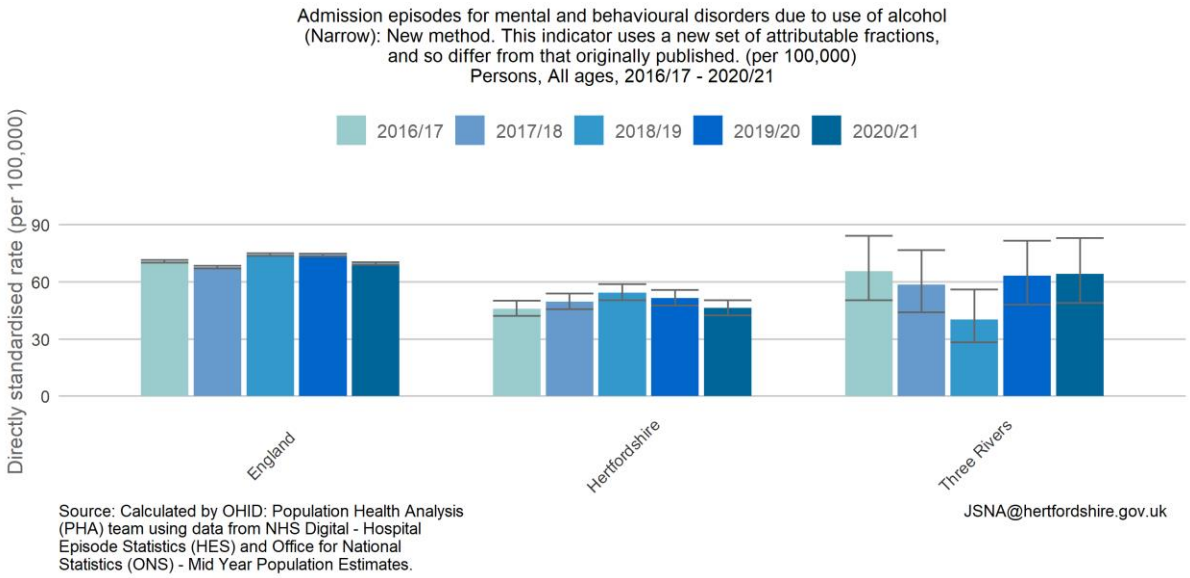
- In general, the rate of hospital admissions for intentional self-harm in 2021/22 was statistically significantly higher in the most deprived deciles in England compared to the least deprived deciles.

4.2.4 Suicide rate



- In 2019-21 in Three Rivers, the suicide rate for people aged 10+ was 6.9 per 100,000, which was statistically similar to the Hertfordshire (7.7 per 100,000) and England (10.4 per 100,000) suicide rates.
- While the national suicide rate has statistically significantly increased between 2015-17 and 2019-21 (from 9.6 to 10.4 per 100,000), the suicide rate in Three Rivers has not statistically significantly changed between 2015-17 and 2019-21 (from 7.0 to 6.9 per 100,000).
- In 2019-21 in Hertfordshire, the suicide rate was statistically significantly higher for males compared to females (11.4 per 100,000 compared to 4.2 per 100,000). The national suicide rate in the least deprived decile of England (9.4 per 100,000) was statistically significantly lower than the national average (10.4 per 100,000).
- Findings from the 2019-2021 Hertfordshire Suicide Audit show that those living in the least deprived quintile had the fewest suicides (17.8%) compared to all other IMD quintiles. However, this was not statistically significant.

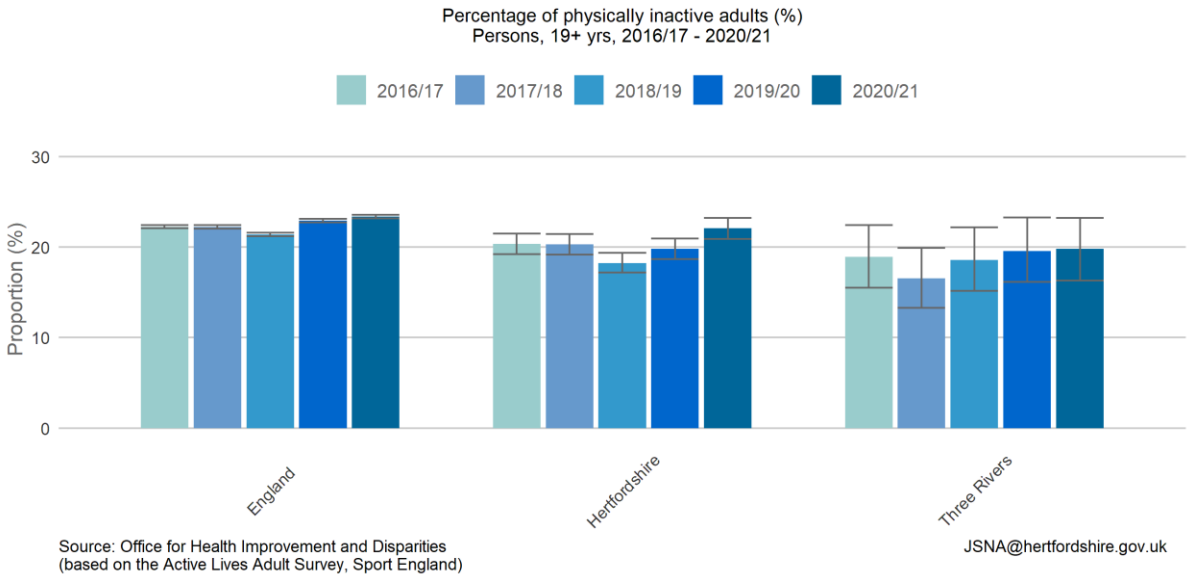
4.2.5 Mental and behavioural disorders due to alcohol



- In 2020/21 in Three Rivers, the directly standardised rate of admission episodes for mental and behaviour disorders due to use of alcohol was 64.3 per 100,000, which was statistically similar to Hertfordshire (46.3 per 100,000) and England (69.7 per 100,000).
- Between 2016/17 and 2020/21, the rate of admission episodes for mental and behaviour disorders due to use of alcohol has remained fairly consistent in Three Rivers except for in 2018/19 where it decreased to 40.3 per 100,000, although this was not statistically significant.
- In 2021/22, the rate of admission episodes in Three Rivers was 51.7 per 100,000, which was statistically similar to Hertfordshire (47.1 per 100,000) and England (67.2 per 100,000). The rate in Three Rivers was statistically significantly higher among males (84.6 per 100,000) compared to females (22.4 per 100,000). This mirrors the trend seen in Hertfordshire and England.
- Although data on deprivation is not available locally, in 2021/22, the rate of admission episodes for mental and behaviour disorders due to the use of alcohol was statistically significantly higher in the most deprived decile of England (90.0 per 100,000) compared to the least deprived decile (42.9 per 100,000).

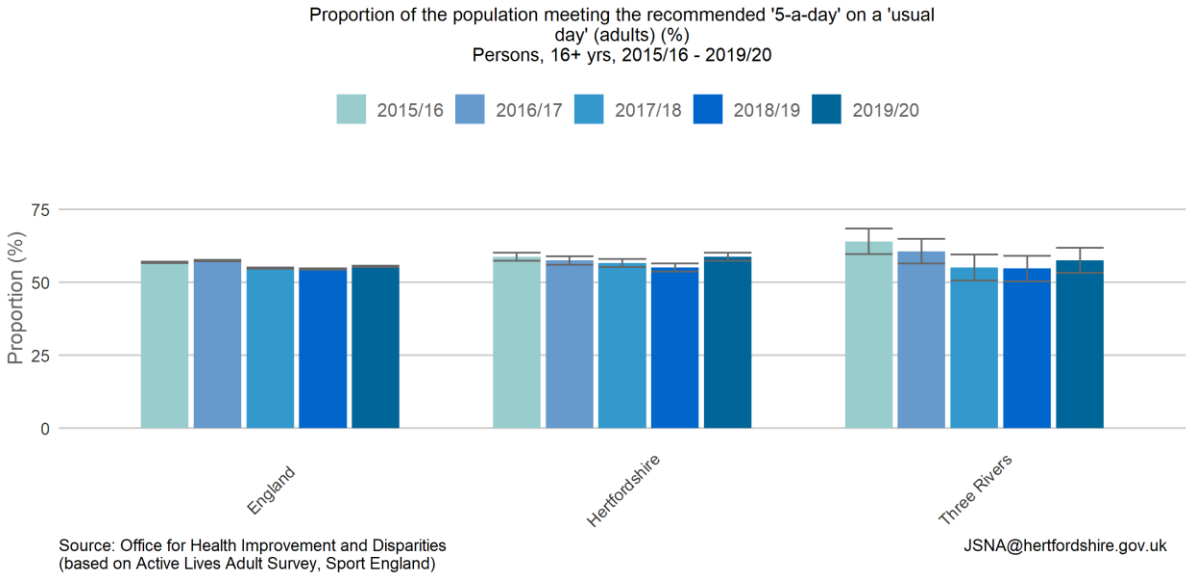
4.3 Healthy weight

4.3.1 Physically inactive adults



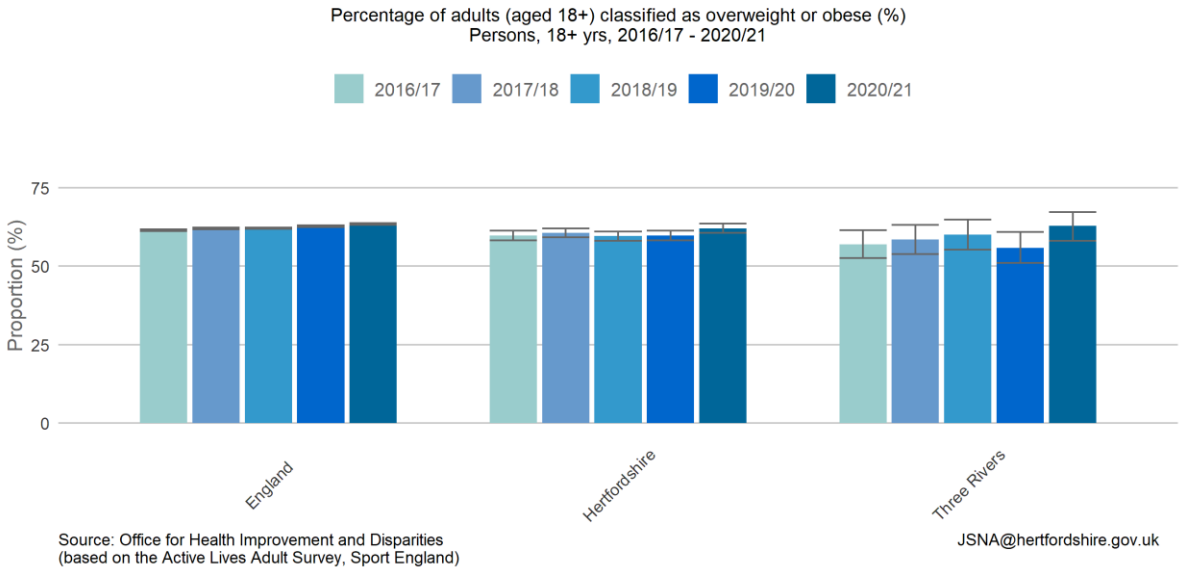
- In 2020/21, the proportion of physically inactive adults (19+) that exercise less than 30 minutes per week in Three Rivers was 19.8%, which was statistically similar to Hertfordshire (22.1%) and England (23.4%).
- The proportion in Three Rivers remained statistically similar between 2016/17 (18.9%) and 2020/21 (19.8%), although it has been increasing in the last 3 years.
- Although there is no local data on inequalities, the proportion of physically inactive adults in England in 2020/21 was statistically significantly higher among females (24.2%) than males (22.4%) and among people in the most deprived decile (29.3%) compared to least deprived decile (18.9%).

4.3.2 Healthy eating



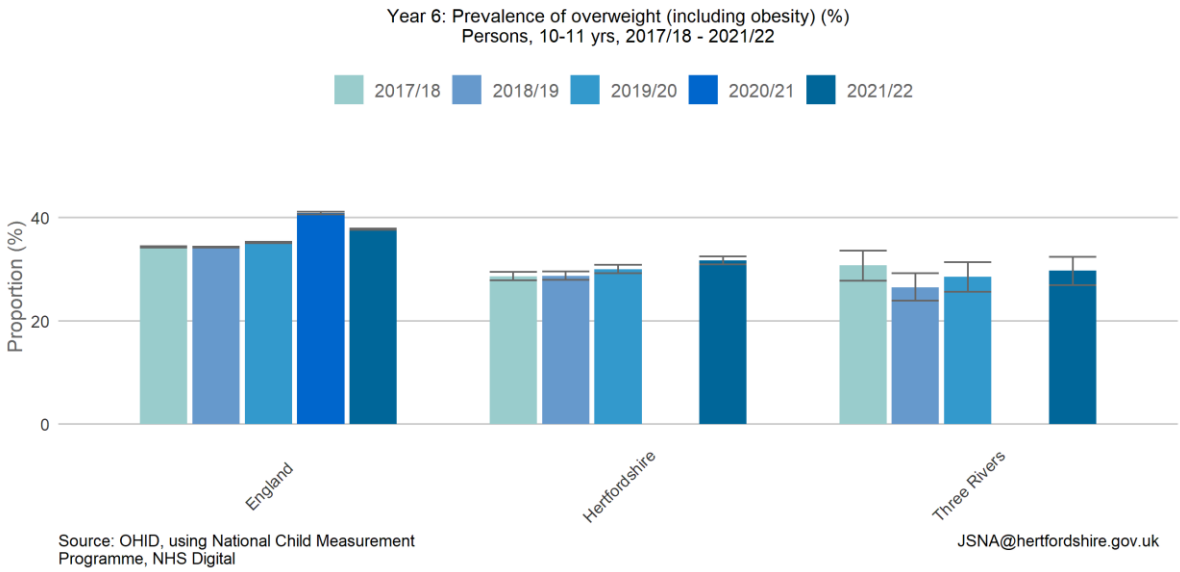
- In 2019/20, the proportion of adults (16+) meeting the recommended '5 a day' on a 'usual day' in Three Rivers was 57.5%, which was statistically similar to Hertfordshire (58.7%) and England (55.4%).
- The proportion in Three Rivers meeting the '5 a day' recommendation has decreased between 2015/16 (63.9%) and 2019/20 (57.5%), although this has not been statistically significant.
- Although there is no local data on inequalities, the proportion of adults in England meeting the recommended '5 a day' in 2019/20 was statistically significantly higher among females (59.5%) than males (51.2%) and among people in the least deprived decile (59.2%) compared to most deprived decile (47.8%).

