

# Bristol, North Somerset and South Gloucestershire (BNSSG)

Case for Change

Addressing the Health and Wellbeing Gap

Version 2: February 2018

## **Changes since version 1**

p5 - Change to paragraph text on life expectancy to include healthy life expectancy and to clarify gap between deprivation quintiles in BNSSG.

p25-26 – Clarification of life expectancy by gender and slope index of inequality.



## Contents

|   |    |
|---|----|
| <b>1. Summary</b> .....                     | 5  |
| <b>2. The local population</b> .....        | 7  |
| 2.1 Population overview .....               | 7  |
| 2.2 Population density .....                | 7  |
| 2.3 Age distribution.....                   | 9  |
| 2.4 Population growth and projections ..... | 10 |
| 2.5 Population diversity .....              | 12 |
| 2.5.1 Ethnicity .....                       | 12 |
| 2.5.2 Sexuality .....                       | 13 |
| 2.5.3 Population groups.....                | 14 |
| 2.6 Deprivation .....                       | 16 |
| 2.7 Education .....                         | 19 |
| 2.7.1 GCSEs achieved .....                  | 20 |
| 2.7.2 Readiness for school .....            | 21 |
| 2.8 Employment.....                         | 22 |
| 2.8.1 Unemployed population .....           | 22 |
| 2.8.2 Income .....                          | 23 |
| 2.9 Housing .....                           | 24 |
| 2.9.1 Homeless population .....             | 24 |
| 2.9.2 Living conditions .....               | 25 |
| 2.10 Crime and anti-social behaviour .....  | 26 |
| 2.10.1 Violent crime.....                   | 26 |
| 2.10.2. Young offenders.....                | 27 |
| <b>3. Life expectancy</b> .....             | 28 |
| 3.1 Life expectancy .....                   | 28 |
| 3.1.1 Life expectancy at birth.....         | 28 |
| 3.1.2 Life expectancy at 65 years.....      | 30 |
| 3.1.3. Life expectancy gap.....             | 30 |
| 3.1.4 Healthy life expectancy.....          | 31 |
| 3.2 Mortality and premature mortality ..... | 33 |



|       |  |    |
|-------|--|----|
| 3.2.1 | Leading causes of premature death in BNSSG.....      | 33 |
| 3.2.2 | Premature deaths from heart disease and stroke ..... | 35 |
| 3.2.3 | Premature deaths from cancer .....                   | 36 |
| 3.2.4 | Premature deaths from liver disease.....             | 37 |
| 3.2.5 | Premature deaths from respiratory disease.....       | 38 |
| 3.2.6 | Smoking related deaths .....                         | 39 |
| 3.2.7 | Injury .....   | 40 |
| 3.3   | Years of Life Lost .....                             | 41 |
| 3.3.1 | Causes of years of life lost .....                   | 41 |
| 3.3.2 | Deprivation and years of life lost .....             | 44 |
| 4.    | <b>The health needs of the local people</b> .....    | 46 |
| 4.1   | Overview .....                                       | 46 |
| 4.2   | Disease prevalence .....                             | 46 |
| 4.2.1 | Cardiovascular disease (CVD).....                    | 46 |
| 4.2.2 | Cancer .....   | 50 |
| 4.2.3 | Screening.....                                       | 53 |
| 4.2.4 | Diabetes .....                                       | 56 |
| 4.2.5 | Kidney disease.....                                  | 57 |
| 4.2.6 | Liver disease.....                                   | 58 |
| 4.2.7 | Respiratory disease .....                            | 59 |
| 4.2.8 | Emergency hospital admissions.....                   | 61 |
| 4.3   | Children and Young People .....                      | 63 |
| 4.3.1 | Low birth weight .....                               | 63 |
| 4.3.2 | Infant mortality .....                               | 64 |
| 4.3.3 | Breastfeeding .....                                  | 65 |
| 4.3.4 | Oral and dental health .....                         | 66 |
| 4.3.5 | Injuries .....                                       | 67 |
| 4.4   | Older people .....                                   | 70 |
| 4.4.1 | Dementia.....  | 70 |
| 4.4.2 | Osteoporosis .....                                   | 71 |
| 4.4.3 | Arthritis .....                                      | 73 |
| 4.4.4 | Hip and knee replacements .....                      | 74 |



|   |            |
|---|------------|
| 4.4.5 End of life .....   | 75         |
| 4.5 Mental Health .....   | 76         |
| 4.5.1 Depression .....  | 77         |
| 4.5.2 Self-harm.....  | 78         |
| 4.5.3 Suicide .....   | 79         |
| 4.5.4 Mental health services.....   | 80         |
| 4.6 Communicable diseases.....  | 81         |
| 4.6.1 Flu vaccination .....   | 81         |
| 4.6.2 Tuberculosis .....  | 83         |
| 4.6.3 Sexually transmitted infections .....                                       | 84         |
| 4.6.4 HIV.....  | 85         |
| 4.6.5 MMR vaccination .....   | 86         |
| 4.7 Behavioural and lifestyle factors.....  | 89         |
| 4.7.1 Smoking.....  | 89         |
| 4.7.2 Alcohol .....   | 92         |
| 4.7.3 Substance misuse.....   | 94         |
| 4.7.4 Excess weight .....   | 95         |
| 4.7.5 Diet.....   | 97         |
| 4.7.6 Physical activity.....  | 98         |
| 4.7.7 Under 18 conceptions.....   | 100        |
| <b>5. Key challenges and messages .....</b>                                       | <b>102</b> |
| 5.1 Behavioural and cardiovascular risk factors .....                             | 102        |
| 5.2 Variation in health outcomes and socially-determined health inequalities..... | 103        |
| 5.3 Wider determinants of health .....  | 103        |
| 5.4 Recommendations .....   | 104        |



## 1. Summary

Health and social care organisations across Bristol, North Somerset and South Gloucestershire (BNSSG) have come together to improve services and ensure the best possible health and social care outcomes for local people. By understanding the current picture of the needs of the local population, there can be a better understanding of how provision should be designed and commissioned. At a time of increasing demands and constrained resources, and with an ageing and growing population, the health and social care system needs to think differently about the way in which services are designed, commissioned, and delivered.

There are nearly one million residents in BNSSG, and nearly half of the population live in Bristol. There are three acute hospital trusts, an ambulance trust, four providers of community services and a mental health trust, as well as 104 GP practices and supporting organisations including those from the voluntary and community sector.

This Case for Change describes the local context, the changing health and care needs, and the key health and wellbeing challenges facing the BNSSG health and social care system. This document can be used to shape service provision and development of local services to meet the needs of the population.

The population of BNSSG is growing and the health needs are changing:

- The population is due to grow significantly in the next few years, with a large increase in people aged over 75. Indeed the BNSSG population growth is likely to grow at a greater rate than national projections as the latter does not take into account dwelling-led population growth. Local people are living longer and older people tend to have additional health needs related to complex multiple conditions.
- The health of the people in BNSSG overall is generally good; however there is great variation across the population.
- Life expectancy is the average number of years a newborn might be expected to live if born today. In BNSSG as a whole, life expectancy is good at 80 years for men and 84 years for women. However there are widespread inequalities across BNSSG, with stark health inequalities. The difference in life expectancy between those people living in the most and least deprived areas of BNSSG is 9 years for men and 6 years for women. Healthy life expectancy in BNSSG, that is the average number of years an individual is expected to spend in good or very good health, is considerably lower still: 63 years for men and 65 years for women, which suggests that people are likely, on average, to spend much of the last two decades of life in poorer health.
- The most common causes of premature death in BNSSG are due to cancer, heart disease and stroke, liver disease and injury. These main causes of early death are often preventable and amenable to public health interventions. Behavioural and lifestyle factors including smoking, excessive alcohol consumption and poor diets are linked to an increasing number of diseases and conditions.

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- The prevalence of mental health problems disproportionality affect people living in the most deprived areas, with rates of self-harm proving to be a significant local issue.



## 2. The local population

### 2.1 Population overview

The population profile of Bristol, North Somerset and South Gloucestershire is changing dramatically with a rapidly ageing population, and an even faster growing younger population.

Almost one million people (943,517 people) currently live in Bristol, North Somerset and South Gloucestershire. BNSSG has the major city of Bristol at its centre, with the towns, villages and rural areas of North Somerset and South Gloucestershire to the south and north respectively.

The age profile for BNSSG is very similar to England as a whole with 18% of the population aged 0 to 14 years and 8% aged over 75 years.

A 35,683 increase in the BNSSG population is expected by 2020. This represents a 4% increase in just four years. An increase of 9,366 is expected in the over 75 year olds in the BNSSG population by 2020. This represents a 12.6% increase. Over the same time period, there will be an 11,000 increase in the 0 to 14 year old age group in the BNSSG population, representing a 7% increase.

BNSSG is a relatively affluent area, but there is local variation, with significant areas of deprivation. Nearly one in ten of the population (9.3%) are living in some of the most deprived areas whilst one in twenty 5% are living in some of the most affluent areas.

BNSSG is also an area of cultural diversity, with 87,325 (9.8%) of the population having black and Asian ethnicity.

### 2.2 Population density

Almost one million people (943,517 people) live in BNSSG. In total, 90% of this population live in urban locations. Seventeen percent of people in North Somerset and 13% of people in South Gloucestershire live in rural locations.

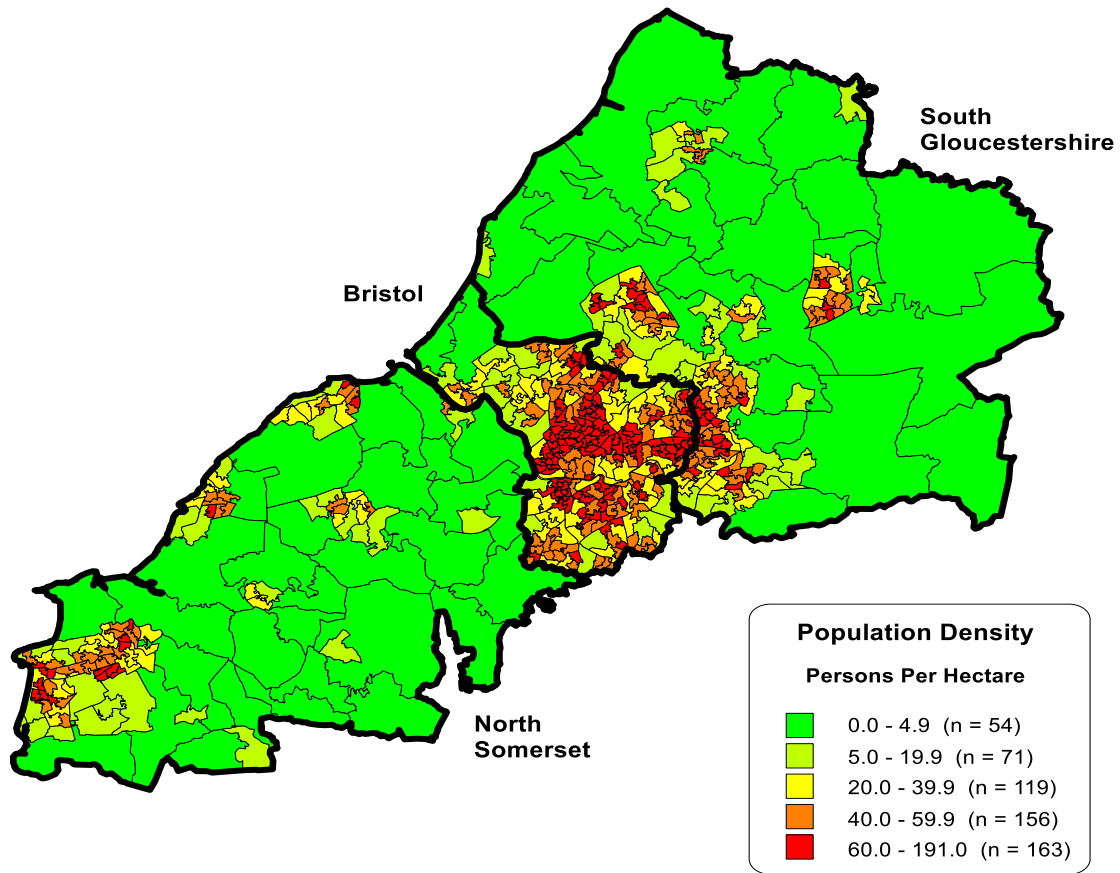
The population of Bristol is estimated to be 454,213 people (Office of National Statistics [ONS] 2016 mid-year population), which makes it the 8th largest city in England. Population size across the city varies by ward, ranging from approximately 5,200 (1%) people living in Hotwells and Harbourside to 21,100 (5%) in Avonmouth and Lawrence Weston.

The estimated North Somerset current population is 211,681 (ONS 2016 mid-year population). The population is most concentrated in Weston-super-Mare (77,026 people) and the three smaller towns of Clevedon (21,275 people), Nailsea (15,498 people) and Portishead (22,405 people). Over two thirds (67%) of people in North Somerset live within these four towns, with the remainder living in the villages and countryside.



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South Gloucestershire currently has an estimated total resident population of 277,623 (ONS 2016 mid-year population). Almost two thirds (63%) of South Gloucestershire's population live on the Bristol fringe area, with 17% living around Yate, Chipping Sodbury and Thornbury and the remaining 20% living in more rural areas. Figure 1 Map of population density across BNSSG for mid-2015



Source: ONS mid-2015, OS data © Crown copyright



## 2.3 Age distribution

The age profile for BNSSG is very similar to England as a whole with 18% aged 0 to 14 years and 8% aged over 75 years. However, the proportion of older people is lower than the average for the South West, where 10% are aged over 75 years.

Figure 2 Chart of BNSSG population by age group

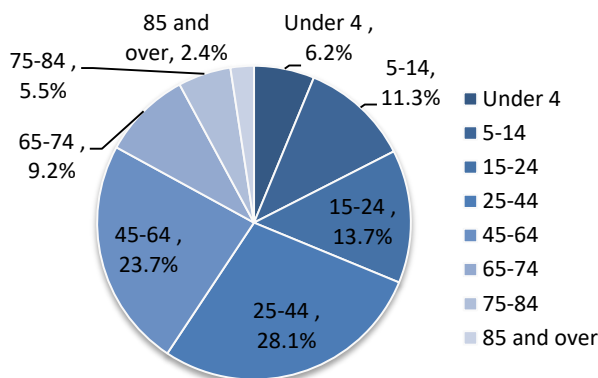
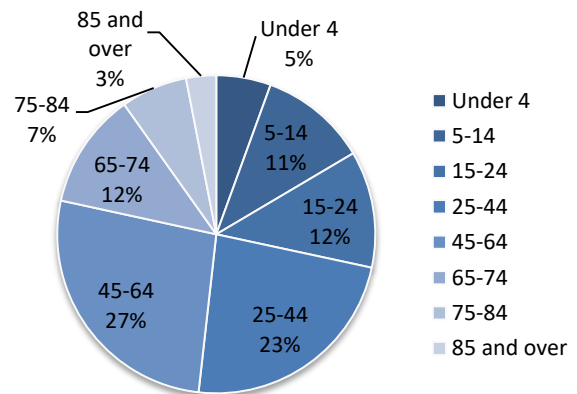


Figure 3 Chart of South West population by age group



Source: ONS, mid-2016

Table 1 Population totals by age group, mid-2016

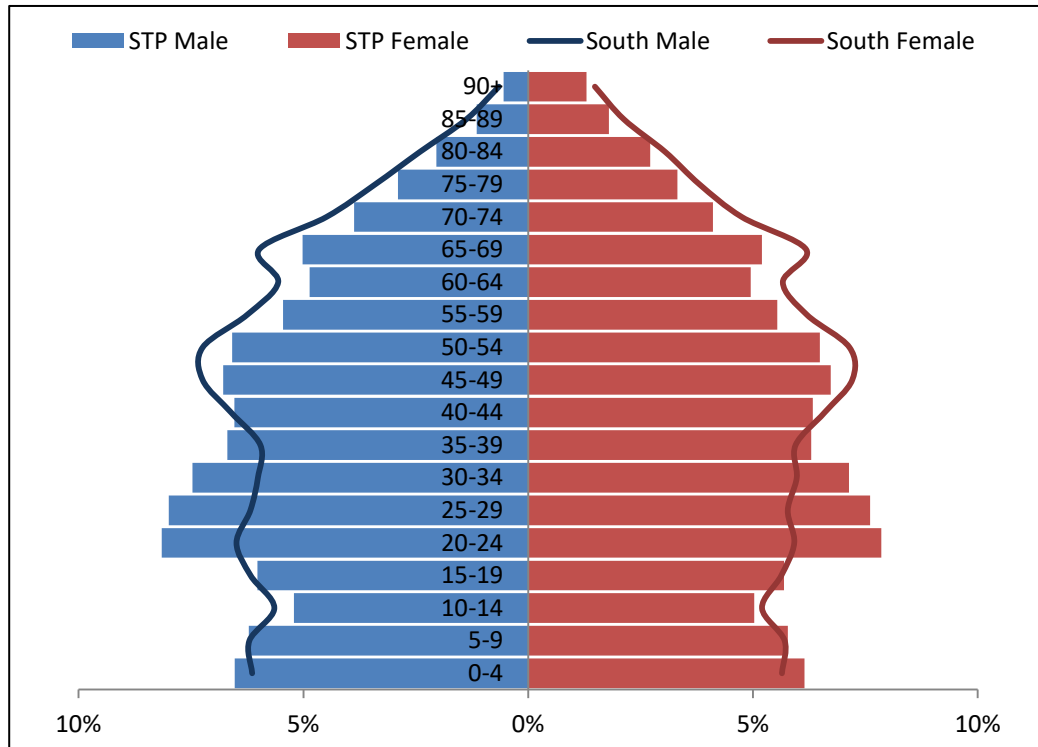
| Age          | Bristol        | North Somerset | South Gloucestershire | BNSSG          | South West       | England           |
|--------------|----------------|----------------|-----------------------|----------------|------------------|-------------------|
| Under 4      | 30,648         | 11,917         | 16,232                | 58,797         | 306,112          | 3,429,046         |
| 5-14         | 49,927         | 24,101         | 32,249                | 106,277        | 603,937          | 6,498,520         |
| 15-24        | 74,844         | 20,847         | 33,811                | 129,502        | 654,769          | 6,739,366         |
| 25-44        | 147,030        | 47,364         | 70,718                | 265,112        | 1,291,537        | 14,653,487        |
| 45-64        | 92,193         | 57,726         | 73,224                | 223,143        | 1,468,663        | 14,064,807        |
| 65-74        | 31,567         | 27,047         | 27,838                | 86,452         | 649,467          | 5,413,344         |
| 75-84        | 18,961         | 15,676         | 16,826                | 51,463         | 372,913          | 3,141,405         |
| 85 and over  | 9,043          | 7,003          | 6,725                 | 22,771         | 168,555          | 1,328,092         |
| <b>Total</b> | <b>454,213</b> | <b>211,681</b> | <b>277,623</b>        | <b>943,517</b> | <b>5,515,953</b> | <b>55,268,067</b> |

Source: ONS

The population of BNSSG has a large proportion of young people (aged 15 to 44 years) when compared to the average for the STPs in the south of England. In BNSSG 41.8% of the population are

in this age group, a total of 394,614 split across males and females. The contrast to other areas is shown in the population pyramid in **Error! Reference source not found.**

Figure 4 Population age pyramid for BNSSG split by gender and compared to the average for STPs in the South



Source: (NHS E STP Dashboard, 2017)

## 2.4 Population growth and projections

Just under half of the population of BNSSG (454,213 people) live in Bristol, with 277,623 in South Gloucestershire and 211,681 in North Somerset. However, the population is not static and is expected to grow over the next five years and onwards.