4.3.3 Overweight or obese adults



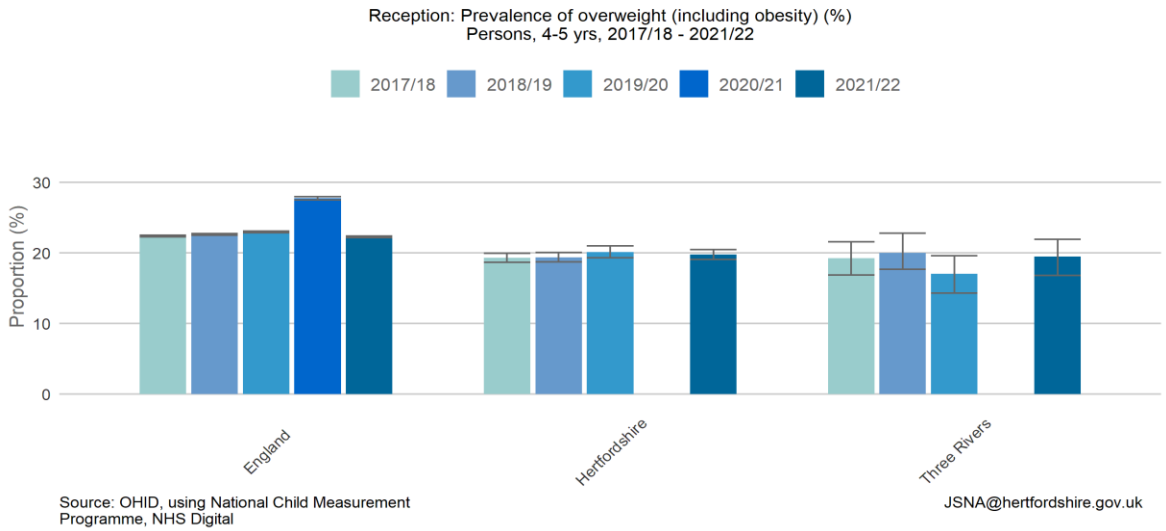
- In 2020/21 in Three Rivers, 62.9% of the population (aged 18+) were classified as overweight or obese, which was statistically similar to Hertfordshire (62.0%) and England (63.5%).
- The proportion of overweight or obese adults in Three Rivers has been increasing gradually between 2016/17 (57.0%) and 2020/21 (62.9%), although this increase has not been statistically significant.
- Although there is no local data on inequalities, the proportion of overweight or obese adults in England in 2020/21 was statistically significantly higher among males (68.5%) than females (58.3%) and among people in the most deprived decile (66.3%) compared to least deprived decile (59.5%).

4.3.4 Overweight or obese children (aged 10-11 years)



- In 2021/22 in Three Rivers, 29.8% of children aged 10-11 years were classified as overweight or obese, which was statistically similar to Hertfordshire (31.7%) and statistically significantly lower than England (37.8%).
- The proportion of overweight or obese Year 6 children in Three Rivers did not statistically significantly change between 2017/18 (30.8%) and 2021/22 (29.8%). Please note that data was missing in Hertfordshire and Three Rivers for 2020/21.
- In Three Rivers in 2021/22, the proportion of Year 6 pupils with excess weight (i.e., overweight or living with obesity/severe obesity) was statistically significantly higher among males (33.5%) compared to females (25.1%), which was similar to the Hertfordshire and national trend. In Hertfordshire, the proportion of excess weight increased as deprivation level increased, with a statistically significantly higher proportion of pupils in the most deprived decile having excess weight (40.2%) compared to the least deprived decile (21.5%) (see Hertfordshire's Children and Young People Obesity Briefing).

4.3.5 Overweight or obese children (aged 4-5 years)



- In 2021/22 in Three Rivers, 19.4% of children aged 4/5 years were classified as overweight or obese, which was statistically similar to Hertfordshire (19.7%) and statistically significantly lower than England (22.3%).
- The proportion of obese or overweight 4–5-year-olds in Three Rivers did not statistically significantly change between 2017/18 (19.2%) and 2021/22 (19.4%). Please note that data was missing in Hertfordshire and Three Rivers for 2020/21.
- In Three Rivers in 2021/22, the proportion of Reception children with excess weight was higher in females (21.2%) compared to males (17.2%), although this was not statistically significant. This contrasts to the trend seen in Hertfordshire and England whereby a higher proportion of 4-5 year old males had excess weight.
- In Hertfordshire, the proportion of excess weight increased as deprivation level increased, with a statistically significantly higher proportion of pupils in the most

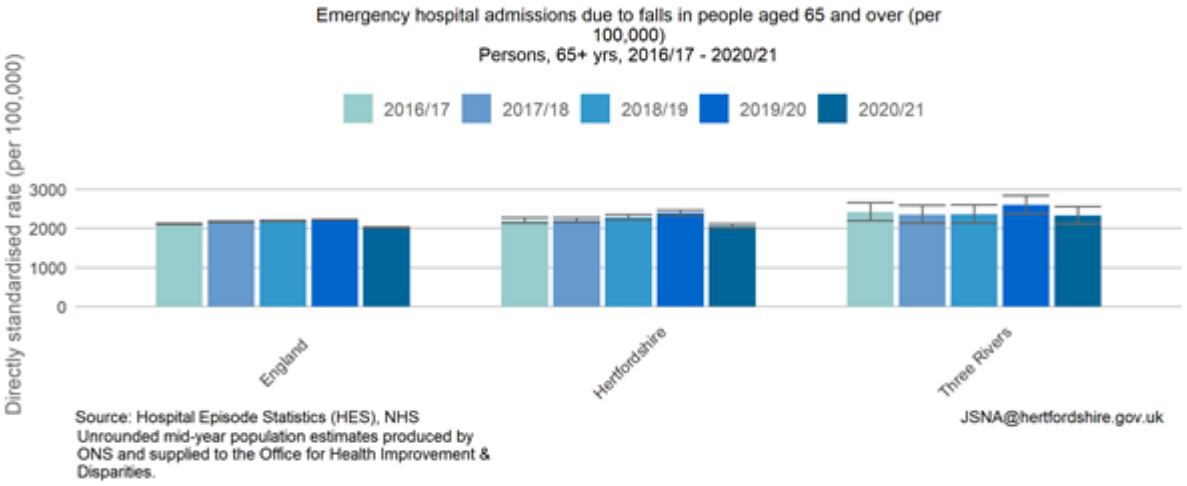
deprived decile having excess weight (22.8%) compared to the least deprived decile (15.0%) (see Hertfordshire's Children and Young People Obesity Briefing).

4.3.6 Eating disorders

- In the year to March 2022 in Herts Valley CCG, 21.8% of urgent cases for children and young people with an eating disorder started treatment within 1 week, and 39.7% of routine cases were seen within 4 weeks.[101] This was not in line with the 95% targets outlined in the NHS Long Term Plan for these indicators.
- Between April 2019 and September 2022, the number of adults on the Hertfordshire Partnership Foundation Trust eating disorder caseload increased by 104% (from 225 to 460). Similarly, the under 18s caseload increased by 72% (from 145 to 250 referrals). There was also a large increase in open referrals for young people across this time period, peaking at 400 referrals in March 2022 (see the Demand of Mental Ill Health on Services in Hertfordshire JSNA).

4.4 Frailty in older people

4.4.1 Emergency hospital admissions due to falls in people aged 65+

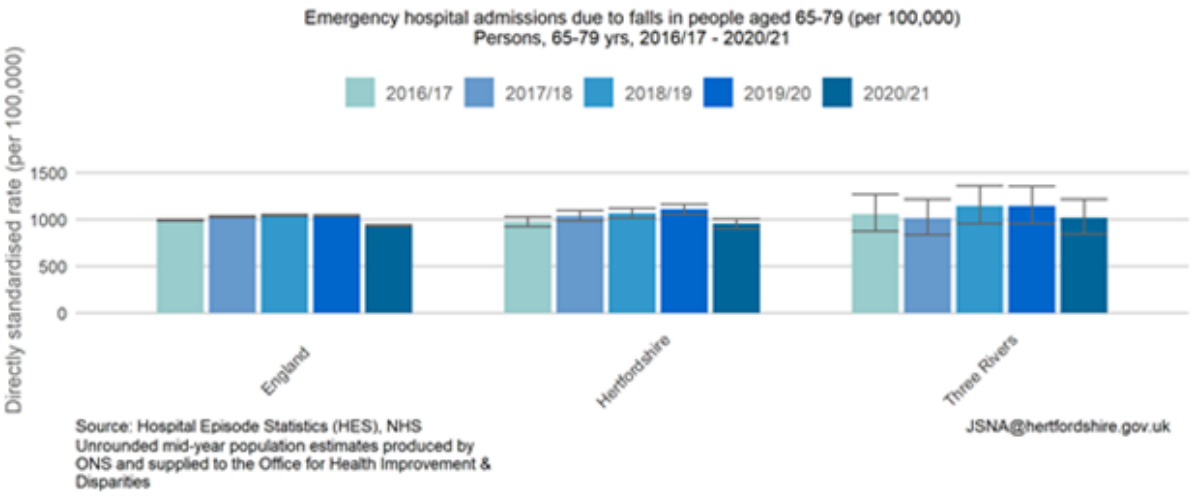


- In 2020/21, the directly standardised rate of emergency hospital admissions due to falls in people aged 65 years and over in Hertfordshire was 2,059 per 100,000. This result was statistically similar to England (2,023 per 100,000). The rate in Three Rivers for the same period was 2,328 per 100,000, and while this was not statistically significantly higher than the Hertfordshire average, it was statistically significantly higher than the England average.
- During the period 2016/17 – 2018/19 in Three Rivers, the rate of emergency hospital admissions remained statistically similar across all years. There was a peak in admissions in 2019/20, reaching 2,601 per 100,000, and this was statistically

significantly higher than the national average (2,222 per 100,000). The rate did appear to recover to previous levels by 2020/21.

- In 2021/22 in Three Rivers, the rate for emergency hospital admissions due to falls among over 65s was 2,568 per 100,000, which was statistically significantly higher than the Hertfordshire (2,206 per 100,000) and England (2,100 per 100,000) averages. In Three Rivers, females had a higher rate than males (2,802 per 100,000 compared to 2,255 per 100,000), although this was not statistically significant. In Hertfordshire and England, females had a statistically significantly higher rate of admissions compared to males.
- Nationally, the rate for emergency hospital admissions due to falls among over 65s in 2021/22 was significantly higher in the most deprived deciles compared to the national average.

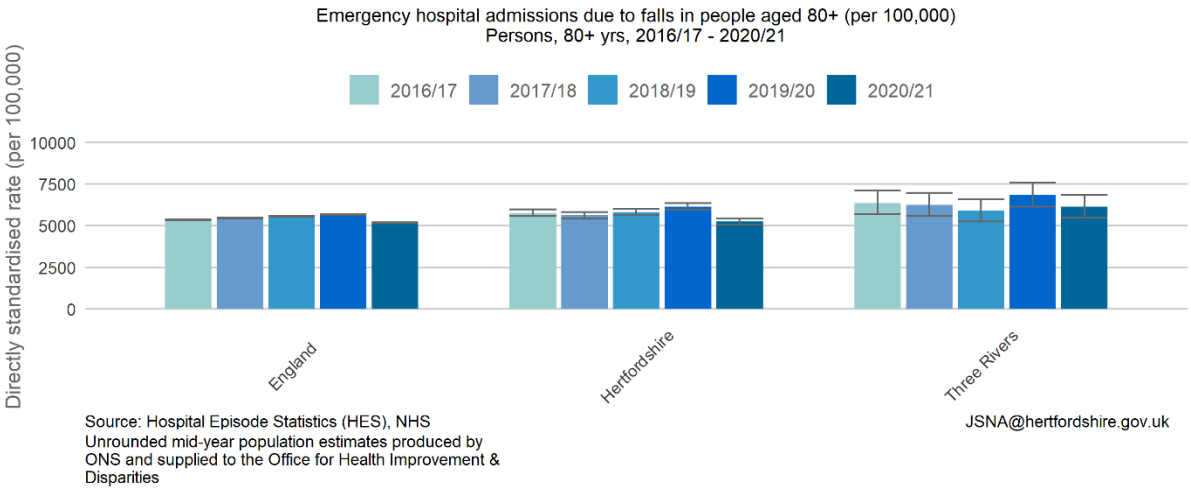
4.4.2 Emergency hospital admissions due to falls in people aged 65-79



- In 2020/21, the directly standardised rate of emergency hospital admissions due to falls in people aged 65 – 79 years in Hertfordshire was 955.1 per 100,000. This directly standardised rate was statistically similar to England (936.6 per 100,000).
- The rate in Three Rivers was 1,018 per 100,000, however, this was statistically similar to both the Hertfordshire and national average. There was a peak in admissions between 2018/19 – 2019/20 to 1,145 and 1,144 per 100,000 respectively, but rates recovered the following year, and these changes were not statistically significant.
- In 2021/22, the rate was 1,204 per 100,000 which was statistically similar to the Hertfordshire average (1,007 per 100,000) and significantly higher than the England average (993 per 100,000). In Three Rivers, females had a higher rate than males (1,268 per 100,000 compared to 1,132 per 100,000), although this was not statistically significant. In Hertfordshire and England, females had a statistically significantly higher rate of admissions compared to males.

- Nationally, the rate for emergency hospital admissions due to falls among 65–79-year-olds in 2021/22 was significantly higher in the most deprived deciles compared to the national average.

4.4.3 Emergency hospital admissions due to falls in people aged 80+



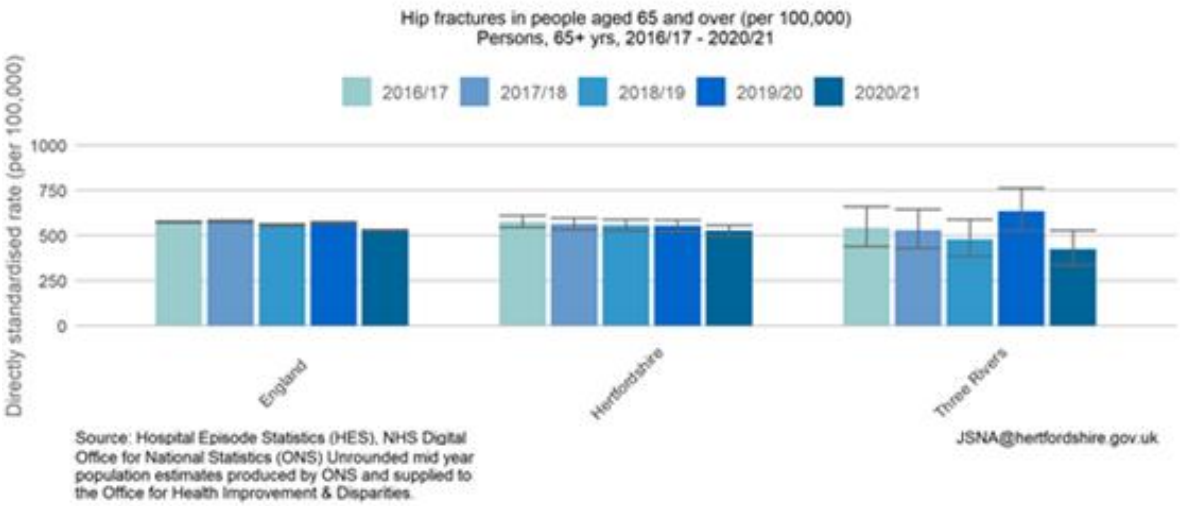
- In 2020/21, the directly standardised rate of emergency hospital admissions due to falls in people aged 80 and over in Hertfordshire was 5,260 per 100,000. This directly standardised rate was statistically similar to England (5,174 per 100,000).

- During the same period in Three Rivers, the rate was 6,127 per 100,000, and this was statistically significantly higher than both the Hertfordshire and national average. Despite this, levels have dropped from a peak of 6,825 per 100,000 in 2019/20 but these results were not found to be statistically significant.

- In 2021/22 in Three Rivers, the rate was 6,525 per 100,000 which was statistically similar to the Hertfordshire average (5,683 per 100,000) and significantly higher than the England average (5,311 per 100,000). In Three Rivers, females had a higher rate than males (7,249 per 100,000 compared to 5,513 per 100,000), although this was not statistically significant. In Hertfordshire and England, females had a statistically significantly higher rate of admissions compared to males.

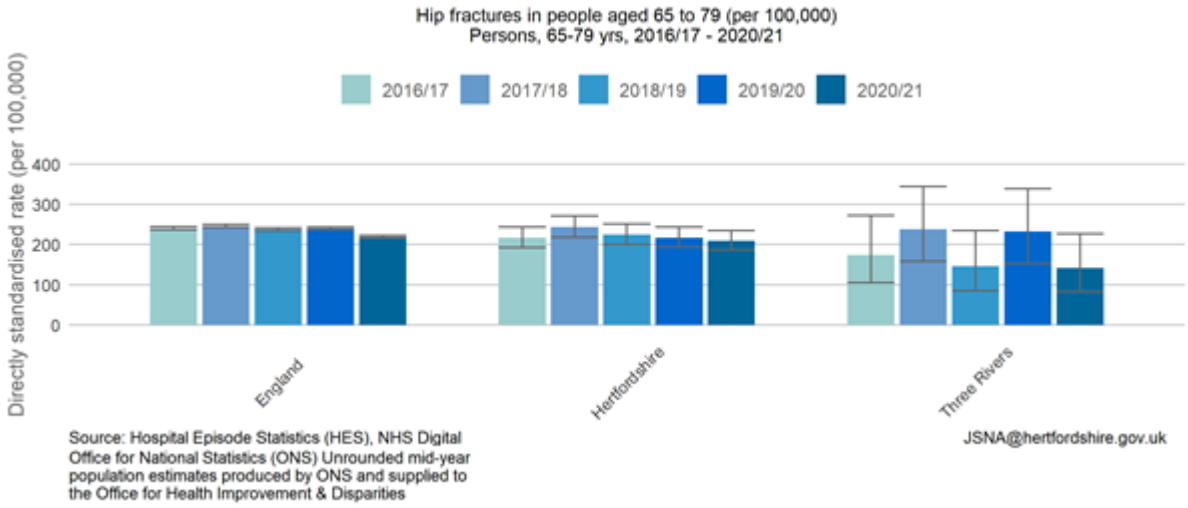
- There is no clear deprivation trend for the rate of emergency admissions due to falls in people aged over 80 in 2021/22, but it may be of note that the rate is statistically significantly higher in the least deprived decile compared to the national average.

4.4.4 Hip fractures in people aged 65+



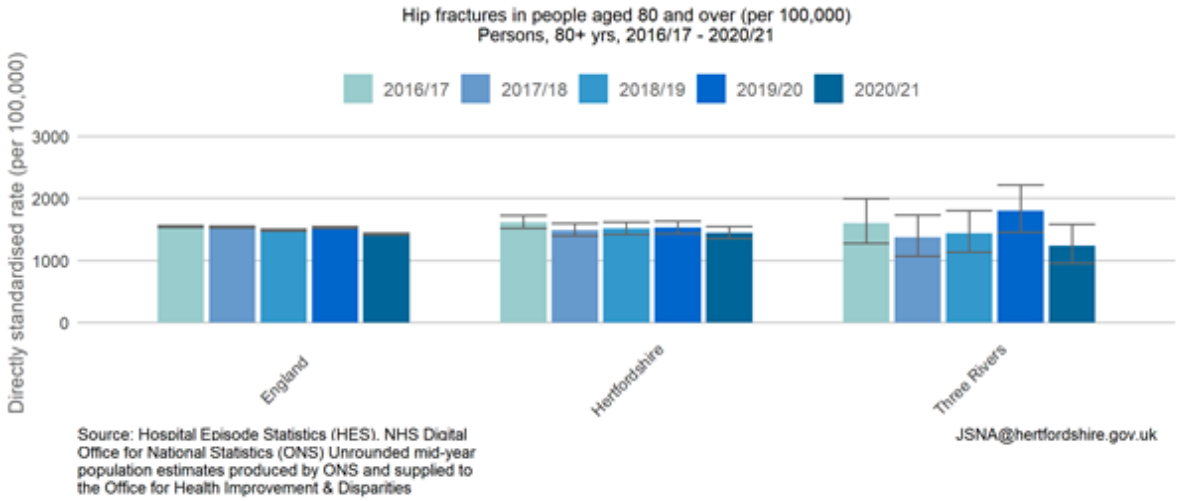
- In 2020/21, the directly standardised rate of hip fractures in people aged 65 and over in Hertfordshire was 526.3 per 100,000. This rate was statistically similar to England (528.7 per 100,000).
- In Three Rivers during the same period, the directly standardised rate was lower than both the Hertfordshire and England average at 423.2 per 100,000, however, this result was not statistically significant. Three Rivers has seen a varied trend across the 5-year period measured, notably a general decrease in the rate of hip fractures between 2016/17 – 2018/19 followed by a peak in 2019/20 to 636.2 per 100,000, however these changes were not statistically significant.
- In 2021/22 in Three Rivers, the rate of hip fractures in people aged 65+ was 533 per 100,000 which was statistically similar to the Hertfordshire (540 per 100,000) and England (551 per 100,000) averages. In Three Rivers, females had a higher rate than males (610 per 100,000 compared to 425 per 100,000), although this was not statistically significant. In Hertfordshire and England, females had a statistically significantly higher rate of hip fractures compared to males.
- Nationally, the rate of hip fractures in people aged 65 and over in 2021/22 was significantly higher in the most deprived deciles and statistically significantly lower in the least deprived deciles compared to the national average.

4.4.5 Hip fractures in people aged 65 to 79



- In 2020/21, the directly standardised rate of hip fractures in people aged 65 – 79 years in Hertfordshire was 209.7 per 100,000. This directly standardised rate was statistically similar to England (219.3 per 100,000).
- In Three Rivers during the same period, the rate was 141.9 per 100,000, however, this was similar to the Hertfordshire and England average. Although the rate for Three Rivers has fluctuated considerably during these 5 years, the rate has remained statistically similar.
- In 2021/22 in Three Rivers, the rate of hip fractures in people aged 65-79 years was 246 per 100,000 which was statistically similar to the Hertfordshire (224 per 100,000) and England (236 per 100,000) averages. In Three Rivers, females had a higher rate than males (264 per 100,000 compared to 225 per 100,000), although this was not statistically significant. In Hertfordshire and England, females had a statistically significantly higher rate of hip fractures compared to males.
- Nationally, the rate of hip fractures in people aged 65-79 years in 2021/22 was significantly higher in the most deprived deciles and statistically significantly lower in the least deprived deciles compared to the national average.

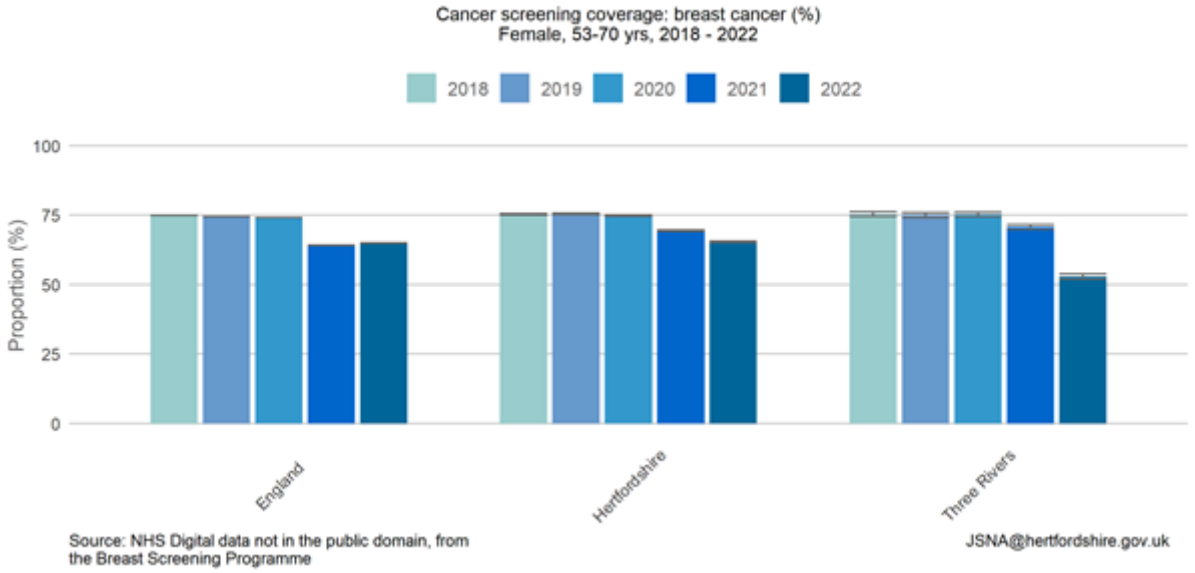
4.4.6 Hip fractures in people aged 80+



- In 2020/21, the directly standardised rate of hip fractures in people aged 80 and over in Hertfordshire was 1,444 per 100,000. This directly standardised rate was statistically similar to England (1,426 per 100,000).
- In Three Rivers, the rate was 1,239 per 100,000, but this was not statistically significantly different to both the Hertfordshire and England average. The district saw the lowest rates of hip fractures in 2020/21, however, this was not a statistically significant change.
- In 2021/22 in Three Rivers, the rate was 1,365 per 100,000 which was statistically similar to the Hertfordshire (1,455 per 100,000) and England (1,466 per 100,000) averages. In Three Rivers, females had a higher rate than males (1,615 per 100,000 compared to 1,005 per 100,000), although this was not statistically significant. In Hertfordshire and England, females had a statistically significantly higher rate of hip fractures compared to males.
- Nationally, the rate of hip fractures in people aged 80+ in 2021/22 was significantly higher in the most deprived deciles compared to the national average.