The official population projections produced by the ONS are based on past trends in births, deaths and migration, and assume that these trends will continue into the future. However, it should be noted that the ONS data does not take into account the number of new homes forecast to be built locally. Population forecasts that incorporate assumptions for future housing growth suggest that the total BNSSG population will increase at a faster rate and that increases in the child and working-age population, in particular, may be larger than those projected by the official ONS data. Exact modelled dwelling-led data with more accurate population projections will be available by the end of 2017.



A 35,683 increase in the BNSSG population is expected by 2020. This represents a 4% increase in 4 years. An increase of 9,366 is expected in the over 75 year olds in the BNSSG population by 2020. This represents a 13% increase. Over the same time period, there will be an 11,000 increase in the 0 to 14 year old age group in the BNSSG population. This represents a 7% increase.

Table 2 BNSSG population projections by age group

| Age Group    | 2016*              | 2020           | 2025             | 2030             | 2039               |
|--------------|--------------------|----------------|------------------|------------------|--------------------|
| 0 to 4       | 58,797<br>(6.2%)   | 61,800         | 64,900           | 65,400           | 66,900<br>(5.9%)   |
| 5 to 14      | 106,277<br>(11.3%) | 114,500        | 119,200          | 123,900          | 127,500<br>(11.3%) |
| 15 to 24     | 129,502<br>(13.7%) | 125,900        | 130,500          | 143,000          | 150,500<br>(13.3%) |
| 25 to 44     | 265,112<br>(28.1%) | 275,400        | 287,200          | 288,800          | 300,000<br>(26.6%) |
| 45 to 64     | 223,143<br>(23.7%) | 229,100        | 232,100          | 232,600          | 244,100<br>(21.6%) |
| 65 to 74     | 86,452<br>(9.2%)   | 88,500         | 88,600           | 99,600           | 106,500<br>(9.4%)  |
| 75 to 84     | 51,463<br>(5.5%)   | 58,100         | 69,700           | 73,500           | 82,900<br>(7.3%)   |
| 85 and over  | 22,771<br>(2.4%)   | 25,500         | 30,000           | 37,200           | 51,300<br>(4.5%)   |
| <b>Total</b> | <b>943,517</b>     | <b>979,200</b> | <b>1,022,300</b> | <b>1,064,000</b> | <b>1,129,500</b>   |

Source: ONS

\* 2016 figures based on mid-2016 population estimates. All other figures based on 2014 population projections



Table 3 BNSSG population percentage changes from 2016

| Age group    | Males          |                |             | Females        |                |             | All persons    |                  |             |
|--------------|----------------|----------------|-------------|----------------|----------------|-------------|----------------|------------------|-------------|
|              | 2016           | 2039           | %           | 2016           | 2039           | %           | 2016           | 2039             | %           |
| 0-4          | 30,056         | 34,300         | 14.1        | 28,741         | 32,600         | 13.4        | 58,797         | 66,900           | 13.8        |
| 5-14         | 54,273         | 65,400         | 20.5        | 52,004         | 62,000         | 19.2        | 106,277        | 127,500          | 20.0        |
| 15-24        | 65,656         | 77,500         | 18.0        | 63,846         | 73,000         | 14.3        | 129,502        | 150,500          | 16.2        |
| 25-44        | 134,724        | 158,100        | 17.4        | 130,388        | 141,600        | 8.6         | 265,112        | 300,000          | 13.2        |
| 45-64        | 110,635        | 121,600        | 9.9         | 112,508        | 122,100        | 8.5         | 223,143        | 244,100          | 9.4         |
| 65-74        | 41,917         | 51,100         | 21.9        | 44,535         | 55,600         | 24.8        | 86,452         | 106,500          | 23.2        |
| 75-84        | 23,036         | 38,400         | 66.7        | 28,427         | 44,700         | 57.2        | 51,463         | 82,900           | 61.1        |
| 85 & over    | 8,071          | 21,700         | 168.9       | 14,700         | 29,600         | 101.4       | 22,771         | 51,300           | 125.3       |
| <b>Total</b> | <b>468,368</b> | <b>568,100</b> | <b>21.3</b> | <b>475,149</b> | <b>561,400</b> | <b>18.2</b> | <b>943,517</b> | <b>1,129,500</b> | <b>19.7</b> |

Source: ONS

Looking ahead to 2039, the BNSSG population is predicted to rise from 943,517 to over 1.1 million (1,129,500). This represents an increase of nearly 20% in 23 years. The increase is expected to be greater for males than females, with an increase of 21% compared to 18%.

## 2.5 Population diversity

### 2.5.1 Ethnicity

The populations of both North Somerset and South Gloucestershire are less ethnically diverse than England and Bristol. The black and minority ethnic (BME) population is 5% in South Gloucestershire and 3% in North Somerset – substantially lower than the national average of 15%. Bristol city is increasingly diverse with around 16% of the population from BME backgrounds, rising to 28% amongst children in Bristol. Across BNSSG, 10% of the population are from BME backgrounds.

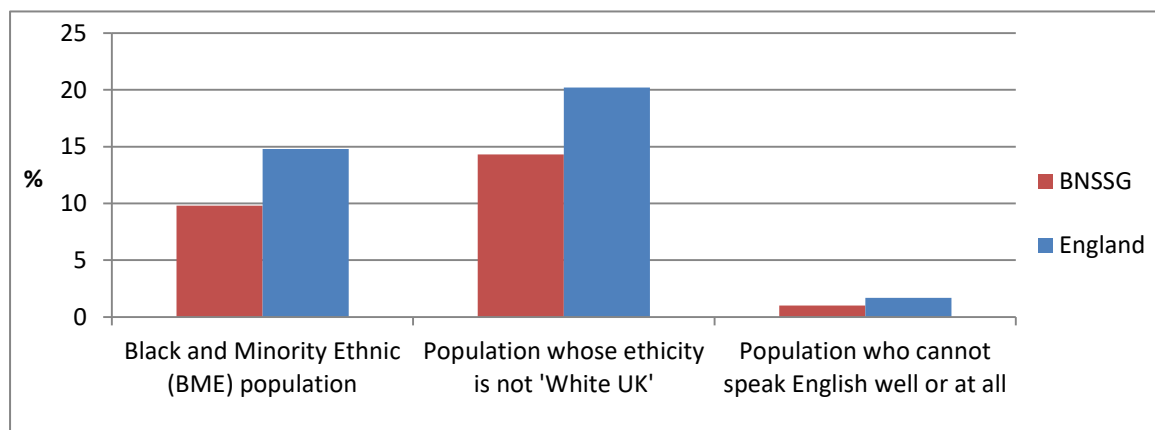


Table 4 The population of BNSSG by ethnicity and language compared to the national population

|                                     | BNSSG   |       | England    |       |
|-------------------------------------|---------|-------|------------|-------|
| BME                                 | 87,325  | 9.8%  | 7,731,314  | 14.8% |
| Not white                           | 127,971 | 14.3% | 10,733,220 | 20.2% |
| Cannot speak English well or at all | 8,187   | 1%    | 843,845    | 1.7%  |

Source: Local Health / ONS, 2011

Figure 5 Chart of the BNSSG population by ethnicity and language compared to the national population



Source: Local Health / ONS, 2011

## 2.5.2 Sexuality and gender dysphoria

There are no reliable local sources of data on the lesbian, gay and bisexual population and current estimates of the LGBT population vary.

Based on national data, 5 to 7% of the population are lesbian, gay or bisexual, equating to approximately 16,300 people in South Gloucestershire, 12,700 in North Somerset and up to 31,500 LGB people in Bristol.

It's not known exactly how many people experience gender dysphoria/transgenderism, because many people with the condition never seek help. The Gender Identity Research and Education Society (GIRES) now estimate the number of people in the UK defined as being on a 'gender variant' to some extent at 1% of the population. This would give a population of over 4,500 people in Bristol and approximately 2,000 in South Gloucestershire and North Somerset on the "gender dysphoria" spectrum.



## 2.5.3 Population groups

### *Student population*

There are two universities in BNSSG - the University of Bristol and the University of the West of England (UWE). The student population in the University of Bristol totals 22,278 comprising of 17,117 undergraduate and 5,161 postgraduate students (2015-16). There are 28,697 students enrolled at UWE - 21,941 undergraduate and 6,738 postgraduate students (2015-16).

The total of 50,957 students represents approximately 5.4% of the BNSSG population (11.2% of the Bristol population).

### *Prison population*

There are four prisons in BNSSG with a current total population of 1,393 (0.15% of the BNSSG population).

- HMP Bristol is a Category B Remand Prison accommodating adult male prisoners and a limited number of young offenders. These are both convicted and remand, with most serving a sentence of under 12 months. The current occupancy is 543.
- HMP Leyhill in South Gloucestershire is a Category D Open Prison accommodating adult male prisoners including those with an indeterminate sentence. The current occupancy is 506.
- HMP Ashfield in South Gloucestershire is a Serco managed Category C prison accommodating adult male prisoners serving sentences for sexual offences. It has current occupancy of 397.
- HMP Eastwood Park in South Gloucestershire is a local remand prison accommodating adult female prisoners as well as a small number of young offenders. Current occupancy is 397.

### *Disability or long-term illness*

In 2011, the number of people living in BNSSG with a disability or limiting long-term illness was 151,378 (16.9% of the population). This compares to a total of over 9 million (9,352,588) of the national population and is significantly lower by percentage (17.6% in England) (ONS Census, 2011).

### *Learning disabilities*

The prevalence of learning difficulties in BNSSG is approximately 0.4%, which is similar to the average for England.



Table 5 BNSSG population with learning disabilities

|                       | Number of people with learning disabilities | % of the population |
|-----------------------|---|---------------------|
| Bristol               | 2,368                                       | 0.5                 |
| North Somerset        | 960   | 0.4                 |
| South Gloucestershire | 957   | 0.4                 |
| <b>BNSSG</b>          | <b>4,285</b>                                | <b>0.4</b>          |
| England               | 263,588                                     | 0.5                 |

Source: QOF, 2015-16

## Carers

The number of people providing unpaid care every week in BNSSG is generally less than the proportion of the population offering care across England (10.1% in BNSSG and 10.2% in England).

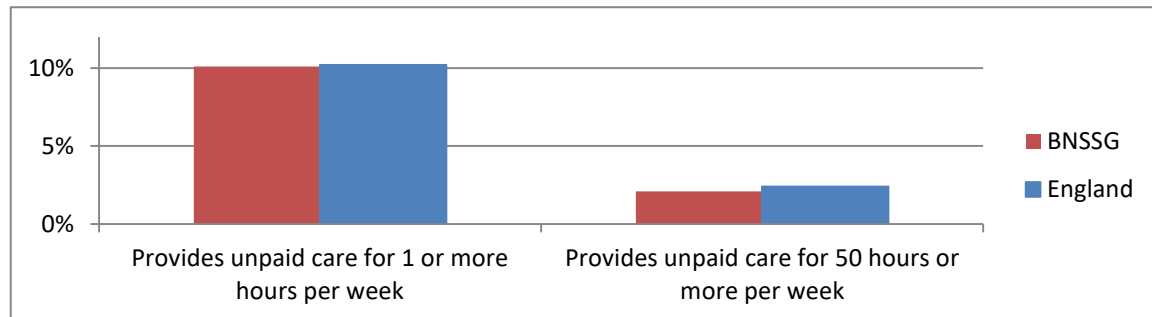
Table 6 Provision of unpaid care in BNSSG population

|  | BNSSG  |       | England   |       |
|--|--------|-------|-----------|-------|
| Provides unpaid care for 1 hour or more per week   | 90,090 | 10.1% | 5,430,016 | 10.2% |
| Provides unpaid care for 50 hours or more per week | 19,124 | 2.1%  | 1,256,237 | 2.4%  |

Source: ONS Census, 2011



Figure 6 Chart of the BNSSG population providing unpaid care



Source: ONS Census, 2011

## Gypsy, Roma and Traveller populations

The 2011 census estimates figures for the White Gypsy or Traveller population, with a total for England recorded as 57,680. However this does not include all Gypsy, Roma, and Traveller (GRT) groups, so specific estimates for the total BNSSG population are difficult to obtain.

Local evidence suggests that there are around 500 GRT families living in Bristol. Census estimates suggest that the White Gypsy or Traveller population is approximately 270 (0.1%) in South Gloucestershire and 176 (0.8%) in North Somerset, representing similar proportions of the population to those seen in England and the South West.

Due to the cultural practices of this ethnic group this figure will be under constant flux, and it is likely that the census figure may represent settled travellers or those on permanent sites and not those actively travelling or on temporary, private or unlicensed sites. It is therefore possible that the census figure is an underestimate of the true GRT population at any one time.

## 2.6 Deprivation

On the whole, BNSSG is a relatively affluent area, but there is considerable local variation, with significant areas of deprivation.

A good measure of this variation is the Index of Multiple Deprivation (IMD) which takes data from the census and other routinely held data sources to provide a score for small areas. The IMD can be broken down into different domains and sub domains or presented as a summary of all domains. The IMD is usually presented in deciles or quintiles – equal tenths or fifths - of the population, ranked and grouped according to their score. Lower scores mean higher deprivation.

Some of the areas with levels of greatest deprivation are found in Bristol, specifically Filwood, Hartcliffe and Withywood and in South Bristol, and Lawrence Hill in the Inner City. There are also pockets of deprivation across the outer part of North Bristol, including Lawrence Weston,

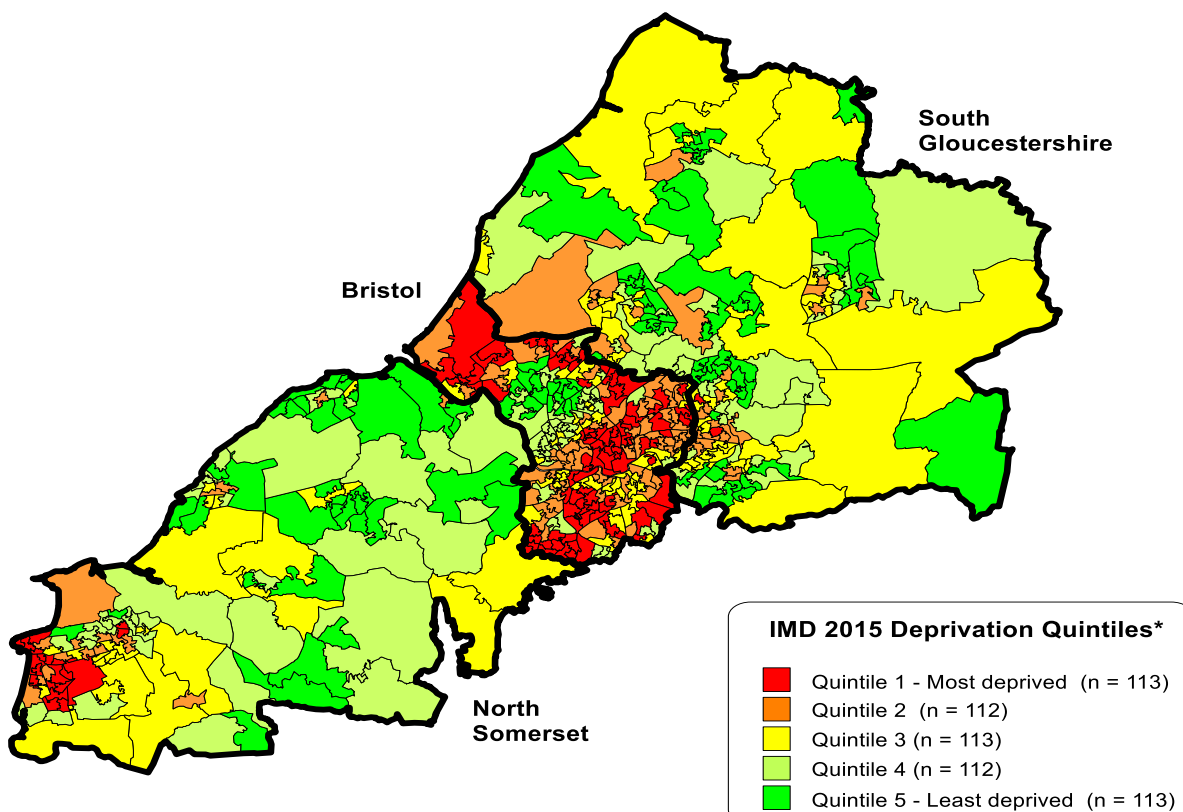


Southmead and Lockleaze. Bristol has 42 of the 10% most deprived areas in England, including 26 in the most deprived 5% and six in the most deprived 1% in England. The overall IMD (2015) score for Bristol was 27.2, which is higher than the average score for England (21.8).

North Somerset has a huge range of inequality, with 21 (15.6%) areas ranking within the 10% least deprived areas in England whilst nine (7%) areas are within the 10% most deprived areas. All of those areas falling in the 10% most deprived are located within Weston-super-Mare. There are two areas in North Somerset within the most deprived 1% nationally and three areas within the least deprived 1%.

South Gloucestershire has an average IMD score (2015) of 11.4, ranked 274<sup>th</sup> deprived out of 326 local authorities. Only 16% of local authority areas in England are estimated to be more affluent than South Gloucestershire.

Figure 7 Map of deprivation across BNSSG (IMD 2015) Deprivation Quintiles based on BNSSG LSOAs

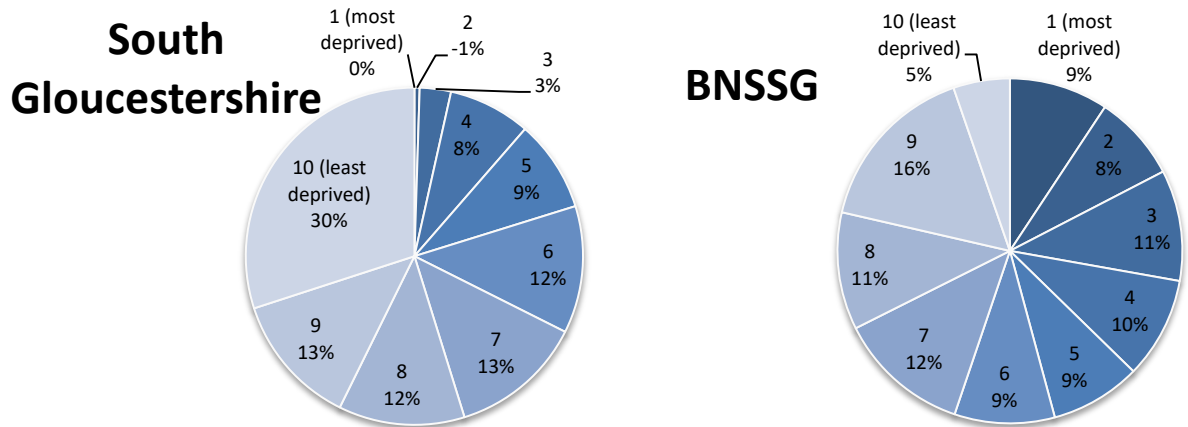
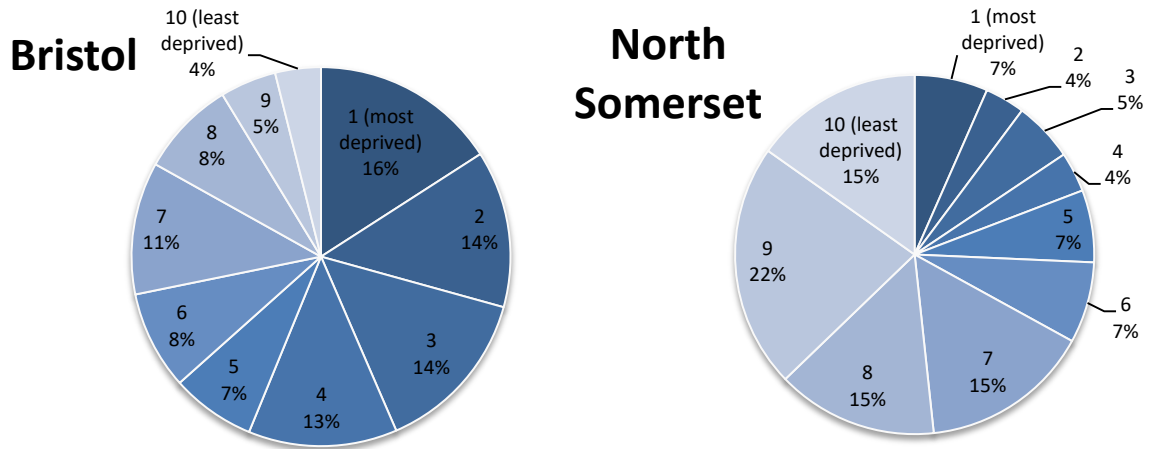


\* Based on BNSSG LSOAs

Source: ONS mid-2015, OS data © Crown copyright



Figure 8 Charts of deprivation deciles in Bristol, North Somerset, South Gloucestershire and BNSSG



Source: ONS, mid-2015



Table 7 Deprivation deciles across BNSSG

| Deprivation Decile           |           |           |           |           |                |           |           |           |           |            |
|------------------------------|-----------|-----------|-----------|-----------|----------------|-----------|-----------|-----------|-----------|------------|
| Most deprived                |           |           |           |           | Least deprived |           |           |           |           |            |
| 1                            | 2         | 3         | 4         | 5         | 6              | 7         | 8         | 9         | 10        | Total      |
| <b>Bristol</b>               |           |           |           |           |                |           |           |           |           |            |
| 68,901                       | 57,939    | 61,514    | 54,906    | 31,058    | 36,412         | 48,826    | 35,418    | 20,549    | 16,711    | 432,234    |
| 15.9%                        | 13.4%     | 14.2%     | 12.7%     | 7.2%      | 8.4%           | 11.3%     | 8.2%      | 4.8%      | 3.9%      | 100%       |
| <b>North Somerset</b>        |           |           |           |           |                |           |           |           |           |            |
| 13,563                       | 7,374     | 11,060    | 7,427     | 13,186    | 14,868         | 31,199    | 29,596    | 44,981    | 31,131    | 204,385    |
| 6.6%                         | 3.6%      | 5.4%      | 3.6%      | 6.5%      | 7.3%           | 15.3%     | 14.5%     | 22.0%     | 15.2%     | 100%       |
| <b>South Gloucestershire</b> |           |           |           |           |                |           |           |           |           |            |
| 0                            | 1,272     | 8,076     | 21,006    | 23,331    | 32,331         | 33,854    | 32,104    | 33,783    | 79,691    | 265,338    |
| 0%                           | 0.5%      | 3.0%      | 7.9%      | 8.8%      | 12.2%          | 12.8%     | 12.1%     | 12.7%     | 30.0%     | 100%       |
| <b>BNSSG</b>                 |           |           |           |           |                |           |           |           |           |            |
| 83,736                       | 73,389    | 93,580    | 85,554    | 76,575    | 85,134         | 112,129   | 98,797    | 145,221   | 47,842    | 901,957    |
| 9.3%                         | 8.1%      | 10.4%     | 9.5%      | 8.5%      | 9.4%           | 12.4%     | 11.0%     | 16.1%     | 5.3%      | 100%       |
| <b>South West</b>            |           |           |           |           |                |           |           |           |           |            |
| 247,146                      | 315,847   | 436,552   | 604,130   | 654,848   | 719,371        | 641,309   | 647,894   | 578,844   | 488,942   | 5,334,883  |
| 4.6%                         | 5.9%      | 8.2%      | 11.3%     | 12.3%     | 13.5%          | 12.0%     | 12.1%     | 10.9%     | 9.2%      | 100%       |
| <b>England</b>               |           |           |           |           |                |           |           |           |           |            |
| 5,319,582                    | 5,421,534 | 5,461,580 | 5,435,299 | 5,357,366 | 5,367,613      | 5,306,344 | 5,294,880 | 5,284,782 | 5,185,150 | 53,434,130 |
| 10.0%                        | 10.1%     | 10.2%     | 10.2%     | 10.0%     | 10.0%          | 9.9%      | 9.9%      | 9.9%      | 9.7%      | 100%       |

Source: ONS mid-2015

## 2.7 Education

There is a consistent association between education and health. People with higher levels of education experience better health and lower levels of morbidity, mortality, and disability.



## 2.7.1 GCSEs achieved

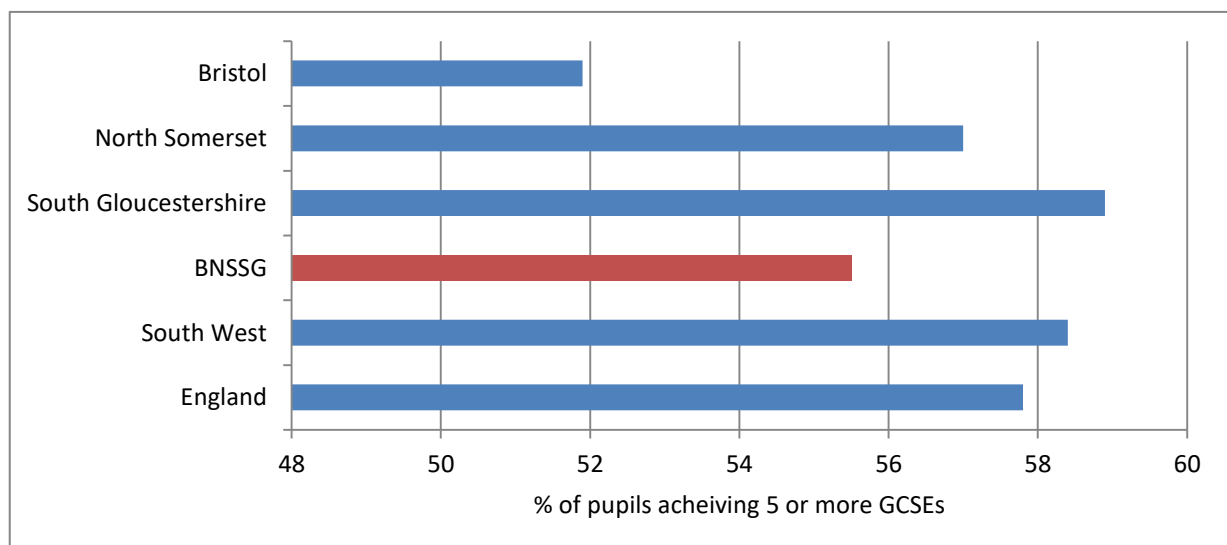
GCSE examination achievement in BNSSG is lower than both the regional and national average, with just over half (56%) of local young people achieving five or more GCSEs at grade A\*-C. However, looking at individual areas, South Gloucestershire has a higher than average level of results (59%) and North Somerset pupils have only a slightly lower level of achievement (57%) than the national average of 58%.

Table 8 GCSE achievement of grades A\*-C by pupils at the end of Key Stage 4 in BNSSG

| Area                  | Number of pupils achieving 5 or more GCSEs | Number of pupils | % of pupils achieving 5 or more GCSEs |
|-----------------------|--|------------------|---------------------------------------|
| Bristol               | 1,831                                      | 3,530            | 51.9                                  |
| North Somerset        | 1,226                                      | 2,152            | 57.0                                  |
| South Gloucestershire | 1,650                                      | 2,803            | 58.9                                  |
| <b>BNSSG</b>          | <b>4,707</b>                               | <b>8,485</b>     | <b>55.5</b>                           |
| South West            | 30,425                                     | 52,089           | 58.4                                  |
| England               | 309,517                                    | 535,737          | 57.8                                  |

Source: Health Profiles / Department For Education 2015-16

Figure 9 Chart of GCSE achievement of grades A\*-C by pupils at the end of Key Stage 4 in BNSSG



Source: Health Profiles / Department For Education 2015-16



## 2.7.2 Readiness for school

Readiness for school requires more than a child simply reaching the chronological age required for school entry. Growth and physical development are vitally important. An assessment by teachers at the end of the Early Years Foundation Stage (EYFS) is seen as a measure of ‘school readiness’. Children are defined as having reached a good level of development if they achieve at least the expected level in prime areas of learning including personal, social and emotional development, physical development, communication and language plus specific areas of mathematics and literacy.

Seventy-one percent of children in BNSSG reach a good level of development at the end of the EYFS, higher than the average across the South West and England. The proportion of children achieving this level in both North Somerset and South Gloucestershire is particularly high compared to Bristol, where the level of achievement is below the national average – 66% in Bristol compared to the national average of 69%. For children receiving free school meals, the differentiation between the BNSSG and the national average is less defined – 53% reaching a good level of development in BNSSG compared to 54% in England.

Table 9 Developmental readiness for school aged 5 years

| Area                  | Number reaching good level of development | Number of eligible children | % reaching good level of development |
|-----------------------|---|-----------------------------|--------------------------------------|
| Bristol               | 3,659                                     | 5,516                       | 66.3                                 |
| North Somerset        | 1,878                                     | 2,532                       | 74.2                                 |
| South Gloucestershire | 2,620                                     | 3,436                       | 76.3                                 |
| BNSSG                 | 8,157                                     | 11,484                      | 71.0                                 |
| South West            | 42,970                                    | 61,800                      | 69.5                                 |
| England               | 463,601                                   | 669,052                     | 69.3                                 |

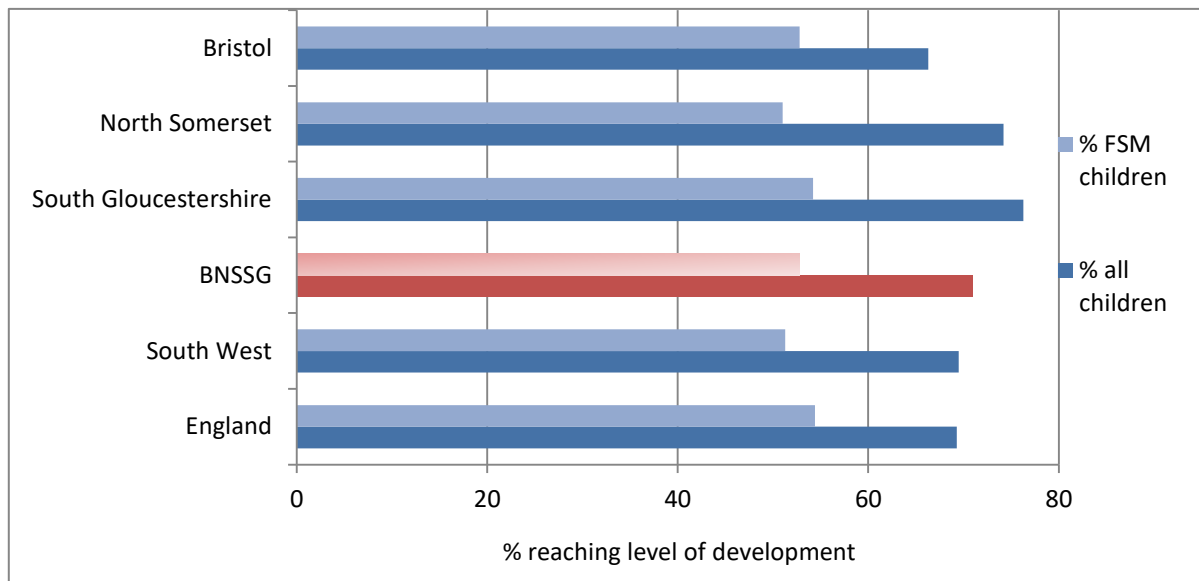
Table 10 Developmental readiness for school aged 5 years for children with free school meal status

| Area                  | Number reaching good level of development | Number of eligible children | % reaching good level of development |
|-----------------------|---|-----------------------------|--------------------------------------|
| Bristol               | 521                                       | 987                         | 52.8                                 |
| North Somerset        | 105                                       | 206                         | 51.0                                 |
| South Gloucestershire | 148                                       | 273                         | 54.2                                 |
| BNSSG                 | 774                                       | 1,466                       | 52.8                                 |
| South West            | 3,830                                     | 7,470                       | 51.3                                 |
| England               | 50,890                                    | 93,538                      | 54.4                                 |

Source: PH Outcomes Framework / Department for Education, Early Years Foundation Stage Profile, 2015-16



Figure 10 Chart of developmental readiness for school aged 5 years



Source: PHOF / DfE, EYFS Profile, 2015-16

## 2.8 Employment

Work and employment is good for health and there are significant harmful effects of long-term unemployment or worklessness. In BNSSG the rate of unemployment in the working age population (aged 16-64 years) is 2.4 per 1,000, which is lower than the national average of 3.7 per 1,000. The rate in North Somerset is particularly low at 1.1 per 1,000 of the working age population.

### 2.8.1 Unemployed population

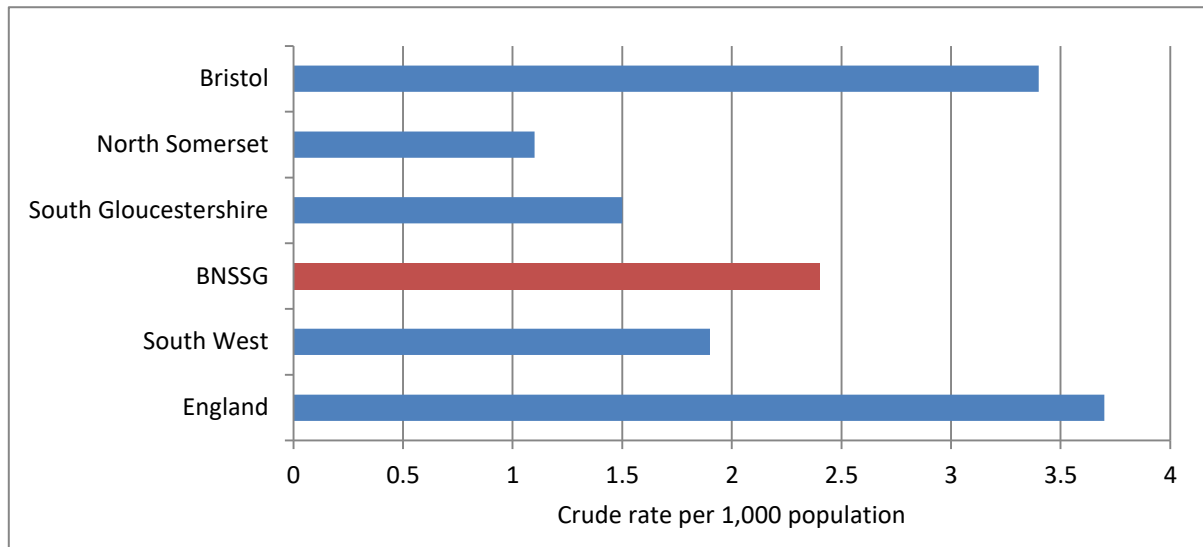
Table 11 The rate of unemployment amongst 16-64 year olds per 1,000 resident population

| Area                  | Number unemployed for more than 12 months | Resident population | Crude rate per 1,000 population |
|-----------------------|---|---------------------|---------------------------------|
| Bristol               | 1,044                                     | 306,300             | 3.4                             |
| North Somerset        | 131                                       | 123,200             | 1.1                             |
| South Gloucestershire | 252                                       | 173,200             | 1.5                             |
| BNSSG                 | 1,427                                     | 602,700             | 2.4                             |
| South West            | 6,258                                     | 3,344,700           | 1.9                             |
| England               | 129,466                                   | 34,669,600          | 3.7                             |

Source: Health Profiles / Job Centre Plus administration systems, 2016



Figure 11 Chart of the rate of unemployment amongst 16-64 year olds per 1,000 resident population



Source: Health Profiles / Job Centre Plus administration systems, 2016

## 2.8.2 Income

Nationally, over 1 in 5 (20%) children aged under 16 years are living in low income households, where their families are in receipt of out of work benefits or tax credits and their reported income is less than 60% of the median income. This figure is lower in BNSSG (18%), but higher in Bristol, where nearly 1 in 4 (23%) children are living in low income families. Locally, work is being undertaken to begin to address this, for example in South Gloucestershire where child poverty is a local priority.