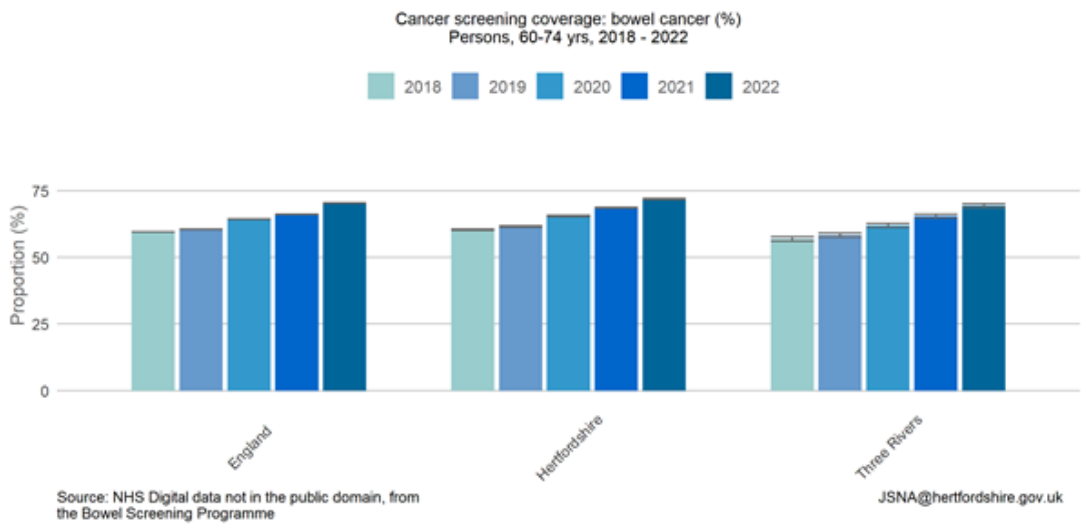
4.5 Cancer

4.5.1 Breast cancer screening coverage



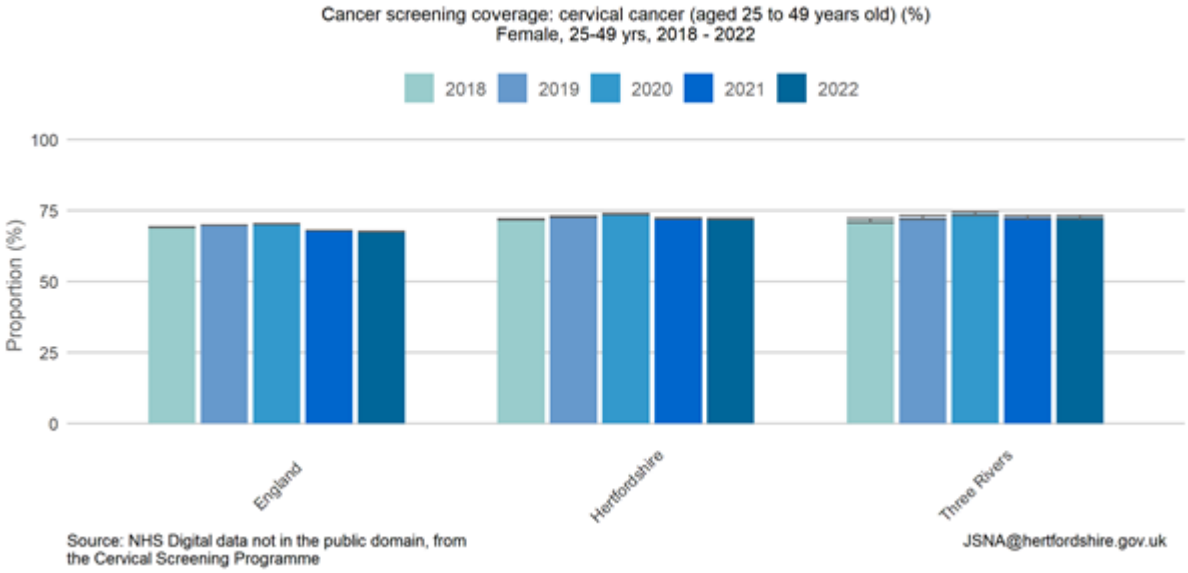
- In 2022, the proportion of cancer screening coverage for breast cancer in 53–70-year-olds in Hertfordshire was 65.4%. This proportion was significantly higher than England (64.9%) and this difference.
- In Three Rivers for the same year, the proportion was 52.9% and this was statistically significantly lower than both the Hertfordshire and England averages. Conversely, while Three Rivers still saw a decrease in screening coverage from previous levels in 2021, the rate was statistically significantly higher than the national average for that year (70.7% vs. 64.1%).
- Although there is no local data available, the proportion of breast cancer screening coverage in England in 2022 was statistically significantly lower in the most deprived decile (58.8%) compared to the least deprived decile (70.8%).

4.5.2 Bowel cancer screening coverage



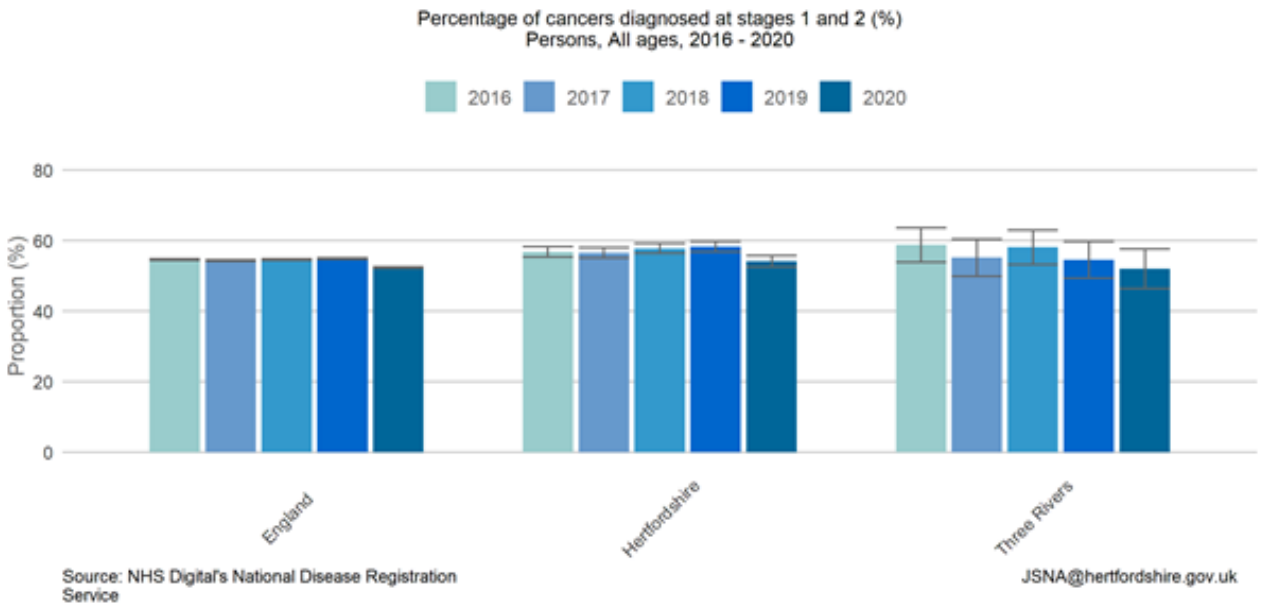
- In 2022, the proportion of cancer screening coverage for bowel cancer in people aged 60-74 years in Hertfordshire was 71.9%. This proportion was higher than England (70.3%) and this difference was statistically significant.
- During the same period, Three Rivers saw a bowel cancer screening proportion of 69.3%, and this result was statistically significantly lower than both the Hertfordshire and England average. Despite this, Three Rivers has seen a year-on-year increase in screening coverage, with the last 3 years on record (2020 – 2022) demonstrating statistically significant increases.
- Although there is no local data available, the proportion of bowel cancer screening coverage in England in 2022 was statistically significantly lower in the most deprived decile (63.5%) compared to the least deprived decile (72.9%).

4.5.3 Cervical cancer screening coverage



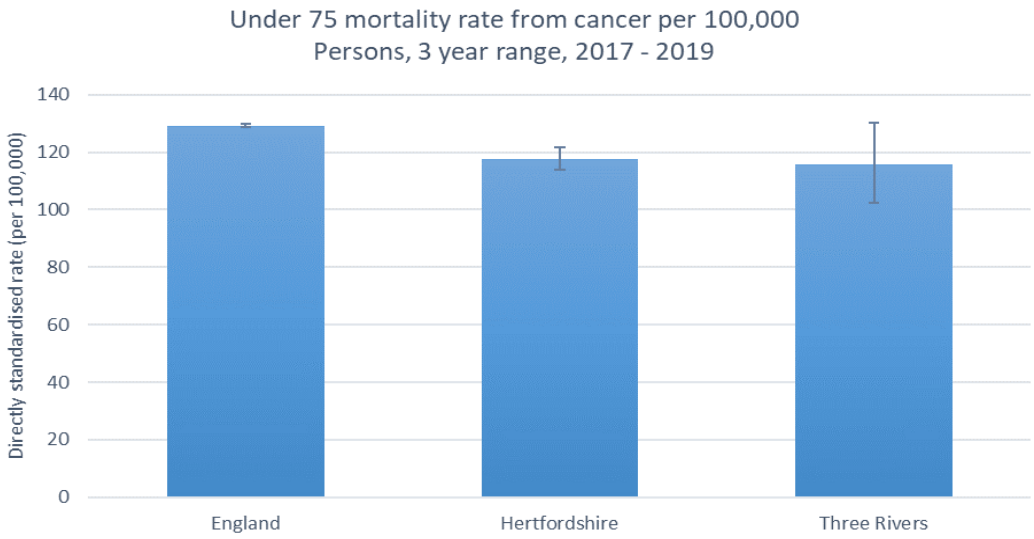
- In 2022, the proportion of cancer screening coverage for cervical cancer for ages 25-49 years in Hertfordshire was 72.1%. This proportion was higher than England (67.6%) and this difference was statistically significant.
- For the same period, Three Rivers saw a proportion of 72.6%, and this result was statistically similar to the Hertfordshire average and statistically significantly higher than the England average.
- In 2022, the proportion of cervical cancer screening coverage in England was statistically significantly lower in the most deprived decile (62.6%) compared to the least deprived decile (69.5%).

4.5.4 Early cancer diagnosis



- In 2020, the proportion of cancers diagnosed at stages 1 and 2 in Hertfordshire was 54.1%. This proportion was higher than England (52.3%) and this difference was statistically significant.
- During the same period, Three Rivers saw 52.0% of cancers being diagnosed at stages 1 or 2, and this result was statistically similar to the Hertfordshire average. The rates seen in 2020 were the lowest across all 5 years, with the highest levels seen in 2016 at 58.8%. None of these changes were statistically significant.
- In 2020 in England, there was a statistically significantly lower proportion of cancers diagnosed at stages 1 or 2 in the most deprived decile (50.3%) compared to the least deprived decile (55.2%).

4.5.5 Under 75 mortality rate from cancer

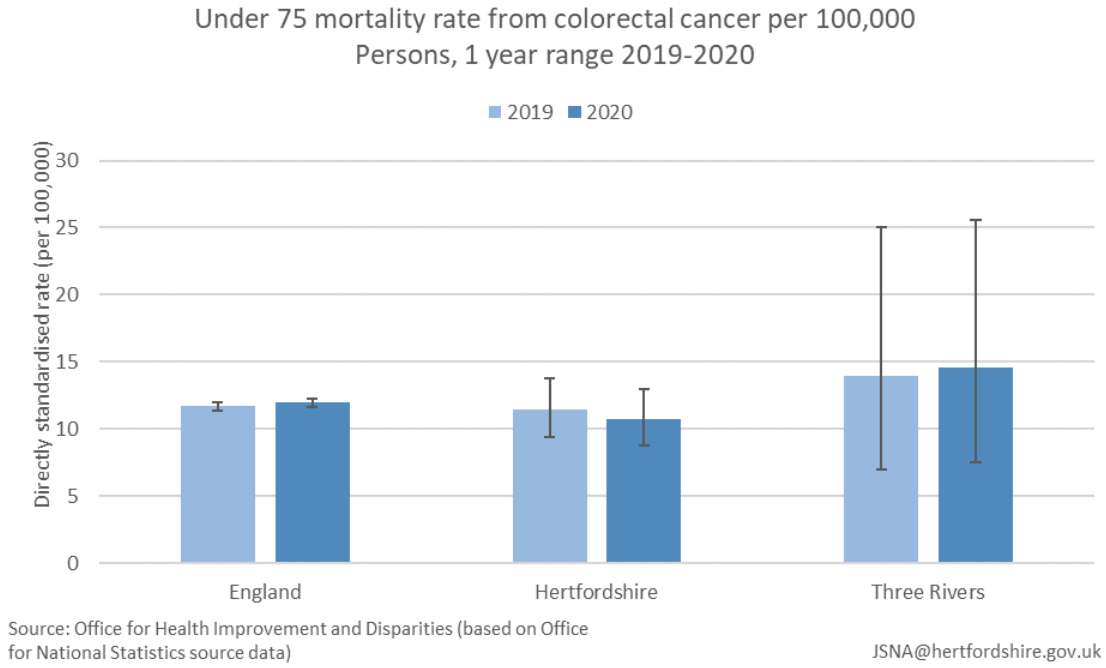


Source: Office for Health Improvement and Disparities (based on Office for National Statistics source data)

JSNA@hertfordshire.gov.uk

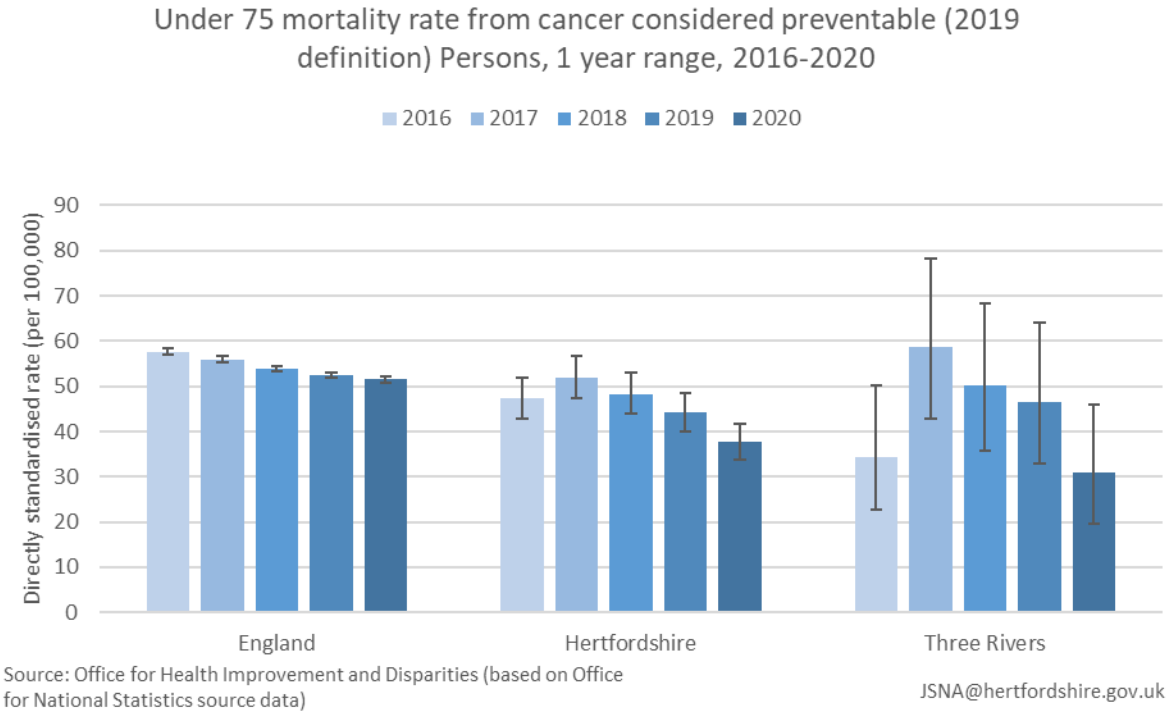
- During the 3-year period 2017 – 2019, the mortality rate for under 75's from cancer in Hertfordshire was 117.8 per 100,000. This was statistically significantly lower than the England average of 128.6 per 100,000.
- Three Rivers observed a rate of 115.8 per 100,000 during the same period. This result was statistically similar to Hertfordshire and the England average.