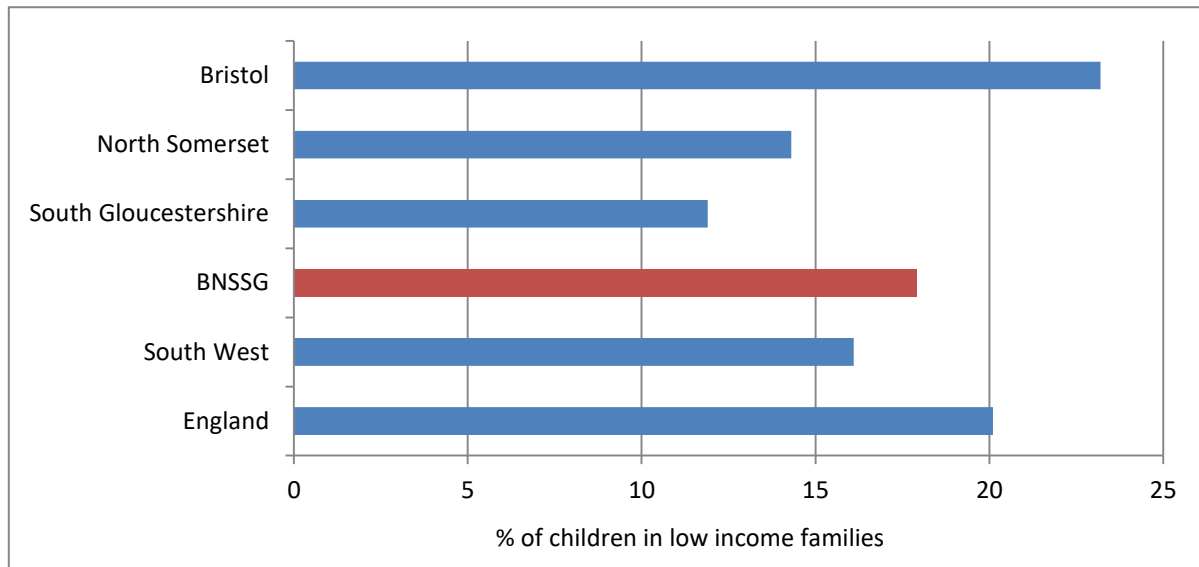
Table 12 The number and percentage of children living in low income families

| Area                  | Number of children in low income families | Total number of children | % of children in low income families |
|-----------------------|---|--------------------------|--------------------------------------|
| Bristol               | 18,885                                    | 81,430                   | 23.2                                 |
| North Somerset        | 5,265                                     | 36,930                   | 14.3                                 |
| South Gloucestershire | 5,790                                     | 48,815                   | 11.9                                 |
| BNSSG                 | 29,940                                    | 167,175                  | 17.9                                 |
| South West            | 148,190                                   | 922,020                  | 16.1                                 |
| England               | 2,003,060                                 | 9,956,030                | 20.1                                 |

Source: Health Profiles / HM Revenue and Customs - Child Poverty Statistics, 2014



Figure 12 Chart of the number and percentage of children living in low income families



Source: Health Profiles / HM Revenue and Customs - Child Poverty Statistics, 2014

## 2.9 Housing

Having a home or somewhere to live is a fundamental part of everyone's life. Housing location, type and condition significantly impact on people's health and wellbeing.

### 2.9.1 Homeless population

The homeless rate for BNSSG in 2015-16 was 0.58 per 1,000 households, lower than the England average. The three main causes of homelessness are recognised as loss of private sector accommodation, parents unable to continue to provide a home, and relationship breakdown involving violence.



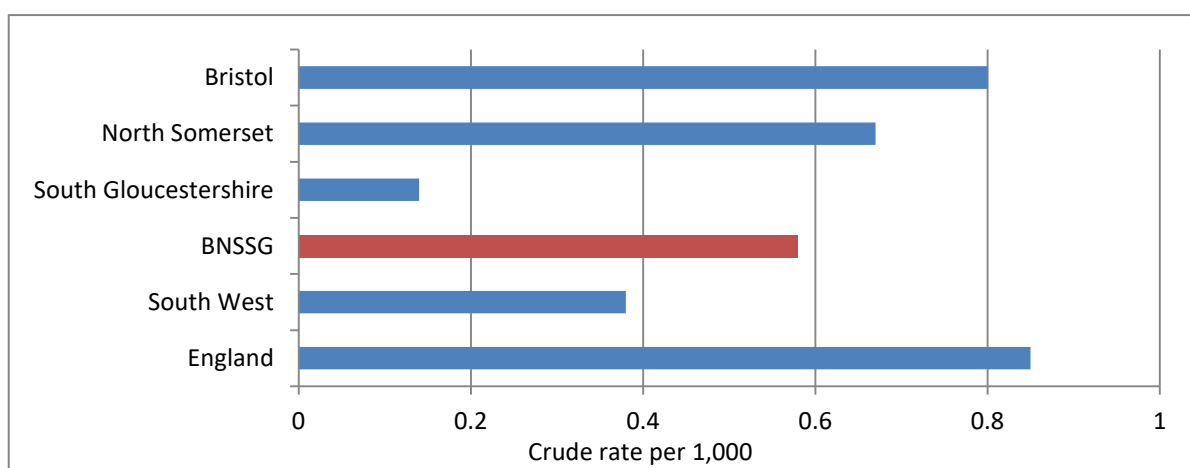


Table 13 The number and proportion of homeless households

| Area                  | Number of homeless households | Number of households | Crude rate per 1,000 households |
|-----------------------|-------------------------------|----------------------|---------------------------------|
| Bristol               | 152                           | 189,853              | 0.80                            |
| North Somerset        | 62                            | 92,466               | 0.67                            |
| South Gloucestershire | 16                            | 112,511              | 0.14                            |
| <b>BNSSG</b>          | <b>230</b>                    | <b>394,830</b>       | <b>0.58</b>                     |
| South West            | 890                           | 2,350,876            | 0.38                            |
| England               | 19,570                        | 22,940,025           | 0.85                            |

Source: Health Profiles / Department for Communities and Local Government, 2015-16

Figure 13 Chart of the number and proportion of homeless households



Source: Health Profiles / Department for Communities and Local Government, 2015-16

## 2.9.2 Living conditions

Poor housing is associated with increased risk of cardiovascular diseases, respiratory diseases, injuries, depression and anxiety. The living conditions experienced by those living across BNSSG are similar to those experienced across the rest of the country.

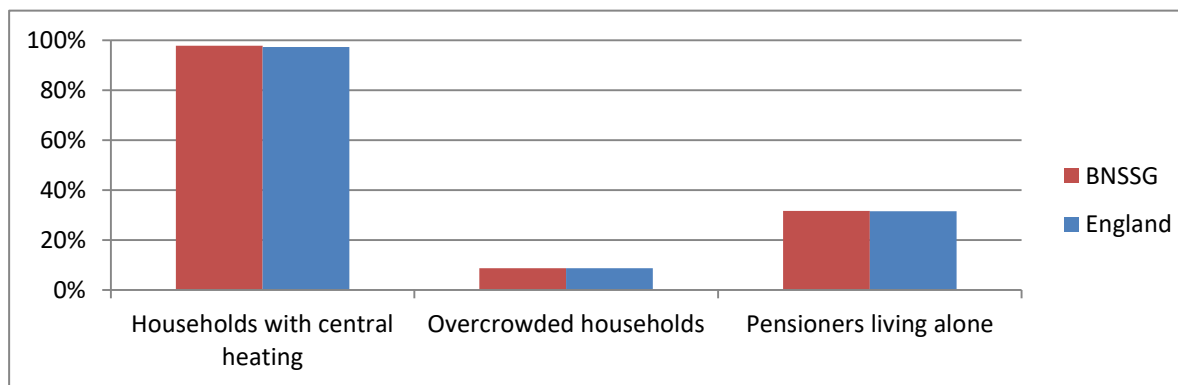


Table 14 Living conditions experienced in households across BNSSG and England

|  | BNSSG   |            | England    |            |
|--|---------|------------|------------|------------|
|  | Count   | Percentage | Count      | Percentage |
| Households with central heating                  | 369,858 | 97.7%      | 21,468,807 | 97.3%      |
| Overcrowded households (at least 1 room too few) | 33,076  | 8.7%       | 1,928,596  | 8.7%       |
| Pensioners living alone                          | 45,096  | 31.6%      | 2,725,596  | 31.5%      |

Source: ONS, 2011

Figure 14 Chart of the living conditions experienced in households across BNSSG and England



Source: ONS, 2011

## 2.10 Crime and anti-social behaviour

Crime, anti-social behaviour and fear of crime can have a significant impact on the health and wellbeing of individuals and the community. Victims of crime often suffer from a wide range of physical and mental health problems including injury, disability and mental illness. Perpetrators of crime are likely to have a wide range of health needs.

### 2.10.1 Violent crime

Violent crime has a major impact on the health and wellbeing of the victim. The crude rate of offences classified as “violence against the person” indicates that there were 20.4 violent offences per 1,000 population in BNSSG in 2015-16, above the national average of 17.2 per 1,000. The rate in Bristol was particularly high at 26.6 per 1,000 population.

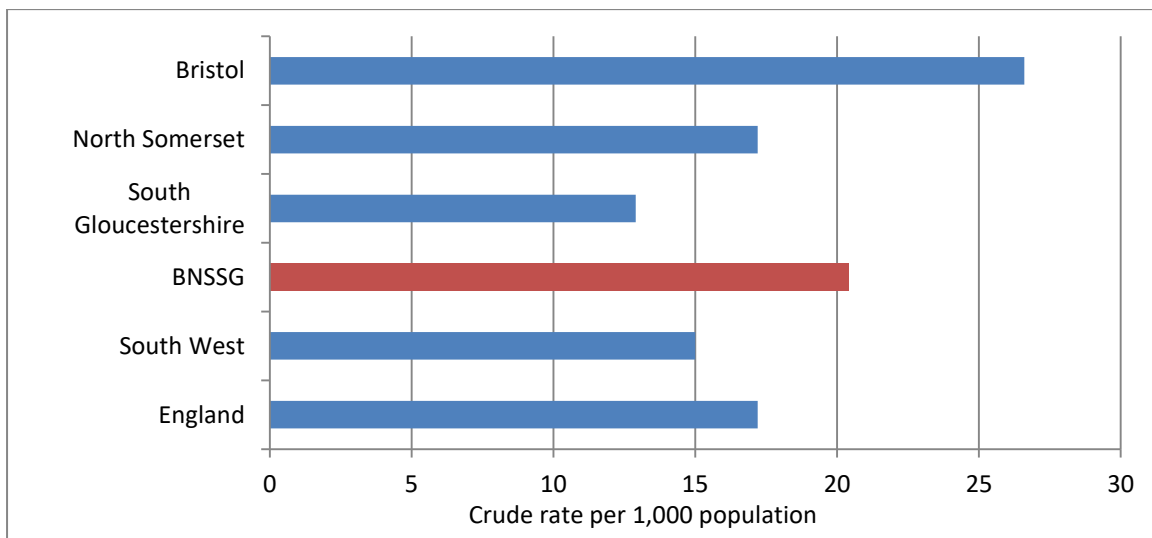


Table 15 Rate of violent offences against other people

| Area                  | Violence offences against other people | Mid-year population | Crude rate per 1,000 population |
|-----------------------|--|---------------------|---------------------------------|
| Bristol               | 11,766                                 | 442,500             | 26.6                            |
| North Somerset        | 3,577                                  | 208,200             | 17.2                            |
| South Gloucestershire | 3,504                                  | 271,600             | 12.9                            |
| <b>BNSSG</b>          | <b>18,847</b>                          | <b>922,300</b>      | <b>20.4</b>                     |
| South West            | 81,400                                 | 5,423,300           | 15.0                            |
| England               | 933,343                                | 54,316,600          | 17.2                            |

Source: Health Profiles / Home Office, 2015-16

Figure 15 Chart of the rate of violent offences against other people



Source: Health Profiles / Home Office, 2015-16

## 2.10.2. Young offenders

There is one secure children's unit in BNSSG - Vinney Green in South Gloucestershire, a 24 bedded mixed gender unit for 10-17 year olds

In addition there are ten approved premises (formerly known as probation or bail hostels) across the South West. These are residential units which house offenders in the community.



## 3. Life expectancy

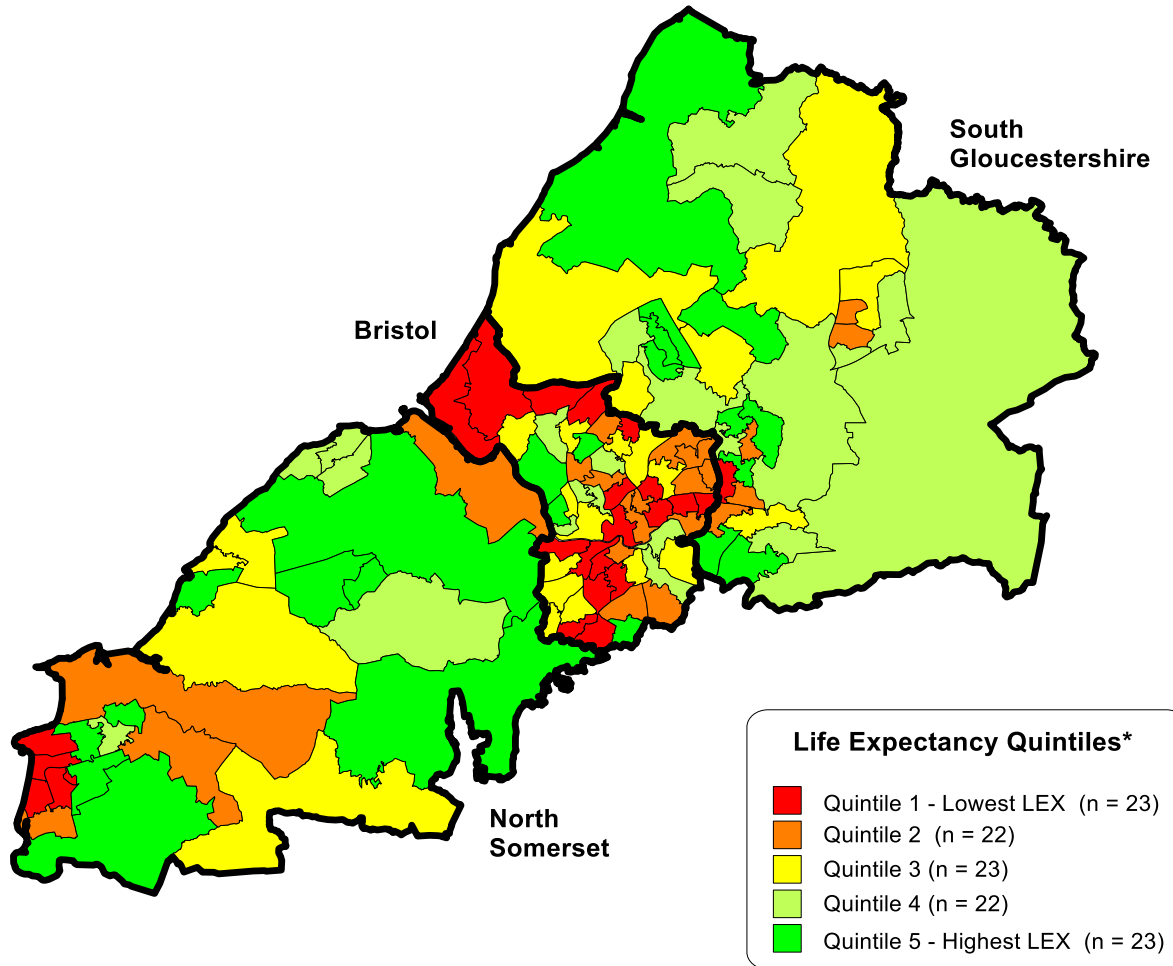
### 3.1 Life expectancy

Life expectancy at birth provides an estimate of the average number of years that a newborn might expect to live, based on current mortality rates. It is a useful indicator for the health of the general population and health inequalities within an area. Females generally have a higher life expectancy than men, although lifestyle risk factors such as smoking, alcohol and poor diet have led to a narrowing of the life expectancy gender gap in recent years.

#### 3.1.1 Life expectancy at birth

Life expectancy has been increasing in BNSSG and is slightly higher than the national average. In 2013-15, life expectancy for men was 79.7 years compared to 79.5 years for England, and for women 83.5 years compared to 83.1 years for England.

Figure 10 Map of life expectancy quintiles for 2009-13 across BNSSG



\* Based on BNSSG MSOAs

Source: ONS mid-2015, OS data © Crown copyright



Table 8 Life expectancy at birth for 2013-15 across BNSSG

| Area                  | Population 2013-15 |                  | Life expectancy at birth |         |
|-----------------------|--------------------|------------------|--------------------------|---------|
|                       | Males              | Females          | Males                    | Females |
| Bristol               | 664,194            | 665,100          |                          |         |
| North Somerset        | 303,649            | 320,584          |                          | 83.5    |
| South Gloucestershire | 404,585            | 410,739          |                          |         |
| <b>BNSSG</b>          | <b>1,372,428</b>   | <b>1,396,423</b> |                          |         |
| South West            | 7,991,999          | 8,280,080        |                          |         |
| England               | 80,336,451         | 82,632,311       | 79.5                     |         |

Source: Health Profiles / ONS death extracts (2013-15)

### 3.1.2 Life expectancy at 65 years

Figures for the average number of years a person might expect to live after the age of 65 are calculated from deaths from all causes and mid-year population estimates. The female population of BNSSG can expect to live for an average of 21.4 years after the age of 65, which is similar to the national average of 21.1 years, and for males this is 18.9 and 18.7 years respectively.

Table 9 Life expectancy at 65 years for 2013-15 across BNSSG

| Area                  | Population 2013-15 |                  | Life expectancy at age 65 |             |
|-----------------------|--------------------|------------------|---------------------------|-------------|
|                       | Males              | Females          | Males                     | Females     |
| Bristol               | 664,194            | 665,100          | 18.1                      | 20.9        |
| North Somerset        | 303,649            | 320,584          | 19.3                      | 21.6        |
| South Gloucestershire | 404,585            | 410,739          | 19.8                      | 22.0        |
| <b>BNSSG</b>          | <b>1,372,428</b>   | <b>1,396,423</b> | <b>18.9</b>               | <b>21.4</b> |
| South West            | 7,991,999          | 8,280,080        | 19.2                      | 21.6        |
| England               | 80,336,451         | 82,632,311       | 18.7                      | 21.1        |

Source: Public Health Outcomes Framework / ONS death extracts, 2013-15

### 3.1.3. Life expectancy gap

There are stark inequalities in life expectancy across BNSSG. People living in the more deprived areas experience comparatively poor health, with a lower life expectancy than those living in the least deprived areas. The slope index of inequality (SII) measures the social gradient in life expectancy. It takes account of health inequalities across the range of deprivation within each local authority,



representing the range in years of life expectancy across the social gradient from most to least deprived.

For men the difference in average life expectancy, or SII, between the most and least deprived areas of BNSSG is 9 years. This gap is greater in Bristol at 10 years, but slightly smaller in South Gloucestershire where the difference is 7 years. For women this gap in average life expectancy between the least and most deprived areas is 6 years in BNSSG with a gap of 7 years in Bristol and 5 in South Gloucestershire.

Table 10 Slope of inequality in life expectancy at birth for 2013-15 across BNSSG

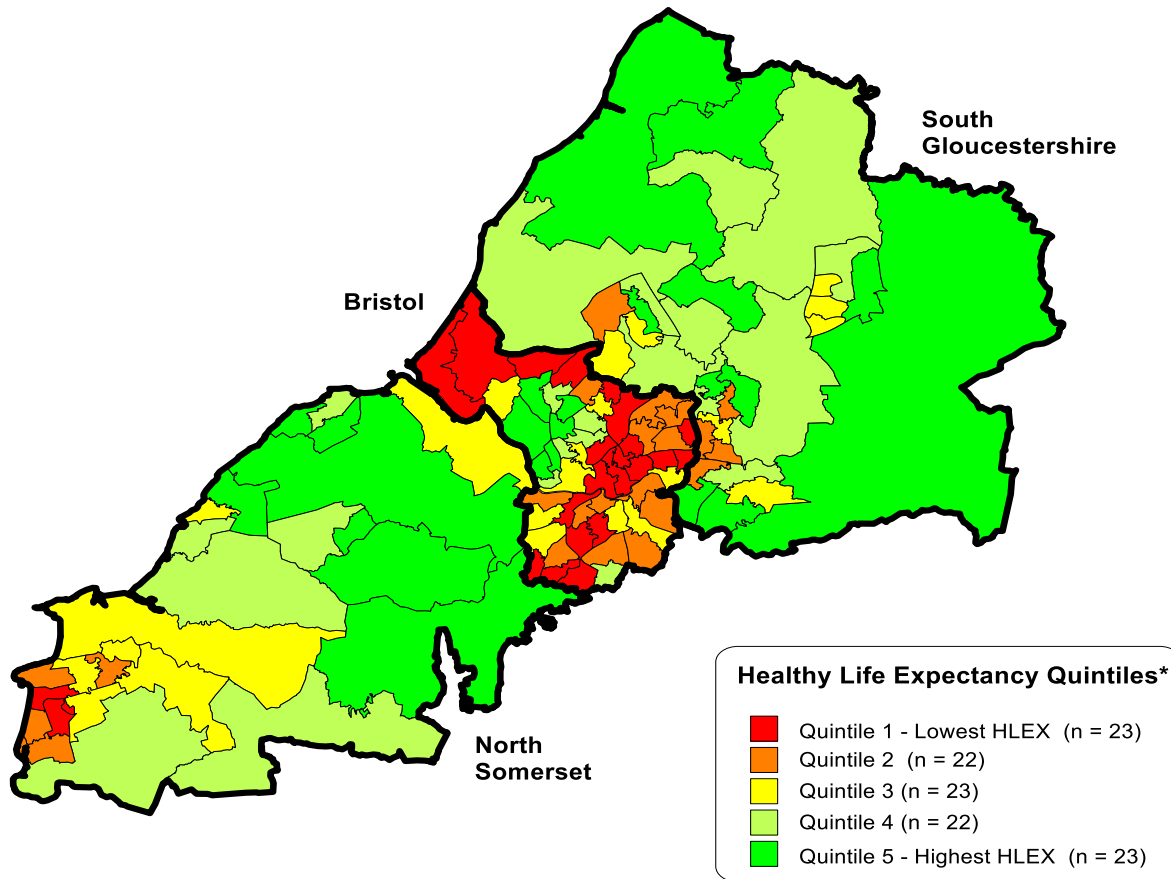
| Area                  | Difference in life expectancy at birth |         |
|-----------------------|--|---------|
|                       | Males                                  | Females |
| Bristol               | 9.6                                    | 7.0     |
| North Somerset        | 9.1                                    | 6.9     |
| South Gloucestershire | 6.5                                    | 4.8     |
| BNSSG                 | 8.6                                    | 6.3     |

Source: Public Health Outcomes Framework / ONS death extracts, IMD 2015 deprivation deciles, 2013-15

### 3.1.4 Healthy life expectancy

In BNSSG, healthy life expectancy (years spent in good health) is 63 for men and 65 for women, similar to the national average. Healthy life expectancy is an important measure as it takes account not only of the number of years lived, but the quality of those years.

Figure 11 Map of healthy life expectancy quintiles for 2009-13 across BNSSG



\* Based on BNSSG MSOAs

Source: ONS mid-2015, OS data © Crown copyright

The number of years lived in good health varies considerably across BNSSG. The areas with the lowest healthy life expectancy are found almost exclusively in Bristol, although Weston-super-Mare in North Somerset is also an area of low healthy life expectancy. In contrast, the majority of South Gloucestershire experiences high levels of healthy life expectancy, with areas recording some of the highest number of years lived in good health. The variation in healthy life expectancy across BNSSG highlights the inequalities experienced across Bristol, North Somerset and South Gloucestershire.





Table 11 Healthy life expectancy at birth for 2013-15 across BNSSG

| Area                  | Healthy life expectancy at birth |             |
|-----------------------|----------------------------------|-------------|
|                       | Males                            | Females     |
| Bristol               | 59.7                             | 64.5        |
| North Somerset        | 66.1                             | 66.3        |
| South Gloucestershire | 66.0                             | 65.5        |
| <b>BNSSG</b>          | <b>63.0</b>                      | <b>65.2</b> |
| South West            | 64.7                             | 65.5        |
| England               | 63.4                             | 64.1        |

Source: Public Health Outcomes Framework / ONS death extracts and Annual Population Survey, 2013-15

## 3.2 Mortality and premature mortality

In BNSSG, mortality rates for most diseases, including cancer and heart disease, are below the national average. The greatest burden of disease in BNSSG and across the UK comes from cancer, heart disease, stroke, respiratory disease and liver disease.

The main factors that increase risk of illness and disease are smoking, high blood pressure, obesity, physical inactivity, alcohol and poor diet. The major causes of disability are mental and behavioural illness, alcohol and drug misuse and musculoskeletal disorders.

### 3.2.1 Leading causes of premature death in BNSSG

Premature mortality is defined as death before age 75. With average life expectancies now over 80, death under 75 is deemed premature and therefore largely avoidable. The age standardised rates of premature death across BNSSG and the rest of England have been ranked by local authority. Although collectively BNSSG has lower than average premature mortality rates, there is variation when looking at the rates of premature death within individual local authorities.

South Gloucestershire and North Somerset consistently report rates of premature mortality that are lower than the national average. Bristol ranks well for breast cancer, but has below average rankings for all other causes of premature death.



Table 12 Leading causes of premature death in BNSSG and England (standardised mortality ratios)

|   | BNSSG           |      | England         |      |
|---|-----------------|------|-----------------|------|
|   | Numbers 2010-14 | SMRs | Numbers 2010-14 | SMRs |
| All causes – aged under 65              | 5,975           | 97   | 391,312         | 100  |
| All causes – aged under 75              | 11,751          | 96.2 | 762,945         | 100  |
| All cancer – aged under 75              | 4,855           | 96.9 | 310,346         | 100  |
| All circulatory disease – aged under 75 | 2,489           | 91.6 | 176,217         | 100  |
| Coronary heart disease – aged under 75  | 1,310           | 87.3 | 99,575          | 100  |

Source: PHE, produced from ONS data, 2010-14

Table 13 Leading causes of premature death in BNSSG (age standardised rate per 100,000) ranked out of the 150 local authorities across England

| Disease                | Highest LA Rate | Lowest LA Rate | Bristol |                   | South Glos |                  | North Somerset |                  |
|------------------------|-----------------|----------------|---------|-------------------|------------|------------------|----------------|------------------|
|                        |                 |                | Rate    | Rank in 150 LA    | Rate       | Rank in 150 LA   | Rate           | Rank in 150 LA   |
| All premature deaths   | 549             | 238            | 384     | 103 <sup>rd</sup> | 272        | 14 <sup>th</sup> | 305            | 45 <sup>th</sup> |
| All cancers            | 199             | 104            | 153     | 107 <sup>th</sup> | 119        | 15 <sup>th</sup> | 133            | 53 <sup>rd</sup> |
| Lung cancer            | 112             | 32             | 62      | 78 <sup>th</sup>  | 46         | 18 <sup>th</sup> | 47             | 28 <sup>th</sup> |
| Breast cancer          | 30              | 16             | 19      | 32 <sup>nd</sup>  | 17         | 18 <sup>th</sup> | 21             | 77 <sup>th</sup> |
| Colorectal cancer      | 18              | 8              | 14      | 130 <sup>th</sup> | 11         | 47 <sup>th</sup> | 12             | 79 <sup>th</sup> |
| Heart disease & stroke | 137             | 52             | 82      | 83 <sup>rd</sup>  | 60         | 17 <sup>th</sup> | 60             | 18 <sup>th</sup> |
| Heart disease          | 81              | 26             | 41      | 68 <sup>th</sup>  | 33         | 29 <sup>th</sup> | 28             | 8 <sup>th</sup>  |
| Stroke                 | 27              | 9              | 16      | 103 <sup>rd</sup> | 10         | 17 <sup>th</sup> | 12             | 37 <sup>th</sup> |
| Lung disease           | 78              | 20             | 40      | 96 <sup>th</sup>  | 23         | 12 <sup>th</sup> | 27             | 36 <sup>th</sup> |
| Liver disease          | 43              | 11             | 20      | 89 <sup>th</sup>  | 13         | 15 <sup>th</sup> | 15             | 34 <sup>th</sup> |
| Injuries               | 24              | 6              | 16      | 127 <sup>th</sup> | 8          | 19 <sup>th</sup> | 13             | 83 <sup>rd</sup> |

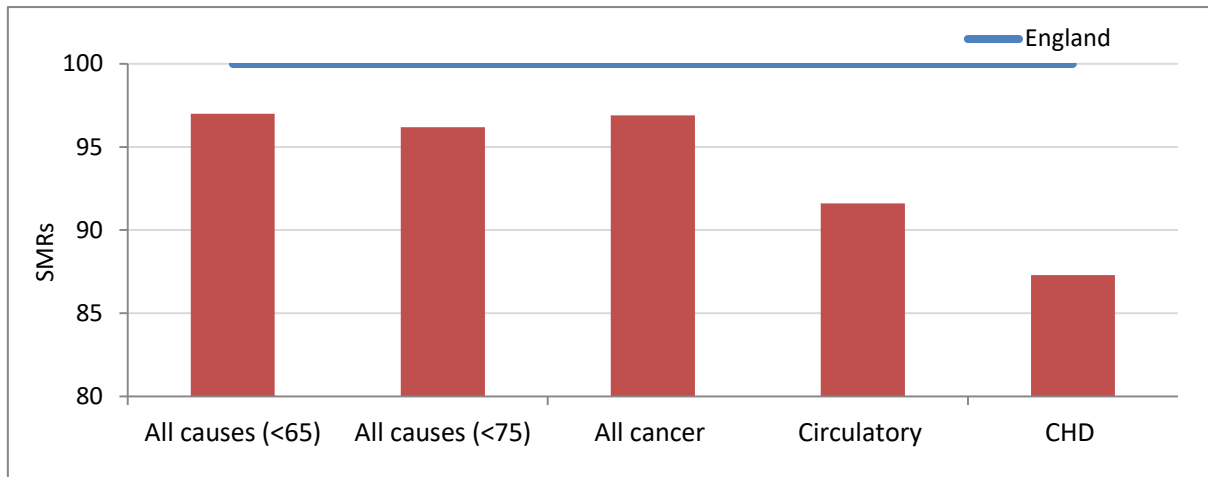
Outcomes:

|       |                    |                     |      |
|-------|--------------------|---------------------|------|
| Worst | Worse than average | Better than average | Best |
|-------|--------------------|---------------------|------|

Source: PHE healthier lives, 2013-15



Figure 12 Chart of the leading causes of premature death in BNSSG compared to the average for England



Source: PHE, produced from ONS data, 2010-14

### 3.2.2 Premature deaths from heart disease and stroke

The rate of premature cardiovascular deaths in BNSSG is 70.8 per 100,000, which is lower than the average for England. The rate in Bristol is 82.3 per 100,000 – higher than the national average (74.6).

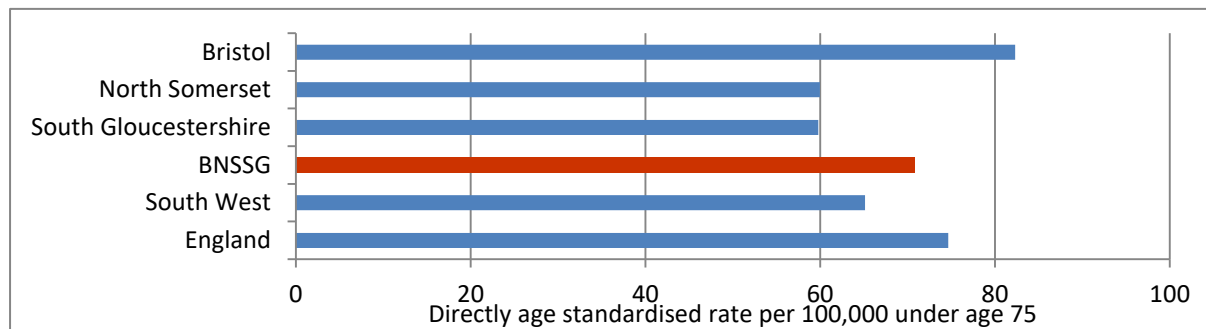
Table 14 Premature cardiovascular deaths under the age of 75

| Area                  | Number of cardiovascular deaths under age 75 | Population aged under 75 | Directly age standardised rate per 100,000 under 75 |
|-----------------------|--|--------------------------|---|
| Bristol               | 699  | 1,244,971                | 82.3  |
| North Somerset        | 367  | 558,340                  | 60.0  |
| South Gloucestershire | 415  | 748,032                  | 59.8  |
| <b>BNSSG</b>          | <b>1,481 *</b>                               | <b>2,551,343</b>         | <b>70.8</b>   |
| South West            | 9,830  | 14,684,252               | 65.1  |
| England               | 99,808                                       | 149,886,504              | 74.6  |

Source: Health Profiles / ONS 2013-15 - est\* figure is estimated as population weighted average of constituent LAs



Figure 13 Chart of premature cardiovascular deaths under the age of 75



Source: Health Profiles / ONS 2013-15

### 3.2.3 Premature deaths from cancer

The premature death rate from cancer in BNSSG (138.7 per 100,000) is very similar to the national rate, but higher than the average across the South West. The rate in Bristol is higher at 153.1 per 100,000, but the rates for both North Somerset and South Gloucestershire are lower than the national average.

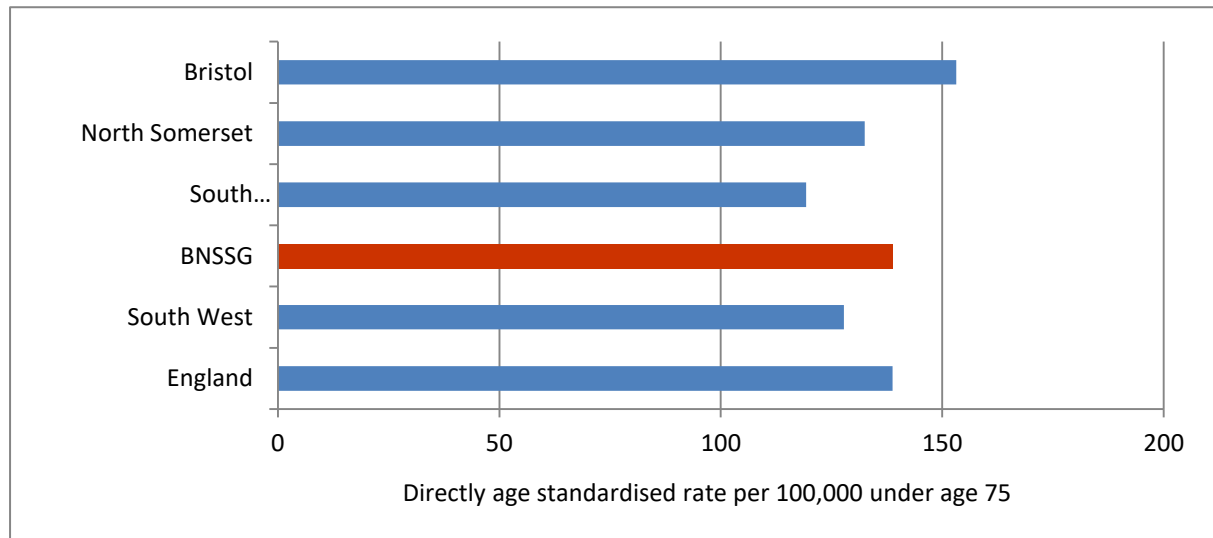
Table 15 Premature deaths from all cancers under the age of 75

| Area                  | Number of cancer deaths under age 75 | Population aged under 75 | Directly age standardised rate per 100,000 under 75 |
|-----------------------|--------------------------------------|--------------------------|---|
| Bristol               | 1,303                                | 1,244,971                | 153.1   |
| North Somerset        | 815                                  | 558,340                  | 132.5   |
| South Gloucestershire | 830                                  | 748,032                  | 119.3   |
| BNSSG                 | 2,948                                | 2,551,343                | 138.7   |
| South West            | 19,418                               | 14,684,252               | 127.8   |
| England               | 186,273                              | 149,886,504              | 138.8   |

Source: Health Profiles / ONS 2013-15 - est\* figure is estimated as population weighted average of constituent LAs



Figure 20 Premature deaths from all cancers under the age of 75

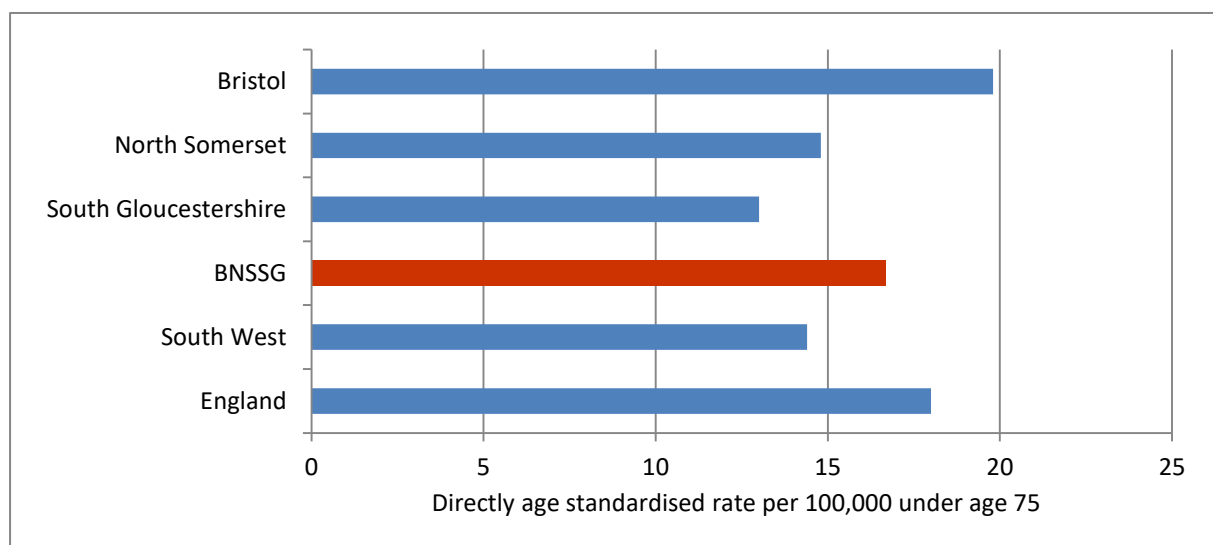


Source: Health Profiles / ONS 2013-15

### 3.2.4 Premature deaths from liver disease

The rate of premature deaths from liver disease in BNSSG (16.7 per 100,000) is higher than the average for the South West, but lower than the national rate of 18 deaths per 100,000. However, the rate in Bristol is high at 19.8 per 100,000 compared to the low rate of 13 per 100,000 in South Gloucestershire.