4.5.6 Under 75 mortality rate from colorectal cancer



- The directly standardised mortality rate for under 75's with colorectal cancer in Hertfordshire remained statistically similar between 2019 and 2020, reducing marginally from 11.4 per 100,000 in 2019 to 10.7 per 100,000 in 2020. This rate was also statistically similar to the England averages during the same period (11.7 per 100,000 in 2019 and 12.0 per 100,000 in 2020).
- The mortality rate from colorectal cancer in Three Rivers increased between 2019 and 2020, from 14.0 per 100,000 in 2019 to 14.6 in 2020, however, this was not statistically significant. The rate also remained statistically similar to both the Hertfordshire and England average.

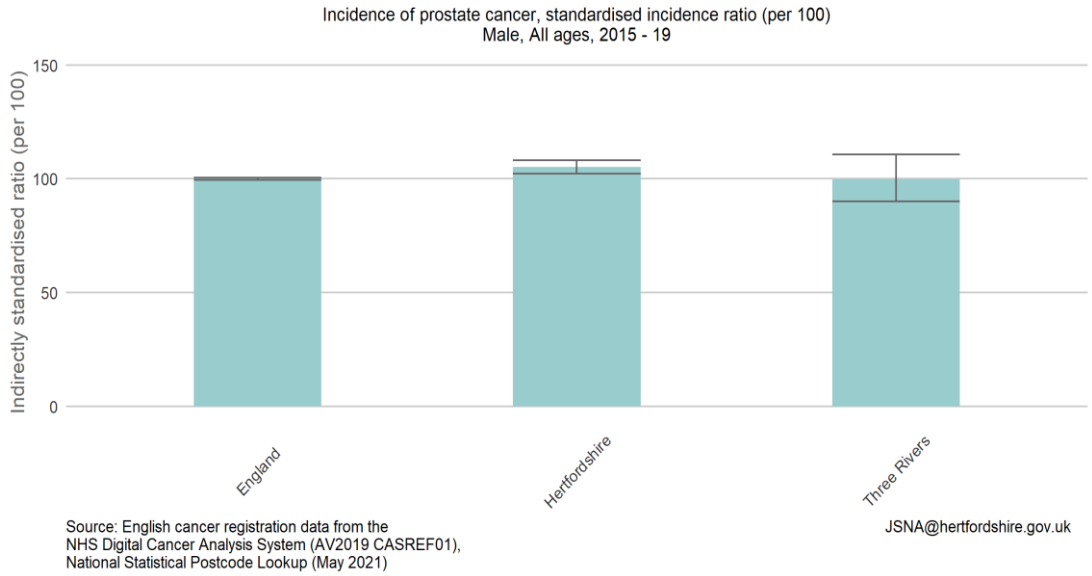
4.5.7 Under 75 mortality rate from preventable cancer



- Both Hertfordshire and Three Rivers have seen reductions in the rate of preventable cancer mortality in the under 75's over the period 2016 – 2020. The rates in Hertfordshire and Three Rivers have been decreasing over the last 4 years in line with the national average. This decrease was statistically significant for Hertfordshire, although not yet significant for Three Rivers.

- All areas saw a drop in mortality by 2020, with the Hertfordshire rate at 37.6 per 100,000 and the rate in Three Rivers at 30.8 per 100,000. Both were statistically significantly lower than the national average of 51.5 per 100,000.

4.5.8 Incidence of prostate cancer



- In 2015-19 in Three Rivers, the indirectly standardised ratio of new cases of prostate cancer was 99.7, meaning that for every 100 expected new cases of prostate cancer, there were 99.7 actual new cases. This ratio was statistically significantly similar to Hertfordshire (105.2 actual new cases per 100 expected new cases) and England (100.0 actual new cases per 100 expected new cases).
- All wards within the Three Rivers district had a statistically similar ratio to both the Hertfordshire and England average during this time period. The highest ratio of new cases of prostate cancer was in Rickmansworth Town (127.0), Abbots Langley & Bedmond (126.3), and Chorleywood South & Maple Cross (118.0).
- There is no inequality or trend data available for this indicator.

5.0 Local strategies and interventions

5.1 Overarching strategies

- The NHS Long Term Plan recognises the increasing contribution that longer-term health conditions have to the overall burden of disease in England. The NHS commits to improving upstream prevention for conditions such as CVD, cancer and diabetes through prioritising action on smoking, poor diet, high blood pressure, obesity, and alcohol and drug use. It also outlines specific actions to improve care for major health conditions including cancer, CVD, diabetes, and mental health.
- In consultation with NHS England, the Government are currently developing a Major Conditions Health Strategy which will set out a coherent policy agenda to establish a shift to integrated, whole-person care. The strategy will focus on cancers, CVD, chronic respiratory diseases, dementia, mental ill health, and musculoskeletal disorders.[102]
- In order to address widening health inequalities, Public Health England have published guidance to taking a whole system approach to health and wellbeing and addressing health across the life course. These approaches recognise the need to adopt a coordinated, collaborative approach across the life course to address the complex health conditions and the wider determinants of health. The importance of focusing on health inequalities at a national, regional and local level is addressed in the Marmot Review: Fair Society, Healthy Lives and the Marmot Review 10 Years On.
- The Hertfordshire and West Essex Integrated Care Strategy is centred around four core principles: (1) integration of health, care and wellbeing services, (2) priority towards prevention and early intervention, (3) targeted work to reduce health inequalities, and (4) involving local residents and workforce. It has several strategic priorities, some of which include:
    - **Support our residents to maintain healthy lifestyles** through initiatives such as developing a new physical activity offer for residents; offering all people admitted to hospital who smoke access to NHS-funded tobacco treatment services; and improving pathways and outcomes for people who have a mental health issue and experience drug and alcohol problems.
    - **Enable our residents to age well and support people living with dementia** through initiative such as improving early diagnosis for people at risk of becoming frail or living with dementia; promoting and encouraging take up of the NHS Health Check for people aged 40-74 to prevent the onset of disease; and improving provision of extra care housing with health and care services embedded to help older residents maintain their health and independence.
    - **Improve support to those living with life-long conditions, long-term health conditions, physical disabilities and their families** through initiatives like

working with the local population to lower risk factors and improve detection, diagnosis, and early intervention of long-term conditions.

    - **Improve our residents' mental health and outcomes for those with learning disabilities and autism** through ensuring there are clear pathways and timely access to psychological therapies; improving integrated pathways to access housing, education, employment for specific groups; and reducing suicide through a focus on system support of suicide prevention, for example.

- Hertfordshire's Public Health Strategy 2022-27 outlines Hertfordshire County Council's ambitions and priorities to deliver a wide range of positive health outcomes. Key ambitions include leading prevention through partnership working and reducing health inequalities. Within the strategy, there are several proposed actions specifically targeting health behaviours (such as smoking and physical activity), excess weight, mental health, and frailty.

- In 2022, Healthwatch Hertfordshire published a report on the impact of the cost of living in Hertfordshire which highlighted that many Hertfordshire residents are struggling with the rising cost of living. Most respondents to the consultation reported that they are reducing their energy usage (80%), going out less (62%) and reducing the amount and/or quality of food they are consuming (59%). Respondents also reported that the rising cost of living has affected their mental health and reduced their access to healthcare including dentist and/or opticians visits, purchasing of prescriptions, purchasing of equipment to help with health and mobility, and inability to travel to appointments due to transport costs.

- The Three Rivers Local Strategic Partnership (LSP) are currently developing the Three Rivers Community Strategy 2023-2028. The strategy focuses on inclusivity, promoting healthy lifestyles, supporting residents to feel safe, responding to the climate emergency, and growing the local economy in a way that benefits local people. The delivery of the strategy will be influenced by four factors: (1) responsive, responsible and local leadership, (2) evidence led and co-designed with communities, (3) a trauma informed approach, and (4) partnership collaboration.

5.2 Long-term health conditions

5.2.1 Strategies

- Public Health England's 'Health Matters – Preventing Cardiovascular Disease' outlines England's CVD ambitions to improve the detection and management of atrial fibrillation (AF), high blood pressure and cholesterol, and reduce health inequalities.

- The NHS Diabetes Rightcare Pathway aims to provide resources to help diabetes services concentrate their improvement efforts to improve population health for those at risk of developing diabetes and those who currently have T1DM or T2DM.

- NICE recommends that all people with diabetes aged 12 and over should receive nine recommended care processes at their annual diabetes review. These processes relate to blood glucose levels, blood pressure, serum cholesterol, foot examination, serum creatinine, urinary albumin, BMI, smoking history, and eye screening. Each care process has defined target levels to reduce the risk of diabetic complications.[103,104] NICE has also published specific guidelines for diabetes in pregnancy.

- The Royal College of Anaesthetist's Four Nation Strategy for Pain Management (2022) provides an overarching framework to deliver improved pain management across the whole healthcare sector. The strategy is patient-centred from point of first contact, including self-help signposting, personalised care and shared decision making.

5.2.2 Interventions

- NHS England and the National Institute for Health and Care Excellence (NICE) identified the most impactful interventions relating to the prevention and management of CVD and diabetes[105]:
    - **Diabetes**: Evidence-based and quality assured structured education programmes such as DAFNE and X-PERT are a cost-efficient way of reducing (a) the risk of diabetes complications, (b) the number of hospital admissions, and (c) reducing the need to refer T2DM patients to specialist services. The NHS Diabetes Prevention Programme – a nine-month, evidence-based lifestyle change programme – has shown to be effective in reducing population incidence of T2DM. Finally, evidence shows the importance of all people with diabetes receiving the NICE recommended nine care processes on an annual basis to reduce the risk of diabetic complications.

    - **CVD**: Successful interventions are based on *case finding* – namely, community pharmacy hypertension case finding, cholesterol search and risk stratification, and NHS Health Checks – and *optimising treatment*. The latter involves interventions such as preventing AF-related strokes with the use of direct-acting oral anticoagulants (DOACs); implementing cardiac rehabilitation for those diagnosed with heart failure; and the optimisation of hypertension treatment, heart failure treatment (through annual reviews), and primary care management after a high-risk CVD event (including lipid management).

- NICE recommend several evidence-based ways of managing chronic primary pain.[106] These include non-pharmacological interventions such as exercise programmes and physical activity; psychological therapy such as acceptance and commitment therapy or cognitive behavioural therapy; acupuncture – but only if the course is delivered within a community setting by a band 7 healthcare professional with appropriate training; and electrical physical modalities (but not TENS, ultrasound or interferential therapy as there is no evidence of benefit). The only pharmacological intervention

that NICE recommend is considering the use of an antidepressant for people aged 18 years and above, after a full discussion of the benefits and harms.[106]

- Recent evidence has shown that psychoeducational interventions are more effective in improving quality of life among fibromyalgia patients than usual treatments alone. A 2019 systematic review found that most of the examined studies found statistically significant positive results for psychoeducation compared to a control group, with specific improvements noted in functional status, management of emotions related to illness and pain, and anxiety and/or depressive symptoms. Online educational programmes were also found to be effective in increasing patients' knowledge of the disease and management of disease-related pain.[107]

- For more information at a national and local level, see the Diabetes JSNA, Diabetes Lite Bite, and Overweight and Obesity JSNA.

5.3 Mental health

5.3.1 Strategies

- The cross-government strategy 'No Health Without Mental Health' (2011) focuses on increasing parity between physical health and mental health and improving access to quality treatment and support throughout the life course. The government is currently in the process of developing a new 10-year plan for mental health and wellbeing, extending the work of the NHS Long Term Plan to better address how local services can work together to prevent those at risk from falling into mental ill-health through earlier, targeted work.

- The National Suicide Prevention Strategy (2012) specifies key areas for action, with annual progress reports published. The fifth progress report, published in 2021, set out new commitments and priorities in the context of the COVID-19 pandemic and the release of the Cross-Government Suicide Prevention Workplan.

- The Local Government Association has outlined some key recommendations that councils can use to develop their mental health strategies in line with their population's specific needs identified through Joint Strategic Needs Assessments.

- The Hertfordshire Suicide Prevention Strategy 2020-2025 identified key priorities based on the national strategy, including support for men, support for those bereaved by suicide, addressing training needs, support for children and young people, reducing access to means of suicide, and support research, data collection and monitoring.

- Hertfordshire County Council are currently developing an Adult Mental Health Strategy for 2022-27 to replace the previous 2016-21 strategy.

5.3.2 Interventions

- Within the NICE guideline 'Common mental health problems: identification and pathways to care', a stepped-care model is used to organise the provision of services for people with common mental health problems and to recommend appropriate

interventions based on the severity of their disorder. In summary, effective treatments may include:

  - **Psychological**: Different forms of cognitive behavioural therapy (CBT) are effective across disorders and severity level. For depression, other effective treatments include behavioural activation, interpersonal therapy, behavioural couples therapy, and mindfulness-based cognitive therapy.
  - **Psychosocial**: Across all conditions, NICE recommends support groups, befriending and rehabilitation programmes, educational and employment support services, and referral for further assessment and interventions.
  - **Pharmacological**: A wide range of antidepressant drugs are effective in treating people with depression, and there is evidence to support the use of some antidepressants such as selective serotonin reuptake inhibitors (SSRI), for panic disorder and moderate to severe presentations of OCD.