Figure 21 Premature deaths from liver disease under the age of 75



Source: Health Profiles / ONS 2013-15



Table 24 Premature deaths from liver disease under the age of 75

| Area                  | Number of liver disease deaths | Population       | Directly age standardised rate per 100,000 |
|-----------------------|--------------------------------|------------------|--|
| Bristol               | 184                            | 1,244,971        | 19.8                                       |
| North Somerset        | 89                             | 558,340          | 14.8                                       |
| South Gloucestershire | 92                             | 748,032          | 13.0                                       |
| <b>BNSSG</b>          | <b>365</b>                     | <b>2,551,343</b> | <b>16.7</b>                                |
| South West            | 2,155                          | 14,684,252       | 14.4                                       |
| England               | 24,791                         | 149,886,504      | 18.0                                       |

Source: Health Profiles / ONS 2013-15 - est\* figure is estimated as population weighted average of constituent LAs

### 3.2.5 Premature deaths from respiratory disease

Early deaths under the age of 75 as a result of respiratory disease range from 22.9 per 100,000 in South Gloucestershire to 39.6 per 100,000 in Bristol. The average for BNSSG is 31.9 per 100,000, which is lower than the national average of 33.1 per 100,000.

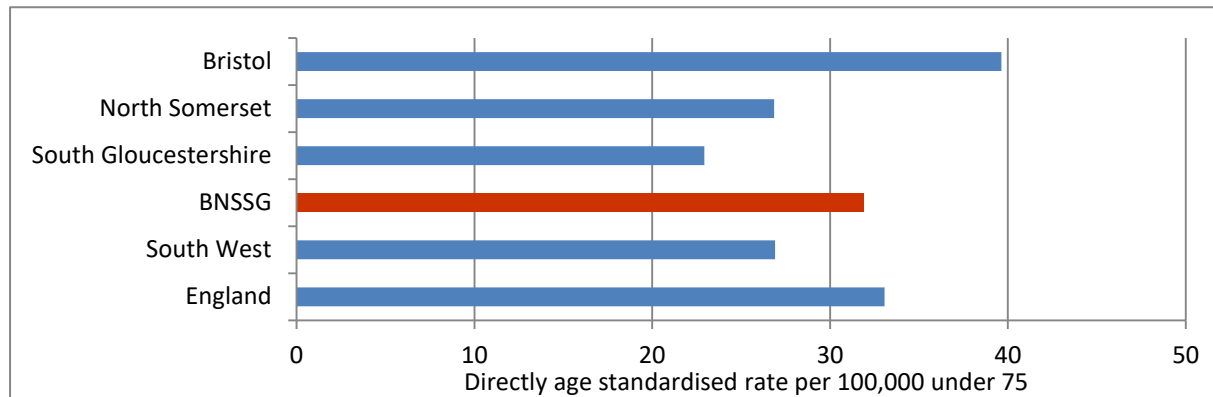
Table 16 Premature deaths from respiratory disease under the age of 75

| Area                  | Number of respiratory disease deaths under age 75 | Population aged under 75 | Directly age standardised rate per 100,000 under 75 |
|-----------------------|---|--------------------------|---|
| Bristol               | 326   | 1,244,971                | 39.6  |
| North Somerset        | 165   | 558,340                  | 26.9  |
| South Gloucestershire | 158   | 748,032                  | 22.9  |
| <b>BNSSG</b>          | <b>649</b>  | <b>2,551,343</b>         | <b>31.9</b>   |
| South West            | 4,086   | 14,684,252               | 26.9  |
| England               | 43,725  | 149,886,504              | 33.1  |

Source: Health Profiles / ONS 2013-15 - est\* figure is estimated as population weighted average of constituent LAs



Figure 22 Premature deaths from respiratory disease under the age of 75



Source: Health Profiles / ONS 2013-15

### 3.2.6 Smoking related deaths

Cigarette smoking causes premature death. Half of all life-long smokers die prematurely, with a life expectancy at least 10 years shorter than non-smokers.

Table 17 Premature deaths attributable to smoking over the age over 35

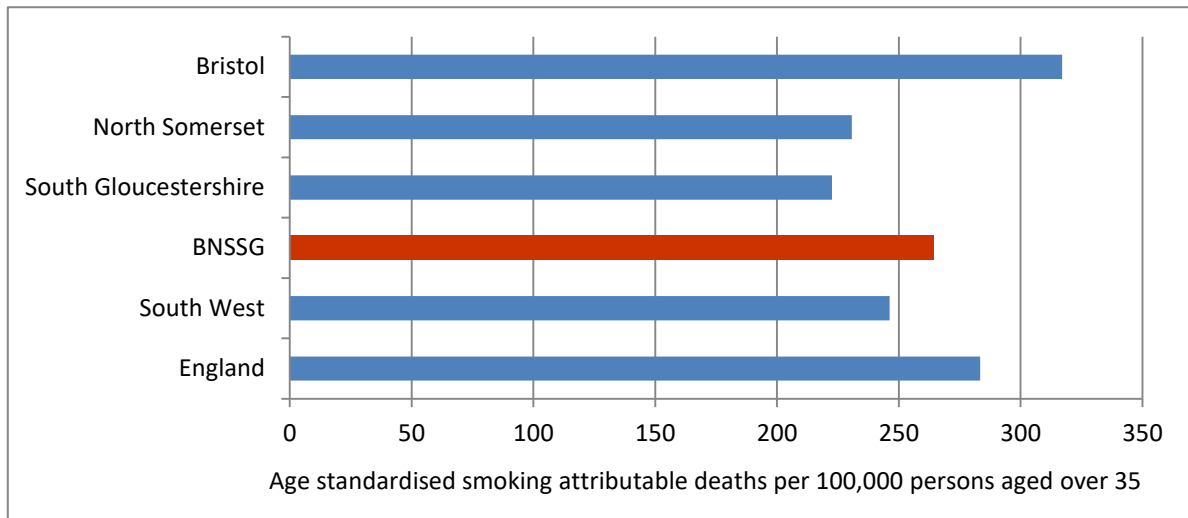
| Area                  | Number of smoking attributable deaths | Population aged over 35 | Age standardised smoking attributable deaths per 100,000 persons aged over 35 |
|-----------------------|---------------------------------------|-------------------------|---|
| Bristol               | 1,803                                 | 626,957                 | 317.0   |
| North Somerset        | 1,003                                 | 391,066                 | 230.7   |
| South Gloucestershire | 1,005                                 | 470,778                 | 222.5   |
| BNSSG                 | 3,812                                 | 1,488,801               | 264.5   |
| South West            | 26,023                                | 9,707,394               | 246.2   |
| England               | 250,225                               | 91,122,532              | 283.5   |

Source: Health Profiles / ONS 2013-15 - est\* figure is estimated as population weighted average of constituent LAs

In BNSSG the age standardised death rate attributable to smoking is 264.5 per 100,000. This is lower than the average across England, but higher than the South West as a whole. The highest death rate for BNSSG is found in Bristol where the rate for smoking attributable deaths is 317 per 100,000. This compares to a rate of 222.5 per 100,000 in South Gloucestershire.



Figure 14 Chart of premature deaths attributable to smoking over the age over 35



Source: Health Profiles / ONS 2013-15

### 3.2.7 Injury

The number of people seriously injured or killed on the roads in BNSSG is low. When compared to both the region and the rest of England, the numbers and rate are significantly better. In BNSSG 24.8 per 100,000 were killed or injured, whereas 38.5 per 100,000 were killed or injured across the rest of the country. All areas of BNSSG report similar low numbers, with South Gloucestershire fairing slightly better than the other areas.

Table 18 Deaths and serious injuries on roads for all ages in BNSSG

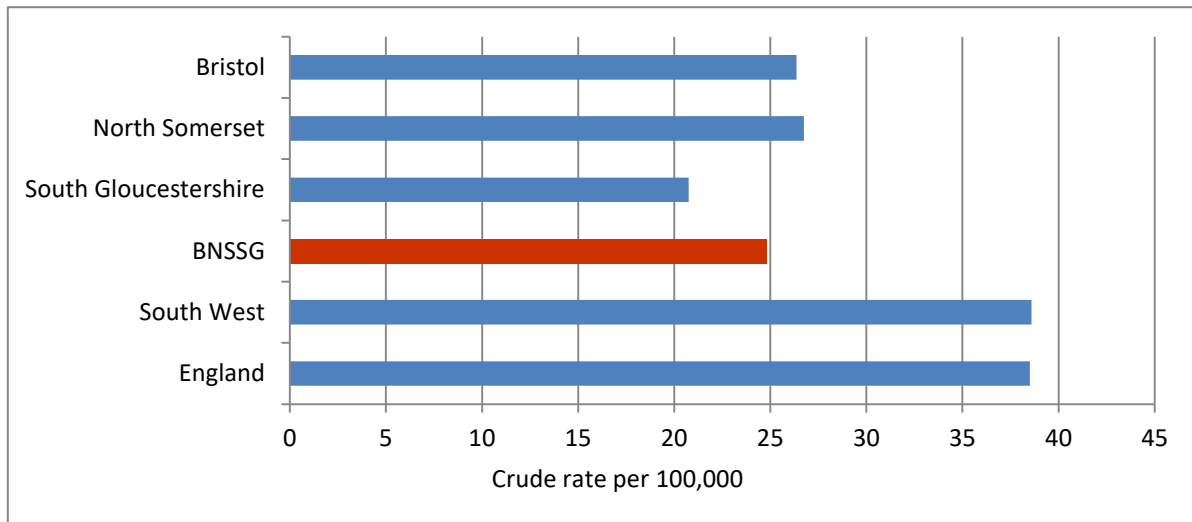
| Area                  | Number of people killed or seriously injured on roads | Population 2013-15 | Crude rate per 100,000 |
|-----------------------|---|--------------------|------------------------|
| Bristol               | 350   | 1,327,422          | 26.4                   |
| North Somerset        | 167   | 624,462            | 26.7                   |
| South Gloucestershire | 169   | 814,668            | 20.7                   |
| BNSSG                 | 686   | 2,766,552          | 24.8                   |
| South West            | 6,279   | 16,269,909         | 38.6                   |
| England               | 62,741  | 162,949,854        | 38.5                   |

Source: Health Profiles / Department for Transport 2013-15 - est\* figure is estimated as population weighted average of constituent LAs





Figure 15 Chart of deaths and serious injuries on roads for all ages in BNSSG



Source: Health Profiles / Department for Transport 2013-15

### 3.3 Years of Life Lost

Years of life lost (YLL) is a measure of premature mortality. It is used to compare the relative importance of different causes of premature death within a specific population.

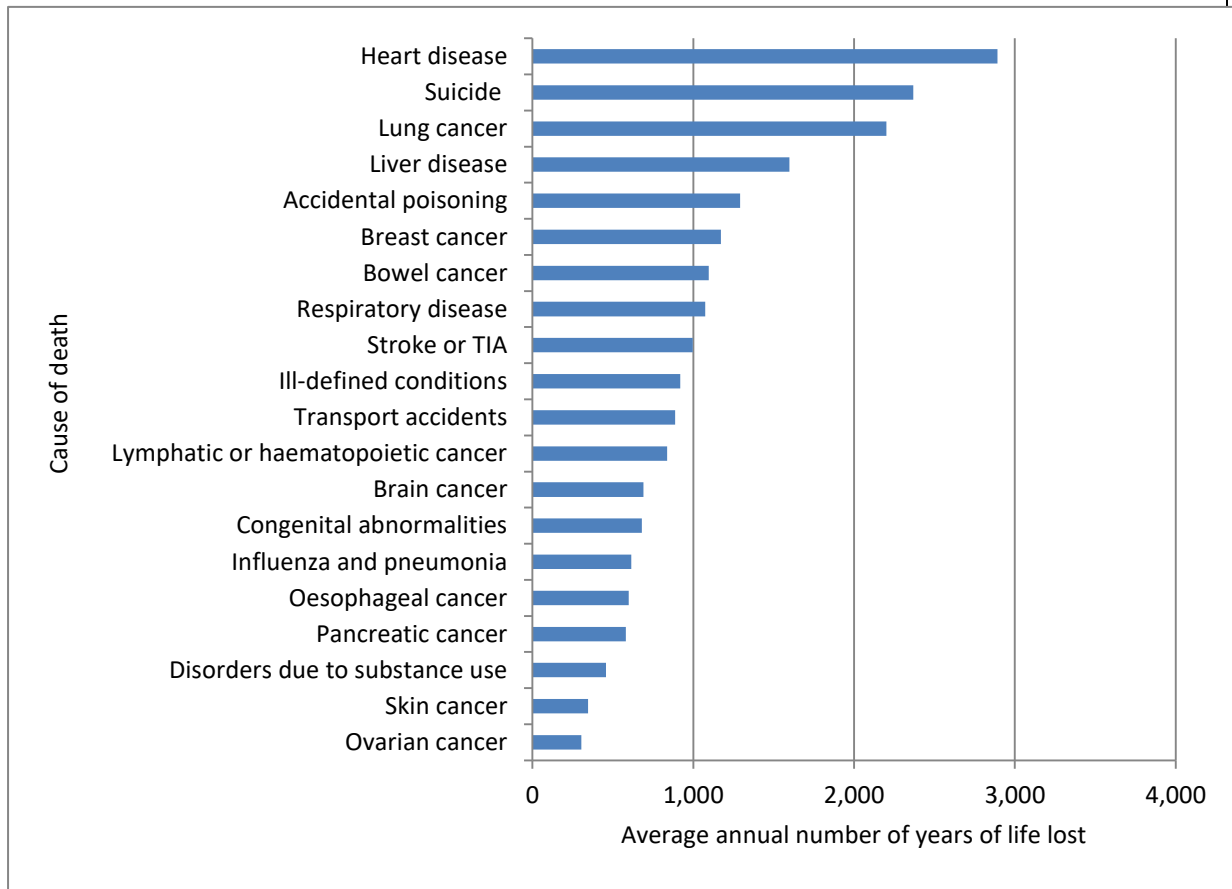
The figures used to compare the years of life lost in the BNSSG population, again considering any death under the age of 75 as premature. For a death under 75 years of age, the number of years of life lost is calculated as 75 minus the age at death. Thus a person who dies at the age of 50 would be considered to have 25 years of life lost, while a person who dies at age 10 would have 65 years of life lost. Deaths occurring above the age of 75 are not considered to be premature, so the numbers of years of life lost are zero.

#### 3.3.1 Causes of years of life lost

The chart below shows the 20 causes of death, as recorded on death certificates, resulting in the most years of life lost in BNSSG from 2009 to 2013. Heart disease is the largest single cause, resulting in 2,891 years of life lost per year. This is followed by suicide with 2,368 and lung cancer with 2,201 years of life lost per year. A wide variety of causes of death appear in the top 20 ranking including stroke, several types of cancer, liver disease, deaths due to transport accidents, accidental poisoning and drug use.



Figure 25 Average annual number of years of life lost from the top 20 causes in BNSSG, 2009-2013



Source: ONS

Between 2009 and 2013 there were over 35,000 years of life lost per year across BNSSG. The listed top 20 causes accounted for 61% of all years of life lost.

Some causes of death affect small numbers, but represent a large proportion dying under the age of 75. For example, causes such as suicide, transport accidents and accidental poisoning affect relatively few people in total, but the number of years of life lost per death under age 75 is high, indicating that people dying from these causes die relatively young.

Deaths from conditions such as influenza and pneumonia have relatively high numbers of total deaths, but only a small proportion occur in those aged under 75 years. Therefore relatively low numbers of years of life lost per death under age 75 are recorded.



Table 19 Average annual numbers of deaths and years of life lost from the top 20 causes in BNSSG, 2009 to 2013

| Cause of death<br>(as recorded on death certificates) |                                    | Deaths per year |              | % of deaths <75 years | Annual YLL    | YLL per death < 75 years |
|---|------------------------------------|-----------------|--------------|-----------------------|---------------|--------------------------|
|   |                                    | <75             | All ages     |                       |               |                          |
| 1   | Heart disease                      | 275             | 932          | 29.5                  | 2,891         | 10.5                     |
| 2   | Suicide                            | 75              | 81           | 93.3                  | 2,368         | 31.5                     |
| 3   | Lung cancer                        | 218             | 427          | 51.0                  | 2,201         | 10.1                     |
| 4   | Liver disease                      | 83              | 103          | 80.7                  | 1,597         | 19.2                     |
| 5   | Accidental poisoning               | 37              | 39           | 94.9                  | 1,291         | 34.5                     |
| 6   | Breast cancer                      | 79              | 151          | 52.3                  | 1,172         | 14.9                     |
| 7   | Bowel cancer                       | 92              | 219          | 41.8                  | 1,097         | 12.0                     |
| 8   | Respiratory disease                | 119             | 402          | 29.5                  | 1,074         | 9.1                      |
| 9   | Stroke or TIA                      | 91              | 587          | 15.5                  | 996           | 11.0                     |
| 10  | Ill-defined conditions             | 31              | 274          | 11.2                  | 920           | 30.1                     |
| 11  | Transport accidents                | 23              | 26           | 88.4                  | 887           | 38.9                     |
| 12  | Lymphatic or haematopoietic cancer | 67              | 178          | 37.6                  | 838           | 12.5                     |
| 13  | Brain cancer                       | 42              | 59           | 70.0                  | 691           | 16.6                     |
| 14  | Congenital abnormalities           | 17              | 19           | 88.4                  | 681           | 40.5                     |
| 15  | Influenza and pneumonia            | 49              | 456          | 10.8                  | 615           | 12.5                     |
| 16  | Oesophageal cancer                 | 53              | 110          | 48.4                  | 599           | 11.3                     |
| 17  | Pancreatic cancer                  | 57              | 115          | 50.0                  | 581           | 10.1                     |
| 18  | Disorders due to substance use     | 16              | 16           | 96.3                  | 457           | 29.3                     |
| 19  | Skin cancer                        | 22              | 39           | 55.1                  | 346           | 16.0                     |
| 20  | Ovarian cancer                     | 28              | 51           | 54.9                  | 304           | 10.9                     |
| <b>Top 20 causes</b>                                  |                                    | <b>1,471</b>    | <b>4,283</b> | <b>34.3</b>           | <b>21,603</b> | <b>14.7</b>              |
| <b>All causes</b>                                     |                                    | <b>2,342</b>    | <b>7,581</b> | <b>30.9</b>           | <b>35,322</b> | <b>15.1</b>              |

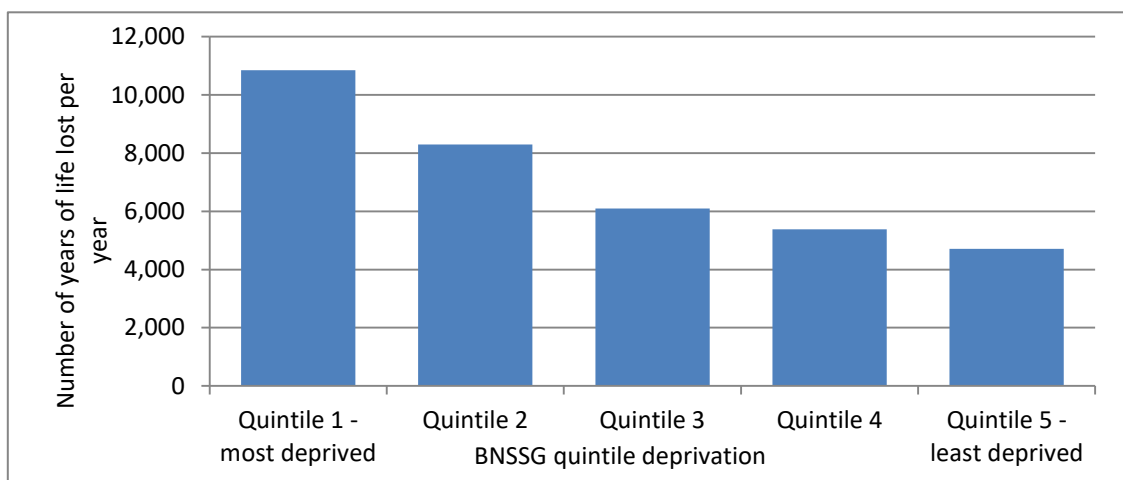
Source: ONS



### 3.3.2 Deprivation and years of life lost

The chart below shows the average annual years of life lost by level of deprivation, with reference to IMD deprivation quintiles. There is a clear increase in the numbers of years of life lost with increasing level of deprivation. The step increase per quintile is most pronounced for the most deprived quintile. People living in the most deprived areas in BNSSG therefore lose twice the number of years of life compared to those living in the least deprived parts of BNSSG.

Figure 16 Chart of the annual number of years of life lost in BNSSG by deprivation quintiles, 2009-2013



Source: ONS, IMD 2015

In addition to the increase in numbers of years of life lost with increasing level of deprivation, there are also corresponding increases in total deaths and deaths under the age of 75 with rising deprivation. The percentages of total deaths that occur below age 75 also vary across the deprivation quintiles, from 28% in the least deprived to 37% in the most deprived.



Table 20 Average annual numbers of deaths and years of life lost, age standardised rates and potential reduction in years of life lost by deprivation quintile in BNSSG, 2009 to 2013

| Deprivation quintile | Deaths per year |          | % deaths  | Annual years of life lost | Age standardised YLL rate per 10,000 | Annual YLL if each quartile had same YLL rates as the least deprived quartile |             |
|----------------------|-----------------|----------|-----------|---------------------------|--------------------------------------|---|-------------|
|                      | <75             | All ages | <75 years |                           |                                      | Number  | % Reduction |
| 1<br>Most deprived   | 649             | 1,772    | 36.6      | 10,847                    | 734.4                                | 4,367   | 59.7        |
| 2                    | 544             | 1,748    | 31.1      | 8,291                     | 539.8                                | 4,464   | 46.2        |
| 3                    | 414             | 1,317    | 31.4      | 6,098                     | 382.7                                | 4,575   | 25.0        |
| 4                    | 379             | 1,464    | 25.9      | 5,383                     | 348.0                                | 4,455   | 17.2        |
| 5<br>Least deprived  | 356             | 1,280    | 27.8      | 4,704                     | 287.6                                | 4,704   | 0.0         |
| Total                | 2,342           | 7,581    | 30.9      | 35,322                    | 450.6                                | 22,565  | 36.1        |

Source: ONS, IMD 2015

Table 20 also shows the potential reduction in years of life lost for each deprivation quintile in BNSSG as a whole, if all areas experienced the same year of life lost levels as the most affluent quintile. As the level of deprivation increases, the potential reduction becomes larger. So if the most deprived areas could attain the same years of life lost rates as the least deprived, there would be a 59.7% reduction in the total years of life lost for the most deprived areas. If the whole of BNSSG achieved the same years of life lost rates as the least deprived areas, there would be a 36.1% reduction in total years of life lost, which equates to over 12,000 life years saved.



## 4. The health needs of the local people

### 4.1 Overview

Overall, the health of the population in BNSSG is good. However everyone in BNSSG will have different health issues and subsequently different needs for health and social care services. Some people will need intensive support and care whilst others will access services very infrequently. Although much of this need depends on demographic factors such as age, deprivation and lifestyle choices, it will also depend on whether people are living with a long term health condition such as asthma, cancer, dementia or mental illness.

To understand the changing needs of the local people in BNSSG, it is important to understand the health issues and needs of the local population.

### 4.2 Disease prevalence

In the UK the greatest burden of disease comes from cancer, heart disease, stroke, respiratory illness and liver disease. The major causes of disability are mental and behavioural illness, substance misuse (drug and alcohol) and musculoskeletal disorders.

#### 4.2.1 Cardiovascular disease (CVD)

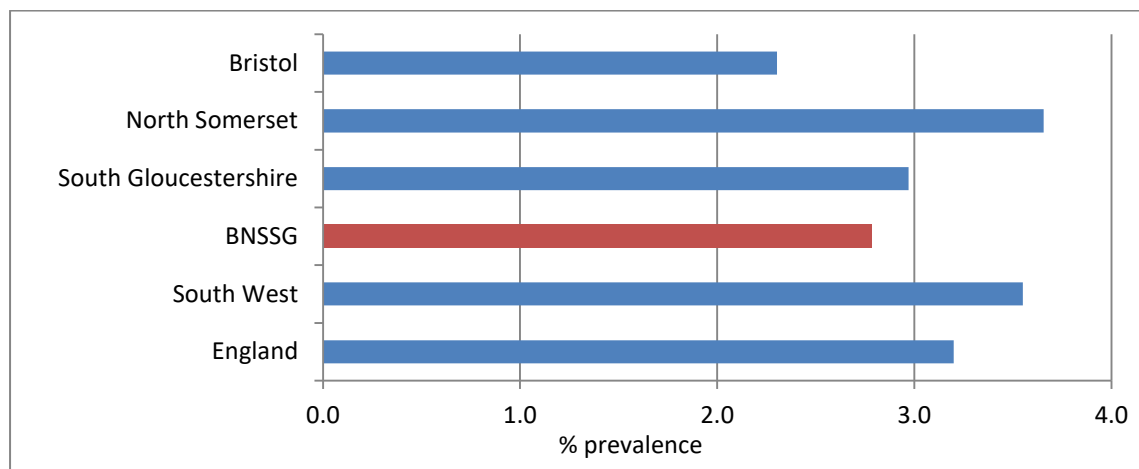
Cardiovascular disease (CVD) includes all the diseases of the heart and circulation including coronary heart disease (CHD), angina, heart attack, congenital heart disease and stroke.

##### *Coronary heart disease (CHD)*

Approximately 2.78% of the patients on GP practice registers in BNSSG have coronary heart disease, which is lower than the level recorded across England and the South West as a whole. Recorded prevalence in primary care is slightly higher in North Somerset (3.7%), with a level similar to the South West. The most comprehensive prevalence data available for many conditions are retrieved from GP registers. However these data should be interpreted with some caution as reporting completeness can be highly variable between practices, and the data are not adjusted for age and gender mix of the patient lists.



Figure 17 Chart of patients recorded on GP coronary heart disease registers



Source: QOF data / NHS Digital, 2015-16

Table 30 Patients recorded on GP coronary heart disease registers

| CCG                   | Number of patients with coronary heart disease | Total list size - all ages | % prevalence |
|-----------------------|--|----------------------------|--------------|
| Bristol               | 11,462   | 497,549                    | 2.30         |
| North Somerset        | 7,912  | 216,364                    | 3.66         |
| South Gloucestershire | 7,877  | 265,088                    | 2.97         |
| BNSSG                 | 27,251   | 979,001                    | 2.78         |
| South West            | 117,164  | 3,300,846                  | 3.55         |
| England               | 1,839,330                                      | 57,549,410                 | 3.20         |

Source: QOF data / NHS Digital, 2015-16

## Strokes and transient ischaemic attacks (TIAs)

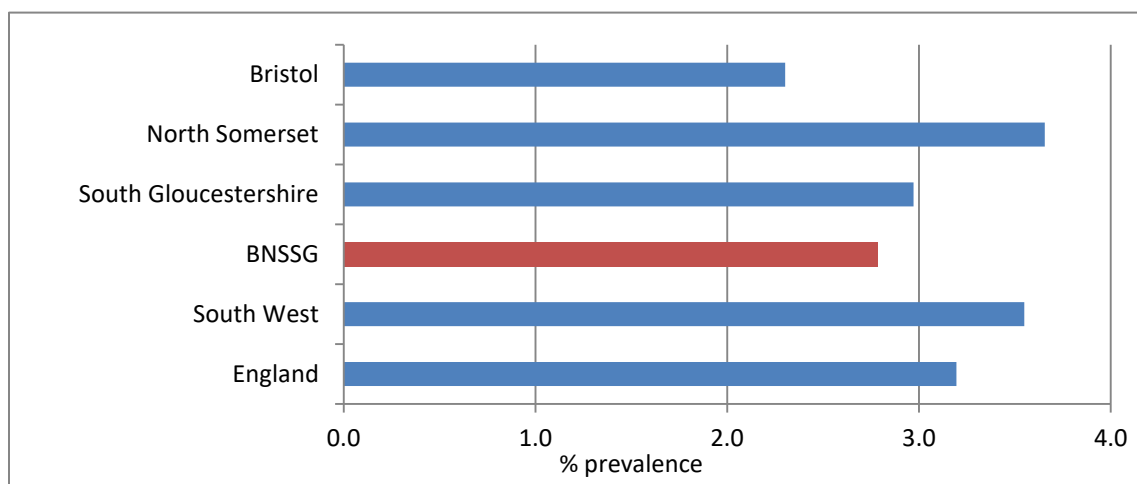
Table 31 Patients with stroke or TIA on GP stroke or TIA registers

| CCG                   | Number of patients with stroke or TIA | Total list size - all ages | % prevalence |
|-----------------------|---------------------------------------|----------------------------|--------------|
| Bristol               | 7,635                                 | 497,549                    | 1.53         |
| North Somerset        | 5,129                                 | 216,364                    | 2.37         |
| South Gloucestershire | 4,688                                 | 265,088                    | 1.77         |
| BNSSG                 | 17,452                                | 979,001                    | 1.78         |
| South West            | 71,672                                | 3,300,846                  | 2.17         |
| England               | 998,774                               | 57,549,410                 | 1.74         |

Source: QOF data / NHS Digital, 2015-16



Figure 18 Chart of patients with stroke or TIA on GP stroke or TIA registers



Source: QOF data / NHS Digital, 2015-16

## Hypertension

Hypertension, or high blood pressure, rarely has noticeable symptoms. However if left untreated, it can increase the risk of heart disease or stroke. GP recorded prevalence in BNSSG is slightly lower than the national average, although higher in North Somerset.

Table 21 Patients with hypertension on the GP hypertension registers

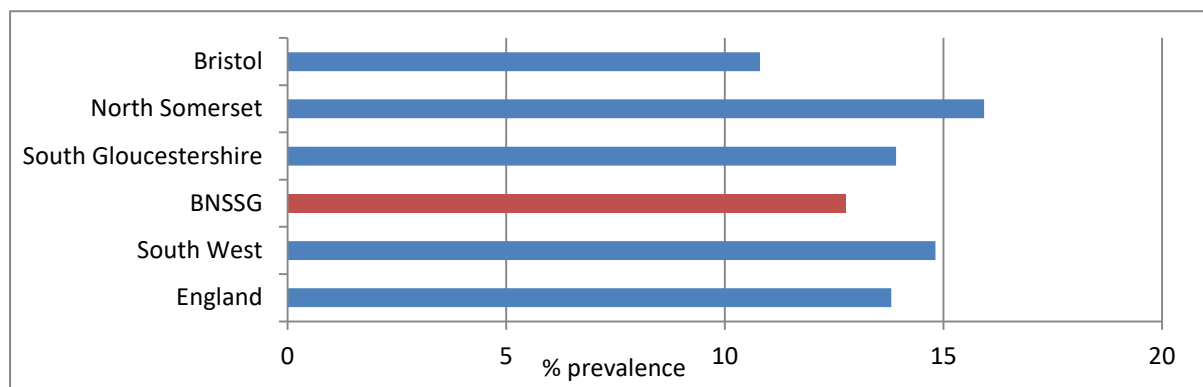
| CCG                   | Number of patients with hypertension | Total list size - all ages | % prevalence |
|-----------------------|--------------------------------------|----------------------------|--------------|
| Bristol               | 53,771                               | 497,549                    | 10.81        |
| North Somerset        | 34,463                               | 216,364                    | 15.93        |
| South Gloucestershire | 36,908                               | 265,088                    | 13.92        |
| BNSSG                 | 125,142                              | 979,001                    | 12.78        |
| South West            | 489,310                              | 3,300,846                  | 14.82        |
| England               | 7,949,274                            | 57,549,410                 | 13.81        |

Source: QOF data / NHS Digital, 2015-16





Figure 19 Chart of patients with hypertension on the GP hypertension registers



Source: QOF data / NHS Digital, 2015-16

### Atrial fibrillation

Atrial fibrillation (AF) is a heart condition that causes an irregular and often abnormally fast heart rate. It is estimated that 1.4 million people in England have AF, 2.5% of the population. AF is a risk factor for stroke and TIA. Estimated prevalence ranges from 1.0% to 3.9% at CCG level. In BNSSG the estimated prevalence ranges from 1.9% in Bristol to 3.1% in North Somerset.