- The Royal College of Psychiatrists published a summary of evidence on public mental health interventions across the life course. Some interventions with a strong evidence base included parenting programmes to help prevent child mental disorder and improve parental mental health; school-based bullying and violence prevention; interventions to prevent depression such as psychological interventions, physical activity, and increasing employment; and workplace interventions to reduce employee stress and/or mental disorder and increase wellbeing.

For more information at a national and local level, see the Mental Health and Wellbeing of Children and Young People JSNA, the Mental Health and Wellbeing in Adults JSNA, the Mental Health and Wellbeing Perinatal JSNA, the Mental Health Demand on Local Services JSNA, and the Mental Health resources for children aged 0-5 Lite Bite.

5.4 Healthy weight

5.4.1 Strategies

- Since 2019, Hertfordshire County Council has taken a whole systems approach to obesity. The approach aims to support and promote healthy weight by engaging with neighbourhoods and communities using 10 Pillars of Action. These include promoting a healthy environment, engaging with neighbourhoods and communities, adopting a first 1000 critical days approach for child development, improving workplaces to foster health, improving the food environment in schools and for young people, focusing on people with special needs, helping people regain a healthier weight, learning from research and evaluation, using digital technology and using behavioural science.

- The Three Rivers Sport and Physical Activity Strategy aims to reduce health inequalities by increasing the levels of physical activity in the most inactive

communities in the council. Through the development of sports development initiatives, the council follows three strategic priorities to achieve this ambition:

1. **Active People "Encouraging residents in Three Rivers to be more active, more often":** This priority aims to promote the benefits of sport and physical activity, to increase participation rates and to reduce inequalities by targeting under-represented groups such as women, girls, older adults and those with long-term health conditions. This priority also aims to promote active lifestyles by supporting national campaigns and local initiatives.

2. **Active Places "Providing spaces and facilities that encourage residents to be more active":** This priority focuses on promoting the design, development and use of environments that make it easier for people to participate in sport and physical activity. Through encouraging residents to use the current green space, encouraging sustainable travel options and auditing indoor and outdoor facilities for local sporting; the district aims to target communities with greater inequalities.

3. **Active Together "Working in partnership with organisations to create an active Three Rivers population":** This priority emphasises the district's aim to work in partnership across sports clubs and public, private and voluntary organisations to increase engagement in physical activity. It also aims to work with its leisure provider to develop innovative ways to increase engagement amongst residents.

5.4.2 Interventions

- The NICE guidelines on preventing excess weight gain makes 10 recommendations to help different population groups on how to maintain healthy weight or prevent excess weight gain. These recommendations are to:
    1. Encourage people to make changes in line with existing advice on physical activity and healthy dietary habits
    2. Encourage physical activity habits to avoid low energy expenditure
    3. Encourage dietary habits that reduce the risk of excess energy intake
    4. Further advice for parents and carers of children and young people
    5. Encourage adults to limit the amount of alcohol they drink
    6. Encourage self-monitoring,
    7. Clearly communicate the benefits of maintaining a healthy weight
    8. Clearly communicate the benefits of gradual improvements to physical activity and dietary habits
    9. Tailor messages for specific groups
    10. Ensure activities are integrated with the local strategic approach to obesity.

For more information at a national and local level, see the Overweight and Obesity JSNA.

- Evidence has suggested that media literacy interventions help to reduce weight and shape concerns; cognitive dissonance interventions help to reduce aspiring to the thin-ideal; and CBT interventions help to reduce body dissatisfaction, dieting and bulimic symptoms. Therefore, these interventions may be beneficial in the prevention of eating disorders.[108]

- The NICE guidelines for Eating disorders: recognition and treatment suggest the following:

    - **Anorexia Nervosa:** consider providing Individual Eating-disorder-focused Cognitive Behavioural Therapy (CBT); Maudsley Anorexia Nervosa Treatment for Adults; or Specialist Supportive Clinical Management for adults. For children, Anorexia-focused Family Therapy is the first-line therapy suggested.
    - **Binge-eating disorder:** offer a binge-eating-disorder focused self-help programme, or group or individual eating-disorder-focused CBT.
    - **Bulimia Nervosa:** consider bulimia-nervosa-focused self-help programmes or individual eating-disorder-focused CBT in adults. For children, offer bulimia-nervosa-focused family therapy or individual eating-disorder focused CBT.

5.5 Frailty and older people

5.5.1 Strategies

- The NHS frailty framework of core capabilities aims to identify and describe skills, knowledge and behaviours required to deliver high quality, holistic compassionate care and support for older people. The framework is underpinned by 14 capabilities which are grouped into 4 domains namely: understanding, identifying and assessing frailty; person-centred collaborative working; managing frailty; and underpinning principles. These domains outline how people living with frailty, their loved ones and carers, practitioners, service providers, commissioning teams, and education and training providers can better identify frailty and understand how to support people to live well with frailty. This framework builds upon and references the priorities set in the NHS Five Year Plan.
- The Hertfordshire Adult Care Services 15 Year Direction strategy sets out ambition to make sure the right service development and transformation is available to the people that need them. Within its framework, this strategy aims to make sure that the adult social care system meets the rising expectations in society for personalised services and adequate planning for an expanding and ageing population.

- One of the six strategic priorities set by the Hertfordshire and West Essex Integrated Care Strategy (ICS) is to enable residents to age well and support people with dementia. In this priority, the ICS sets out to support residents to age healthily and ensure access to advice and services that enable them to live well and independently for as long as possible.

5.5.2 Interventions

- A practical guide to healthy ageing is a NHS information guide in partnership with Age UK that provides information to older adults from age 70 on how to manage healthy living in the later years. The guide provides practical advice on keeping active, preventing falls and overall physical and mental health in older adults.
- The NHS practical guide to healthy caring is an information guide that is designed for carers who are 65 years and older and are new to caring. The guide provides resources and support for older adults who have taken on caring roles. It also provides information on the health issues that may be associated to caring that can be harmful for older adults.

- NICE guidelines on Dementia, disability and frailty in later life makes recommendations centred around promoting healthy lifestyles and service organisation and delivery to delay or prevent the onset of dementia, disability and frailty in later life. Their first recommendation is promoting healthy lifestyles by: encouraging healthy behaviours, integrating dementia risk reduction prevention policies, raising awareness of risk and producing information on reducing the risk of dementia, disability and frailty, preventing tobacco use, improving the environment to promote physical activity, reducing alcohol-related risk, and supporting people to eat healthily. The second recommendation is encouraging service organisation and delivery to deliver services to promote behaviour change, provide accessible services, provide advice on reducing the risks of dementia, disability and frailty, providing physical activity opportunities, provide training, lead by example in public sector, and provide support in the workplace.

- A systematic review and meta-analysis analysed the effects of physical activity intervention such as weight-based movement, outdoor walking, strength, balance, and flexibility exercises on frailty. The review concluded that physical activity is likely to help prevent frailty.[109]

5.6 Cancer

5.6.1 Strategies

- The NHS Long Term Plan ambitions for cancer aim to increase the number of people who survive cancer and those who are diagnosed early by 2028. The ambitions will be delivered by trying to improve quality of life outcomes, improving patient experience outcomes, reducing variation and inequalities. These ambitions aim to build on and accelerate the progress made through delivering recommendations made by the Independent Cancer Taskforce made in 2015.
    - The NHS cancer screening programme encourages regular screening in the efforts to help diagnose cancer or a risk of cancer earlier to improve likelihood of successful treatment. There are three main cancer screening

programmes in England: cervical screening, breast screening and bowel screening.

- The 10-Year Cancer Plan (2023-2032) is a new strategy that will be published that encompasses all ambitions in the fight against cancer as identified by the Department of Health and Social Care in collaboration with other stakeholders. The new plan uses knowledge on the innovations and improvements that were done during the pandemic and aims to incorporate them moving forward. It also identifies what additional intervention might be adopted to support the delivery of the existing ambitions. Lastly this strategy aims to look beyond the end date of the NHS Long-Term Plan to consider what more can be done to shape and improve cancer services in the next decade also through research and development.

5.6.2 Interventions

- Cancel Out Cancer is an initiative in East and North Hertfordshire aimed at improving awareness and understanding of cancer. This initiative was developed by NHS patient representatives and offers a 60-minute free online session discussing cancer screening, symptoms and prevention.

- Cancer Alliances brings together clinical and managerial leaders from different hospital trusts and other health and social care organizations to change the diagnosis, treatment and care for cancer patients in their local area. In collaboration with primary care, they offer personalized care interventions to people with breast, colorectal, prostate cancer and other cancers using these four ambitions:

    - **Personalized Care and Support Planning** (based on holistic needs assessments) ensures people's physical, practical, emotional and social needs are identified and addressed at the earliest opportunity.

    - **End of Treatment Summaries** provide both the person and their GP with valuable information, including a detailed summary of treatment completed, potential side effects, signs and symptoms of recurrence and contact details to address any concerns.

    - **Primary Care Cancer Care Review** is a discussion between the person and their GP / primary care nurse about their cancer journey. This helps the person to discuss any concerns, and, if appropriate, to be referred to services or signposted to information and support that is available in their community and from charities.

    - **Health and Wellbeing Information and Support** includes the provision of accessible information about emotional support, coping with side effects, financial advice, getting back to work and making healthy lifestyle choices. This support will be available before, during and after cancer treatment.

- **Breast screening:** A systematic review exploring health promotion interventions to increase breast cancer screening uptake found that most interventions including individual, community and group-based interventions helped to increase uptake.[110]

- **Cervical cancer screening:** Another systematic review and meta-analysis found that theory-based cervical cancer educational interventions (such as teaching about what is involved in screening and why it is important) helped to increase uptake in cervical cancer screening. Offering women the option of self-sampling for HPV testing increased screening uptake by 71%. Additionally, the study found that sending reminders to patients who are overdue for screening helped to improve uptake.[111]
- For more information at a national and local level, see the Cancer JSNA.

6.0 Limitations

- The health conditions covered in this needs assessment are all extensive and multifaceted topics. For this reason, it was beyond the scope of this report to develop each of the individual topics in depth. More detailed information for individual health topics is available on the JSNA website.

- Following the recent implementation of the Hertfordshire and West Essex Integrated Care system, previous strategies published by Clinical Commissioning Groups are now outdated. There are no updated local strategies for all of the health conditions covered in this needs assessment.

- Some indicators did not have district level data available for analysis. These included data on chronic pain (including fibromyalgia), severe mental illness and eating disorders.

- For some indicators, graphs showing local trends over time did not include the most recent data as this was calculated using different mid-year population estimates and was not directly comparable to previous years. However, the most recent available data was included in the text for all indicators.

- Some of the indicators were missing data for previous years as the data had not been aggregated to district level for these years.

- Indicators have not been analysed at smaller geographies within Three Rivers, such as at ward level or below.

- There is a lack of local data regarding inequalities in the prevalence of different health conditions across various demographic groups, with the exception of sex and IMD quintile for some of the indicators.

- The available data on diet and physical activity is self-reported. Self-reported data has known limitations, such as the validity of using retrospective questions, accuracy of answers and response bias.

- Estimations for the prevalence of mental health disorders that are based on the Adult Psychiatric Morbidity Survey (2014) are outdated and, therefore, may not be representative of the current prevalence.

- Within this JSNA, frailty is measured using hospital admission data for falls and hip fractures in older adults, which serves as more of a proxy measure for frailty, rather than looking at measures such as the frailty index.

- Some indicators, such as those from the GP patient survey or Quality Outcomes Framework, only include data from individuals who are registered at GP surgeries. Therefore, certain population groups may be more likely to be excluded from the sampling framework such as those experiencing homelessness due to barriers with registering[112] and those exclusively using private healthcare.

- The COVID-19 pandemic affected the way that some of the indicators were measured and may mean that comparisons to previous years are misleading. For example, in 2020/21, there were changes in the Quality and Outcomes Framework, with GPs being paid regardless of activity recorded for indicators and there being less face to face visits, which may make data using QOF indicators inaccurate for that year.
- This needs assessment did not address the potential impact that the COVID-19 pandemic or Cost of Living crisis may have had on local health behaviours and outcomes. For more information, please see the Cost of Living JSNA Lite Bite.
- The prevalence of obesity and overweight should be interpreted with caution for the following reasons:
    - Body Mass Index (BMI) is a practical estimate of adiposity (body fatness) and does not distinguish between body fat mass and body lean mass or consider body composition, such as where the body fat is stored, which can pose a separate health risk.[113,114]
    - In some ethnicities, such as some Asian groups, there may be a higher risk of certain medical conditions at a lower BMI.[113,115] Therefore, using the cut-off points of 25kg/m^2 for overweight and 30kg/m^2 for obesity for these populations may mask potential health implications at a lower BMI.

  Please see Overweight and Obesity JSNA for more information.

7.0 Recommendations

7.1 Long term health conditions

- Prioritise upstream prevention and detection of long-term health conditions, such as hypertension and type 2 diabetes, by promoting physical activity and smoking cessation initiatives, and increasing local uptake of NHS Health Checks.
- Increase referrals to structured education programmes as an evidence-based, cost-effective way of reducing risk of diabetes complications, hospital admissions and the need for referral to specialist services among patients with diabetes.
- Encourage the completion of annual care processes (e.g. blood checks, foot examination, eye screening) in those with diabetes, including specific processes for expectant mothers with diabetes in pregnancy.
- Work collaboratively with community and specialist chronic pain services to optimise patient management opportunities and support the development of advice and guidance services if referral may not be required.

7.2 Mental health

- Adopt a life course approach to mental health and wellbeing. This should include the promotion of mental wellbeing from early life (by reducing exposure to adverse childhood experiences and addressing harms by promoting programmes that address childhood trauma) through to older age (by addressing links with issues such as social isolation and physical health).
- Ensure that reducing inequalities and addressing wider determinants of mental health (including physical health) are at the heart of improving mental health and wellbeing in the local population. This should include support for physical health conditions and ensuring equity of access across demographic groups.
- Follow the priorities outlined in national and local strategies for suicide prevention including enabling earlier intervention, reducing access to means of suicide, and improved awareness for professionals on signposting to available services and referral routes. This should include specific consideration for higher risk demographic groups such as men, ethnic minority groups and LGBTQ individuals.

7.3 Healthy weight

- Take a whole-systems approach to obesity by adopting initiatives that target the environmental, social, and physiological drivers of obesity. This approach includes:
    - increasing the availability of different food types and physical activity opportunities across the district
    - increasing nutritional education
    - promoting active travel and use of green spaces
    - increasing awareness of obesity management services and management of drug-induced weight gain

- Increase physical activity in residents through strengthening partnerships across public, private and voluntary organisations to target activities in under-represented groups. This includes those living in deprived areas, women, older adults and those with long-term conditions.
- Increase the number of children and young people starting treatment for eating disorders within 4 weeks to meet the 95% target set out in the NHS Long Term Plan.
- Strengthen prevention work around disordered eating through evidence-based interventions aimed at reducing body dissatisfaction and addressing bullying behaviours, particularly those relating to appearance-related teasing.

7.4 Frailty and older people

- Adopt a multidimensional approach to the prevention of frailty through the promotion of healthy lifestyle behaviours such as regular physical activity, avoidance of excess weight gain, and the prevention and cessation of smoking with a particular focus on women and older adults.
- Review what services and interventions are available across the system in relation to falls prevention among older adults in Three Rivers to identify current gaps in provision.
- Promote physical activity interventions such as weight-based movement, outdoor walking, and strength exercises as a preventative measure for frailty.

7.5 Cancer

- Promote and increase awareness of local initiatives that focus on smoking cessation, weight management, alcohol reduction and cancer prevention behaviours such as reducing exposure to UV radiation, particularly in more deprived areas.
- Increase promotion of cancer awareness campaigns, local initiatives that assist with early detection of cancer, and cancer screening to increase the proportion of cancers diagnosed at stages 1 and 2.
- Map locations of cancer screening services in the local district and increase cancer screening coverage in areas with reduced access to screening services.

7.6 Other inequalities

- Review and monitor the impact of the Cost of Living crisis on local residents' physical and mental health, including access to healthcare services, and increase awareness of local services available for residents struggling with the increased cost of living.
- Consider the changes to local population demographics identified through the Census 2021 over the last 10 years to assess the impact on service capacity and identify any gaps in local health provision.

Find out more

Population information

Herts Insight website

Strategies and Interventions

Overall strategies

The NHS Long Term Plan
whole system approach to health and wellbeing
Addressing health across the life course
Marmot Review: Fair Society, Healthy Lives
Marmot Review 10 Years On.
Hertfordshire and West Essex Integrated Care Strategy
Hertfordshire's Public Health Strategy 2022-27

Long term health conditions

'Health Matters – Preventing Cardiovascular Disease'
NHS Diabetes RightCare Pathway
NICE Guidelines for diabetes in pregnancy
Four Nation Strategy for Pain Management (2022)

Mental Health

The Cross-Government Suicide Prevention Workplan (2019)
Preventing suicide in England: Fifth progress report of the cross-government outcomes strategy to save lives (2021)
Being mindful of mental health: the role of local government in mental health and wellbeing
Hertfordshire Suicide Prevention Strategy 2020-2025
'Common mental health problems: identification and pathways to care',
A summary of evidence on public mental health interventions
National Suicide Prevention Strategy (2012)
No Health Without Mental Health (2011)

Healthy weight

Hertfordshire County Council Whole Systems Approach to Obesity
The best start for life: a vision for the 1,001 critical days
Three Rivers Sport and Physical Activity Strategy
NICE guidelines on preventing excess weight gain

Frailty and older people

The NHS frailty framework of core capabilities

The Hertfordshire Adult Care Services Fifteen Year Direction strategy
A practical guide to healthy ageing
The NHS practical guide to healthy caring
NICE guidelines on Dementia, disability and frailty in later life

Cancer

NHS Long Term Plan ambitions for cancer
Independent Cancer Taskforce
NHS cancer screening
10-Year Cancer Plan (2023-2032)
Cancel Out Cancer
Cancer Alliances

Other relevant JSNA products

Long-term health conditions

Diabetes JSNA
Diabetes Lite Bite

Mental health

Mental Health and Wellbeing in Adults JSNA
Mental Health and Wellbeing Perinatal JSNA
Mental Health and Wellbeing in Children and Young People JSNA
Mental Health Demand on Local Services JSNA
Mental Health resources for children aged 0-5 Lite Bite
Body Positivity JSNA Lite Bite
Cost of Living JSNA Lite Bite

Healthy weight

Physical Activity JSNA briefing.
Hertfordshire's Children and Young People Obesity Briefing
Overweight and Obesity JSNA

Frailty and older people

Ageing Well JSNA

Cancer

Cancer JSNA

Appendix A: Information for Equality Impact Assessments

Three Rivers Inequalities JSNA

Part A: Protected characteristics (protected under the Equality Act 2010)

Age

- The risk of developing CVD increases with age, with it being most common in individuals over the age of 50.[8] Increasing age is associated with an increased prevalence of pre-diabetes and T2DM,[20,21] whilst type T1DM typically peaks around puberty.[22]
- Osteoarthritis typically develops in individuals in 45 years older and above, while rheumatoid arthritis often starts between the age of 30 and 50.[45]
- A national survey of children and young people's mental health found that the prevalence of mental health disorders was highest among 11- to 16-year-olds.[50]
- Findings from the 2021 Health Survey for England show that people aged 45-74 are at higher risk for overweight and obesity.[70] Eating disorders such as anorexia nervosa, bulimia nervosa, and binge eating disorder typically develop in people during their late teens and mid-twenties. [78,79]
- A systematic review found that older age is significantly associated with frailty.[83]
- Increasing age is an important risk factor for cancer, with overall cancer incidence rates rising as age increases. In the UK, the peak rate of cancer cases is among people aged 85-89 years. Despite this, certain types of cancer are more common in children and young people, including brain and spinal tumours and leukaemia.[89]

Disability

- Findings from the 2021 Health Survey for England show that disabled people are at higher risk for overweight and obesity. [70]

- Cardiovascular disease (CVD) is a key cause of disability in the UK but can often be largely prevented by lifestyle modifications.[5]
- National data on chronic pain available from the Health Survey for England in 2017 showed that adults that were permanently unable to work because of long-term sickness or disability, and those intending to look for work but prevented by temporary sickness or injury were more likely to report having chronic pain (77% and 66% respectively) compared with those in paid employment (27%).[99]
- People with learning disabilities have been identified as being at particular risk of poor mental health.[68]

Gender identity and reassignment

- People identifying as transgender are less likely to attend for cancer screening, in part due to fear of discrimination by health care workers, and are less likely to access sex-specific screening such as cervical or breast cancer screening because in some cases they have been omitted from the register due to their recorded gender.[90,91]
- See also Sexual orientation.

Marriage and civil partnership

No specific issues were identified through this needs assessment

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Pregnancy and maternity

- Obesity during pregnancy can cause health problems for both the mother and child, including increased risk of maternal death; miscarriage; gestational diabetes; blood clots; pre-eclampsia; post-partum haemorrhage; still birth; foetal abnormality and increased risk of the baby becoming obese in adulthood.[75,76]
- Women during the perinatal period have been identified as being at particular risk of poor mental health.[69] See Perinatal Mental Health and Wellbeing JSNA.

Race and ethnicity

- In the UK, South Asian, Black African and African Caribbean ethnicities have an elevated risk of developing CVD.[9] Specifically, South Asian groups have the highest mortality from heart disease and stroke, while Black groups in the UK have a significantly lower risk of heart disease compared to the general population but have higher incidence of and mortality from hypertension and stroke.[116]

- A cross-sectional analysis of the Health Improvement Network Primary Care Database found that minority ethnic groups were more likely to have a type 2 diabetes diagnosis compared to white individuals.[23]
- A national survey of children and young people's mental health found that the prevalence of mental health disorders was highest among children of a White British or Mixed/other ethnic background compared to those from Asian/Asian British and Black/Black British backgrounds.[50] Research suggests that people from BAME communities are at higher risk of developing a mental health problem in adulthood, but are less likely to receive support.[54]
- Findings from the 2021 Health Survey for England show that people from the Black ethnic group are at higher risk for overweight and obesity. [70]
- A recent 2022 study in England found that people of non-White ethnicity generally have lower cancer risk than the White population, with some notable exceptions. Some exceptions included prostate cancer (2 times higher in Black ethnic groups), myeloma (3 times higher in Black ethnic groups) and several gastrointestinal cancers (higher in Black and Asian ethnic groups).[92]

Religion or belief

No specific issues were identified through this needs assessment

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Sex

- Men have a higher risk of CVD than women at all ages compared to women, and on average, develop CVD around 10 years earlier than women.[8] However, research suggest that women who have heart attacks receive poorer care than males during diagnosis, treatment and aftercare which may affect health outcomes.[117]
- Fibromyalgia mainly affects women (typically between 80-90% of cases are female), however men with fibromyalgia have been shown to have significantly more comorbidities.[118] Osteoarthritis and rheumatoid arthritis are more common in females than males.[45]
- Women are reported to have a higher rate of all types of common mental health disorders, although suicide is more common among men.[54,55]
- Eating disorders such as anorexia nervosa, bulimia nervosa, and binge eating disorder are more prevalent among women than men.[78,79]
- A systematic review found that found that the female gender is significantly associated with frailty.[83]

- In general, cancer incidence is higher among men than women. However, this pattern differs by age in England, with common cancers that affect women (including breast and cervical cancer) more likely to develop in younger people compared to cancers that mainly affect men (such as prostate cancer).[86]

Sexual orientation

- People who identify as non-heterosexual are more likely to develop mental health problems including depression, anxiety, eating disorders, self-harm, suicidal feelings and misuse of drugs or alcohol.[57] This is related to the fact that many LGBTQ+ people are more likely to experience stigma and/or discrimination, social isolation, exclusion, rejection and inequality.[57–59]
- LGBT people are less likely to attend for cancer screening, in part due to fear of discrimination by health care workers.[91]

Part B: Other Categories

Military personnel and armed forces veterans

- Veterans have been identified as being at particular risk of poor mental health.[66] In particular, military veterans are more likely to experience post-traumatic stress disorder (PTSD), anxiety, depression and alcohol problems than the general populaltion.[119,120]

Carers

- Carers have been identified as being at particular risk of poor mental health.[65] This is because caring responsibilities often have a significant impact on mental health, including: stress and worry; anxiety; isolation and loneliness; less personal time; money worries; lack of sleep; and guilt, frustration and anger.[121]

Mental Illness/Poor Mental Health

- Evidence suggests there is a two-way causal relationship between mental health and long-term conditions like CVD, diabetes, chronic obstructive pulmonary disease, and musculoskeletal disorders.[63]
- Significant positive associations have been found between frailty and higher levels of depression among older people.[83]
- See also Disability.

Impact of COVID-19

- The COVID-19 pandemic had a large impact across multiple health conditions in the UK, including reduced access to healthcare services and varying trends for different conditions. For more information on the impact of the pandemic across the individual conditions explored in this JSNA, please refer to the corresponding JSNA documents for each topic which can be found on the Hertfordshire JSNA website.

Appendix B: Guidance on statistical significance and interpreting confidence intervals

Statistical significance: A term used to indicate whether a difference or relationship really exists between two or more data points including two different geographic areas or time periods and/or whether the difference is just a fluke.

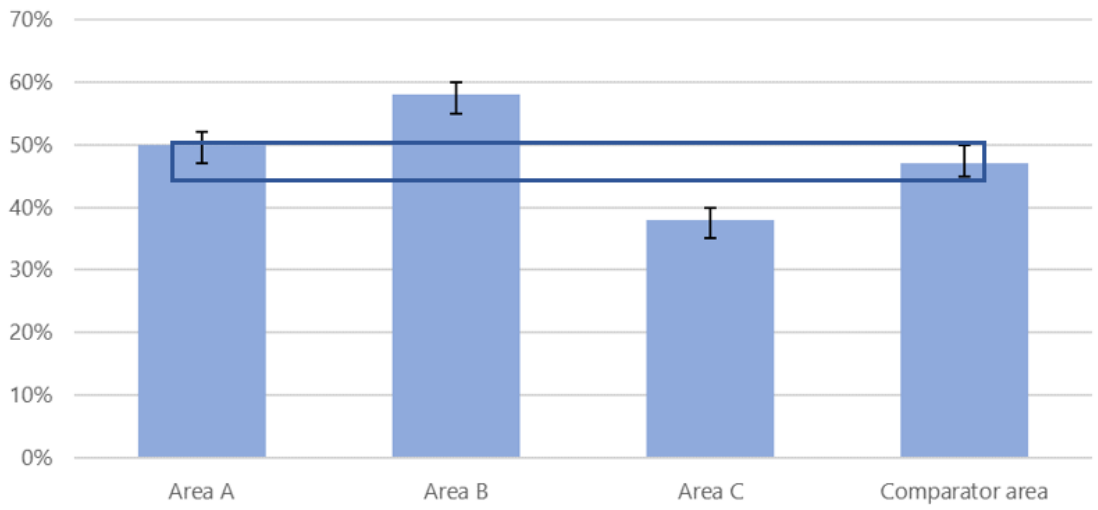
Confidence intervals: provide an easy way to look for statistically significant differences between two or more data points. There are two different methods that can be used, each with its own strengths and weaknesses.

Overlapping confidence intervals: When there are two sets of data with confidence intervals and we want to take the imprecision of both into account we compare both to see if they overlap each other. If the intervals do not overlap there is a significant difference between the data. On the other hand, if the intervals overlap, then the data points are not statistically significant (see example below).

Example:

The graph below shows an example of how confidence intervals can be used to identify statistically significant differences between data. Applying the logic described above, the below graph shows the following:

- Area A is **statistically similar** or **not significantly different** to the comparator area because the confidence intervals overlap.
- Area B is **statistically significantly higher** than the comparator area because the confidence intervals do not overlap.
- Area C is **statistically significantly lower** than the comparator area because the confidence intervals do not overlap.



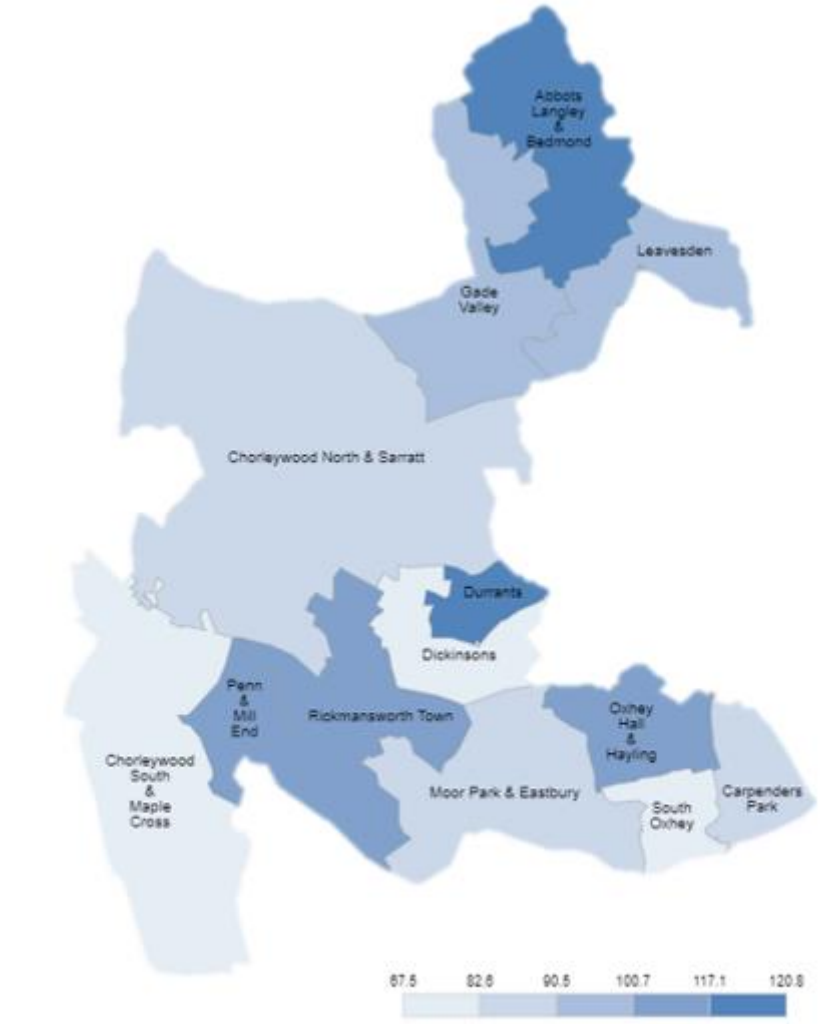
Source: Statistics with Confidence, Altman et al.[122]

Appendix C: Ward level health indicator maps

This appendix contains ward level maps of indicators covered within this JSNA where Three Rivers is either statistically worse or statistically similar to the national average during the most recent data period. This includes the following indicators:

- Emergency hospital admissions for stroke
- Emergency hospital admissions for hip fractures in adults aged 65+
- Incidence of breast cancer
- Incidence of prostate cancer

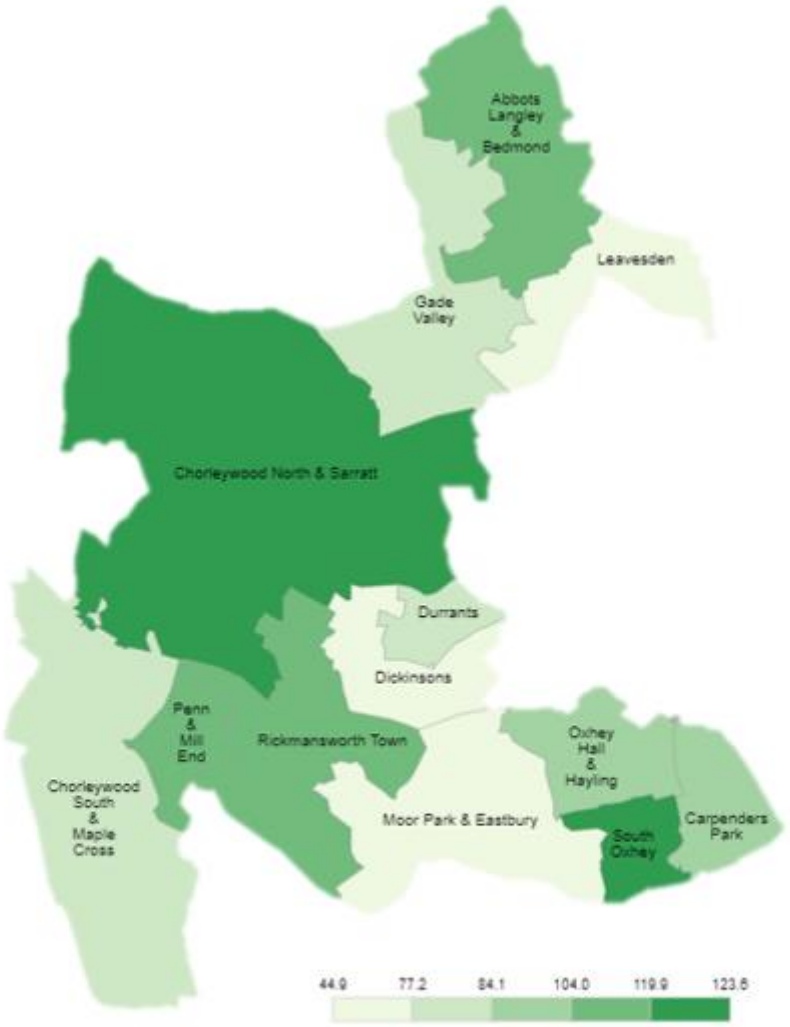
Emergency hospital admissions for stroke, 2015/16 to 2019/20



Source: Hospital Episode Statistics

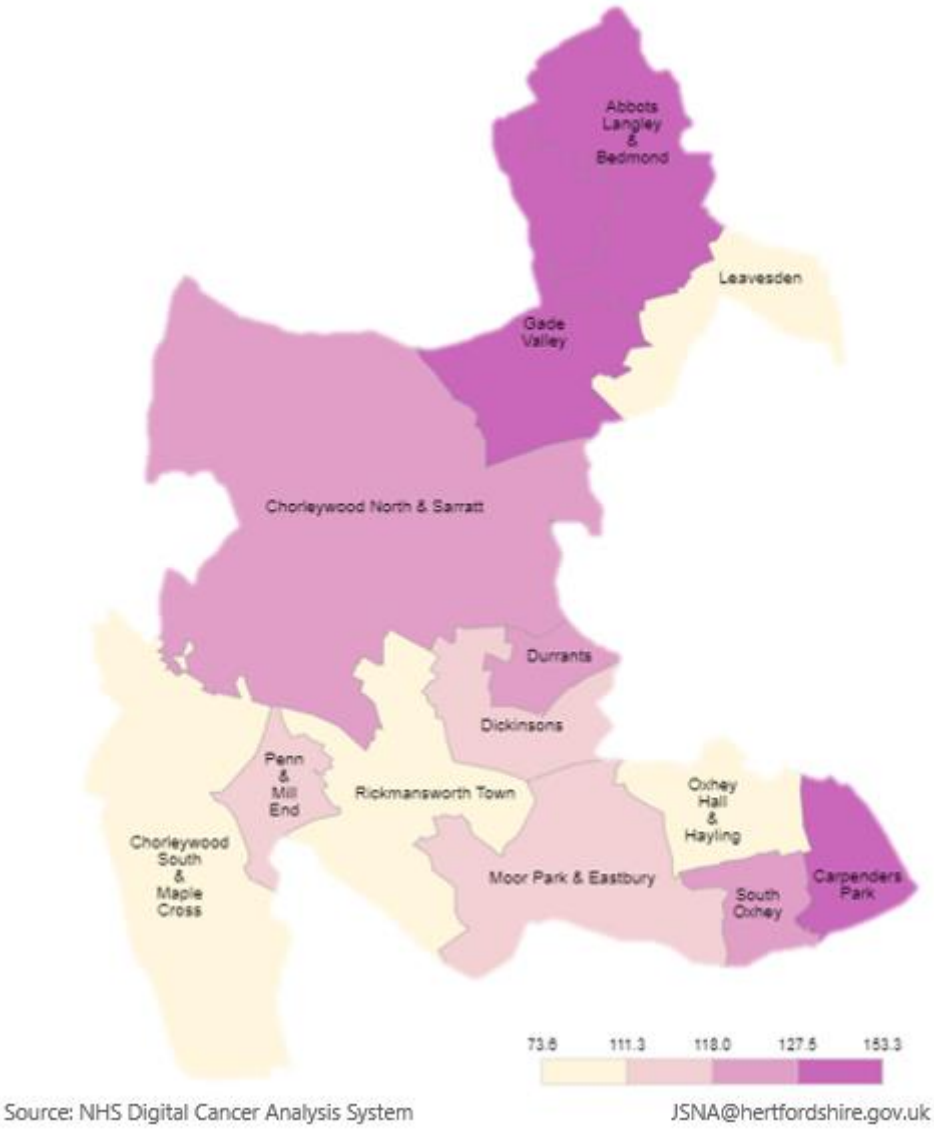
JSNA@hertfordshire.gov.uk

Emergency hospital admissions for hip fractures in adults 65+, 2016/17 to 2020/21



Source: Hospital Episode Statistics and ONS JSNA@hertfordshire.gov.uk

Incidence of breast cancer, 2015 to 2019



Source: NHS Digital Cancer Analysis System

JSNA@hertfordshire.gov.uk

Incidence of prostate cancer, 2015 to 2019

Source: NHS Digital Cancer Analysis System

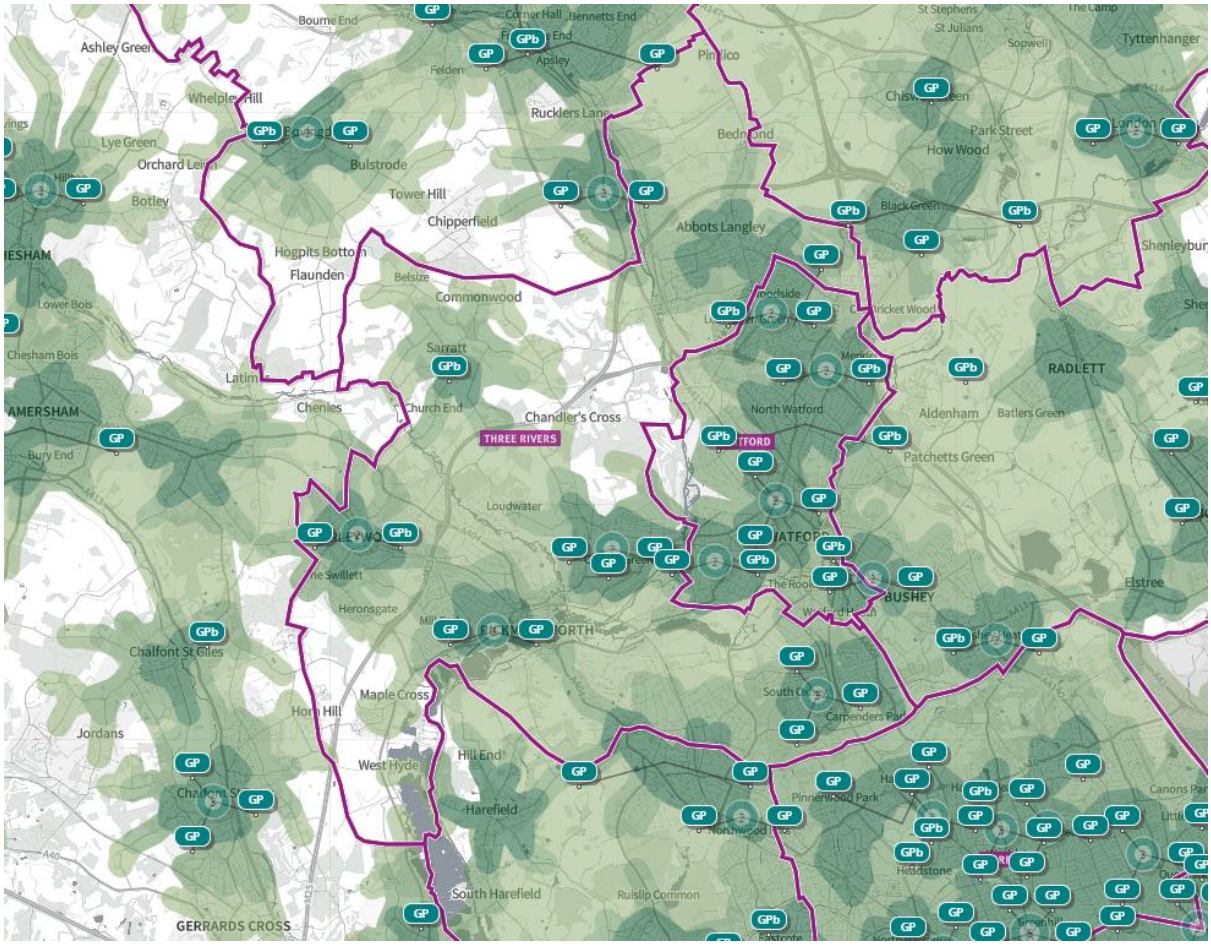
JSNA@hertfordshire.gov.uk

Appendix D: Transport access to GP surgeries

The map below shows the locations of all registered GP surgeries, both in and around Three Rivers, highlighting areas with reduced access to GP surgeries.

As can be seen in the map, there are several pockets within Three Rivers which are not within a 3km drive of a GP surgery, particularly in more rural areas around Chandler's Cross, Sarratt, Maple Cross and West Hyde. This suggests that there may be reduced access to primary care services within these areas.

Areas in Three Rivers district within a 3km driving distance to a GP surgery



Source: SHAPE Place Atlas.

Key

Dark green = Up to 1km drive
Mid-green = Up to 2km drive
Light green = Up to 3km drive
No shading = More than 3km drive

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