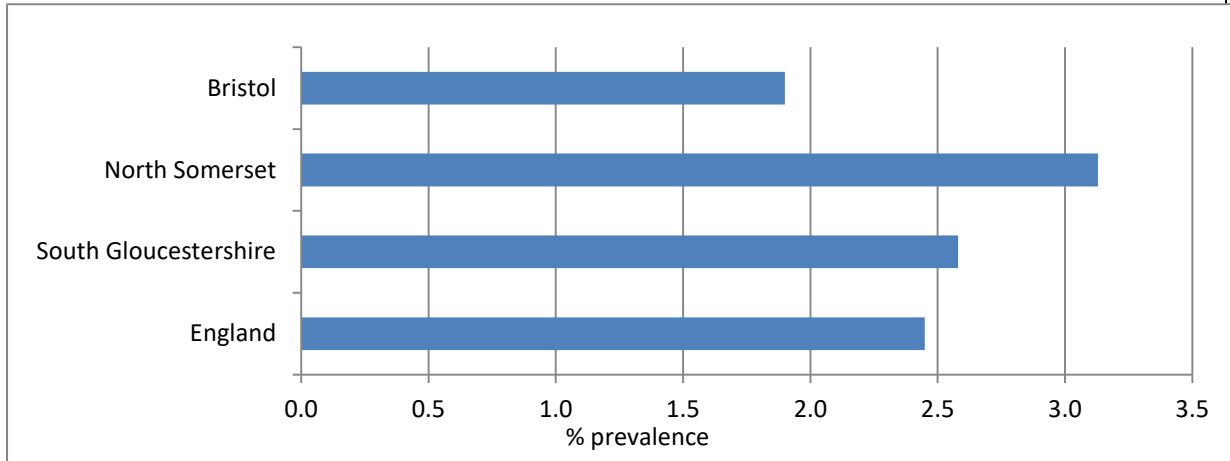
Table 22 Atrial fibrillation prevalence in BNSSG

| CCG                   | Estimated number of cases | Estimated % prevalence |
|-----------------------|---------------------------|------------------------|
| Bristol               | 9,432                     | 1.90                   |
| North Somerset        | 6,765                     | 3.13                   |
| South Gloucestershire | 6,838                     | 2.58                   |
| England               | 1,408,101                 | 2.45                   |

Source: QOF data, 2015-16



Figure 30 Chart of atrial fibrillation prevalence in BNSSG



Source: QOF data, 2015-16

## 4.2.2 Cancer

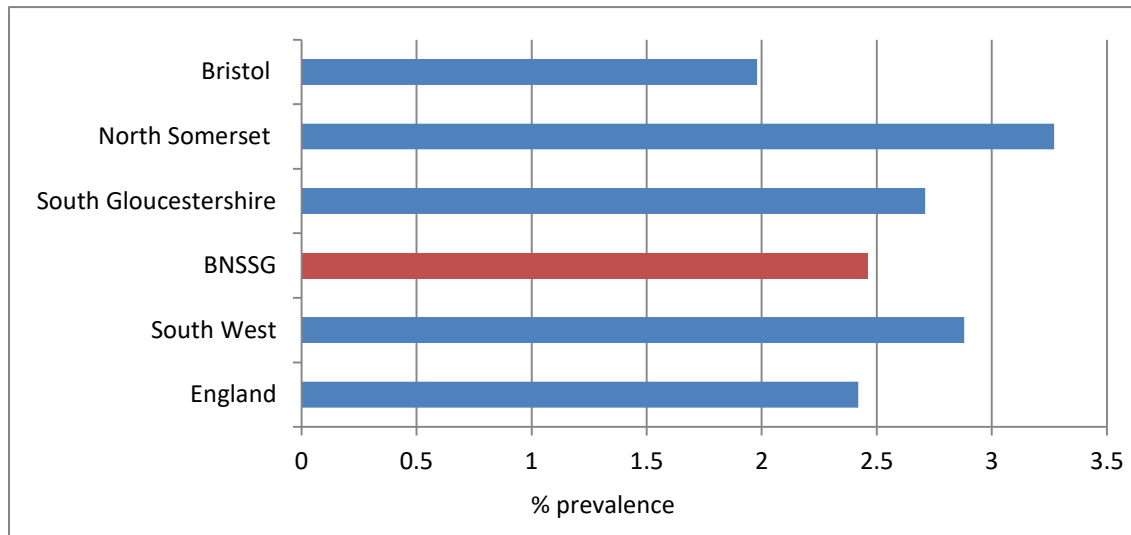
Cancer is the principal cause of avoidable death in the UK. It is primarily a disease of older people, with incidence rates increasing with age for most cancers. The number of people diagnosed and living with cancer each year is likely to grow, even with major improvements in prevention.

### *Cancer prevalence*

The GP reported prevalence of cancer in the population of BNSSG is similar to the national average at 2.46% compared to 2.42%. The 1.98% level in Bristol is lower, which might be partly due to the younger population in the city.



Figure 20 Chart of cancer prevalence in patients on GP registers (diagnosed on or after 1st April 2003)



Source: QOF data / NHS Digital, 2015-16

Table 23 Cancer prevalence in patients on GP registers (diagnosed on or after 1st April 2003)

| CCG                   | Number of patients with cancer | Total list size - all ages | % prevalence |
|-----------------------|--------------------------------|----------------------------|--------------|
| Bristol               | 9,865                          | 497,549                    | 1.98         |
| North Somerset        | 7,078                          | 216,364                    | 3.27         |
| South Gloucestershire | 7,174                          | 265,088                    | 2.71         |
| BNSSG                 | 24,117                         | 979,001                    | 2.46         |
| South West            | 94,950                         | 3,300,846                  | 2.88         |
| England               | 1,392,577                      | 57,549,410                 | 2.42         |

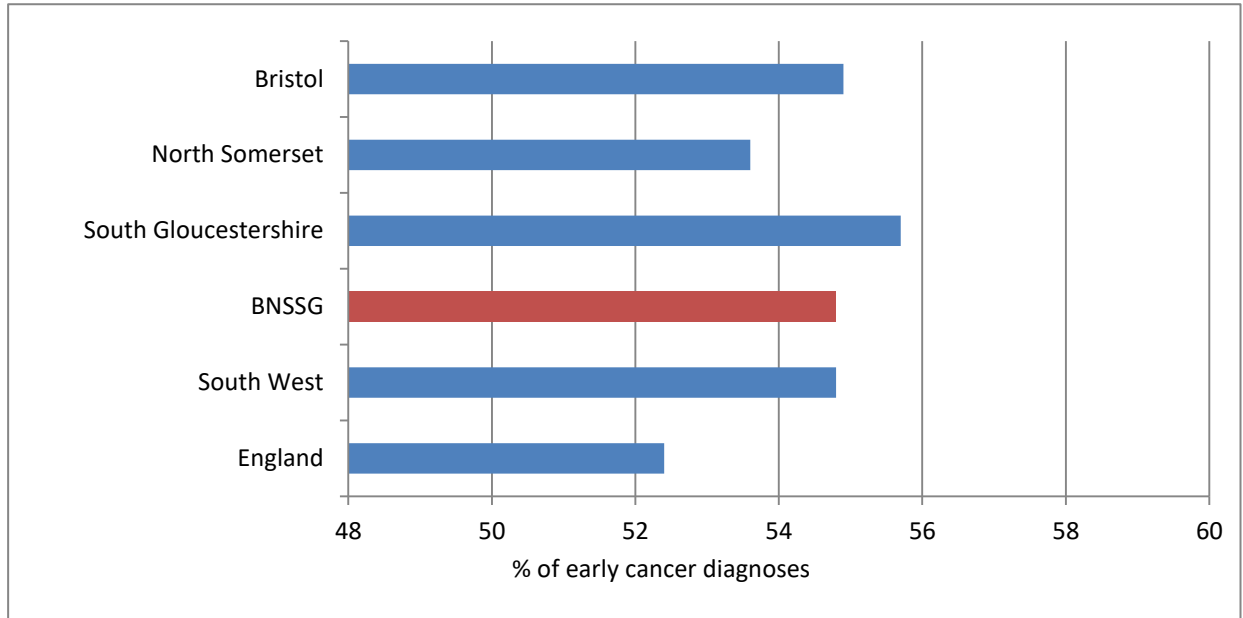
Source: QOF data / NHS Digital, 2015-16

### *Cancer diagnosed early*

Early detection of cancer greatly increases the chances for successful treatment. The new cases of cancer diagnosed at stage 1 and 2 as a proportion of all new cases of cancer diagnosed is slightly higher in BNSSG than the average for England. Individually, Bristol, North Somerset and South Gloucestershire are all performing better than the national average. However, this is still an important area in which there is potential for improvement.



Figure 21 Chart of new cases of cancer diagnosed at stage 1 or 2



Source: Health Profiles / National Cancer Registry, 2015\*

\* It should be noted that this indicator is labelled as an experimental statistic due to the variation in data quality - values primarily represent variation in completeness of staging information



Table 24 New cases of cancer diagnosed at stage 1 or 2

| Area                  | New cases of cancer diagnosed at stage 1 or 2 | All new cases of cancer diagnosed | % of early cancer diagnoses |
|-----------------------|---|-----------------------------------|-----------------------------|
| Bristol               | 878   | 1,600                             | 54.9                        |
| North Somerset        | 551   | 1,028                             | 53.6                        |
| South Gloucestershire | 622   | 1,117                             | 55.7                        |
| <b>BNSSG</b>          | <b>2,051</b>                                  | <b>3,745</b>                      | <b>54.8</b>                 |
| South West            | 13,618  | 24,833                            | 54.8                        |
| England               | 112,152                                       | 214,192                           | 52.4                        |

Source: Health Profiles / National Cancer Registry, 2015

## 4.2.3 Screening

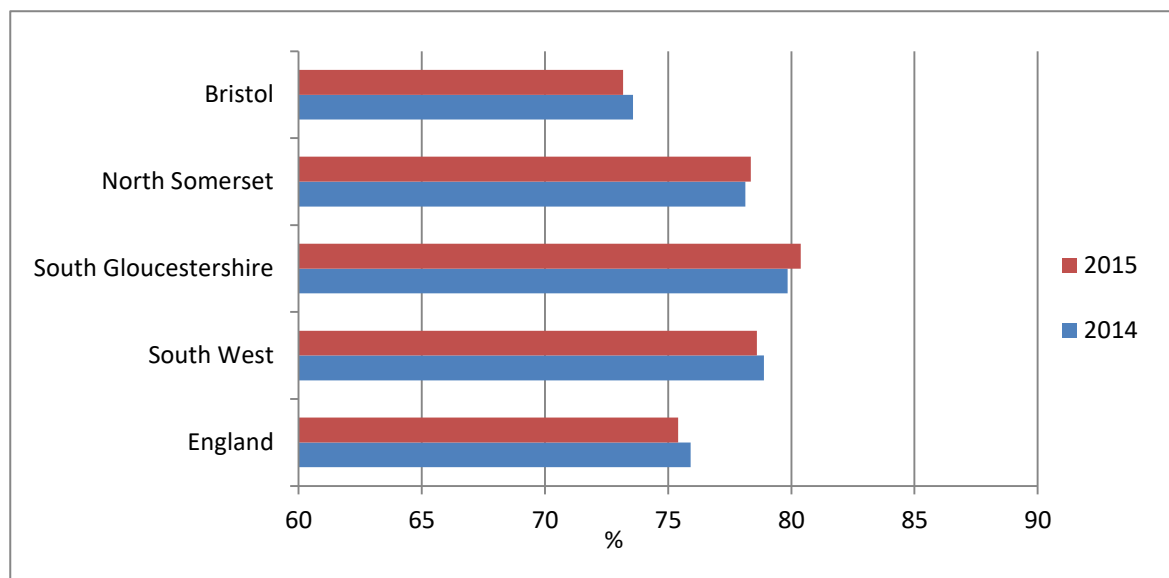
### *Breast screening*

The NHS Breast Screening Programme (NHSBSP) aims to detect the very early stages of cancer. Women between the ages of 50 and 70 are currently invited for mammographic screening every three years.

Nationally, the percentage of eligible women who have had a test with a recorded result within the last three years was 75.4% at 31<sup>st</sup> March 2015, compared with 75.9% at the same point in 2014. In BNSSG the coverage ranged from 73.2% in Bristol to 80.4% in South Gloucestershire. Throughout BNSSG the coverage remains above the NHS Cancer Screening Programme's minimum standard of 70%.



Figure 22 Chart of breast screening coverage in women aged 53-70 at 31st March 2014 and 2015



Source: KC63, Health and Social Care Information Centre, 2014-15

Table 25 Breast screening coverage in women aged 53-70 at 31st March 2014 and 2015

| Area                  | March 2014          |                          |            | March 2015          |                          |            |
|-----------------------|---------------------|--------------------------|------------|---------------------|--------------------------|------------|
|                       | Eligible Population | Number of women screened | Coverage % | Eligible Population | Number of women screened | Coverage % |
| Bristol               | 36,503              | 26,856                   | 73.6       | 37,019              | 27,089                   | 73.2       |
| North Somerset        | 25,660              | 20,048                   | 78.1       | 25,933              | 20,321                   | 78.4       |
| South Gloucestershire | 28,230              | 22,543                   | 79.9       | 28,497              | 22,908                   | 80.4       |
| South West            | 633,752             | 499,990                  | 78.9       | 640,990             | 503,799                  | 78.6       |
| England               | 5,644,660           | 4,284,725                | 75.9       | 5,740,983           | 4,329,310                | 75.4       |

Source: KC63, Health and Social Care Information Centre, 2014-15

Table 26 Breast screening coverage in women aged 53-70 against the minimum standard of 70%

| % screening coverage | Target (%) | Bristol | North Somerset | South Gloucestershire | South West | England |
|----------------------|------------|---------|----------------|-----------------------|------------|---------|
| March 2014           | >70%       | 73.6    | 78.1           | 79.9                  | 78.9       | 75.9    |
| March 2015           |            | 73.2    | 78.4           | 80.4                  | 78.6       | 75.4    |

Source: KC63, Health and Social Care Information Centre, 2014-15



## Cervical screening

Cervical cancer is an uncommon type of cancer that develops in a woman’s cervix. It is possible for women of all ages to develop cervical cancer, although the condition mainly affects sexually active women between 25 and 45 years old.

The NHS offers a national screening programme open to all women between the ages of 25 and 64 years who have a cervix every three or five years, depending on age.

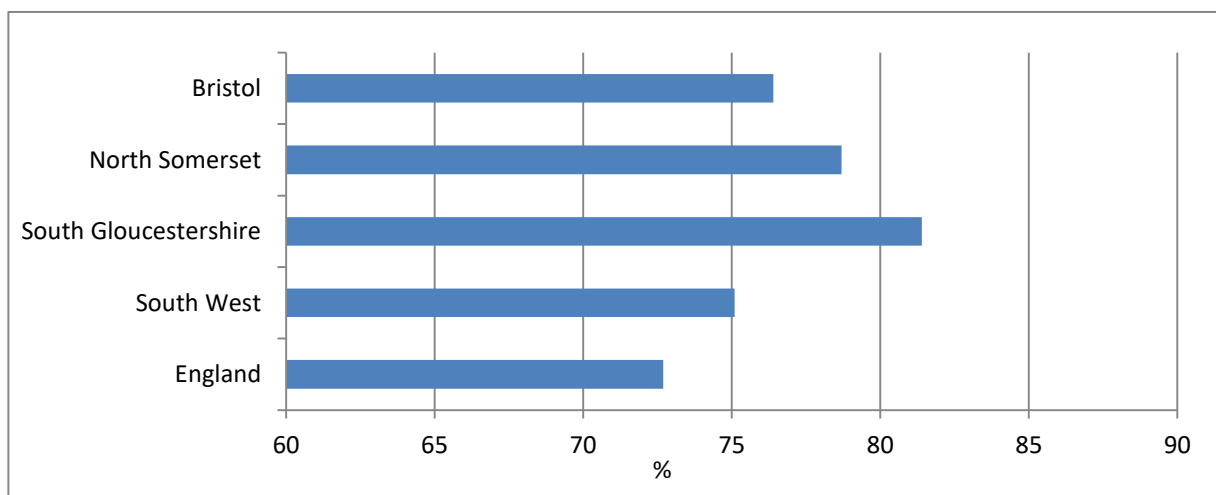
Nationally, coverage amongst women aged 25 to 64 years was 72.7% during 2015-16. This compares to 81.4% in South Gloucestershire, 76.4% in Bristol and 78.7% in North Somerset. All areas of BNSSG have achieved a higher coverage of cervical screening than the average for the South West (75.1%).

Table 27 Cervical screening coverage for 25-64 year olds during 2015-16

| Area                  | Eligible population (000's) | Age appropriate coverage % |
|-----------------------|-----------------------------|----------------------------|
| Bristol               | 63.7                        | 76.4                       |
| North Somerset        | 29.8                        | 78.7                       |
| South Gloucestershire | 39.1                        | 81.4                       |
| South West            | 1,882.7                     | 75.1                       |
| England               | 14,118.4                    | 72.7                       |

Source: NHS Digital / Health and Social Care Information Centre, 2016

Figure 23 Chart of cervical screening coverage for 25-64 year olds during 2015-16



Source: KC63, Health and Social Care Information Centre, 2014-15

The coverage data available routinely are summary-level, and do not always reveal underlying trends and socially-determined inequalities. An evaluation of a screening programme for abdominal aortic



aneurysm in South Gloucestershire, for example, has revealed consistent evidence that those people living in more deprived areas are less likely to attend for their screening appointment compared to those living in more affluent areas.

#### 4.2.4 Diabetes

Diabetes prevalence figures for England reveal that around 9% of the adult population have diabetes (2015). Since 1996, the number of people living with diabetes has more than doubled. The GP-recorded prevalence of diabetes in patients over the age of 17 in BNSSG is lower than both the average for the South West and nationally. Locally it is lowest amongst the population of Bristol. Further data on diabetes in the BNSSG population will be available from the National Diabetes Audit. The National Diabetes Prevention Programme is being rolled out in BNSSG currently, with implementation across GP practices in 2017-18.

Table 28 Diabetes prevalence in patients over the age of 17

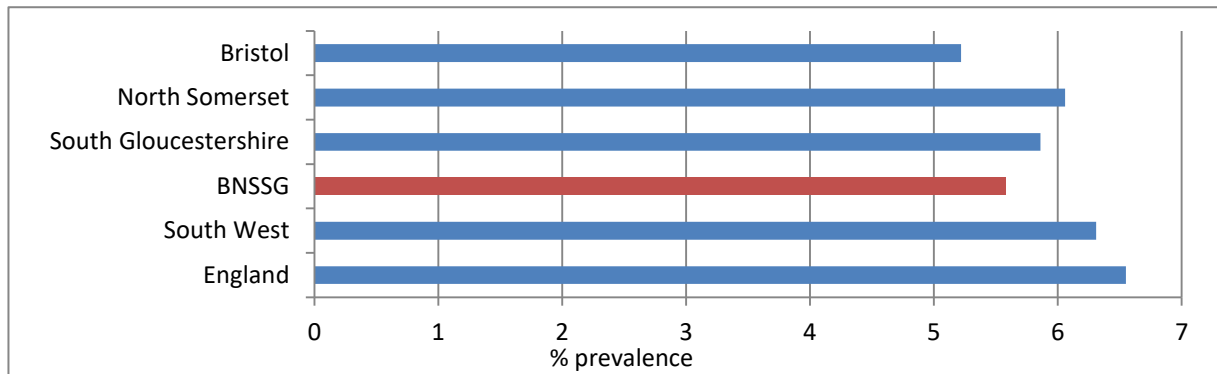
| CCG                   | Number of patients with diabetes mellitus - aged over 17 | Total list size - aged over 17 | % prevalence |
|-----------------------|--|--------------------------------|--------------|
| Bristol               | 21,107   | 404,361                        | 5.22         |
| North Somerset        | 10,641   | 175,681                        | 6.06         |
| South Gloucestershire | 12,452   | 212,388                        | 5.86         |
| <b>BNSSG</b>          | <b>44,200</b>  | <b>792,430</b>                 | <b>5.58</b>  |
| South West            | 170,480  | 2,702,143                      | 6.31         |
| England               | 3,033,529  | 46,335,291                     | 6.55         |

Source: QOF data / NHS Digital, 2015-16





Figure 24 Chart of diabetes prevalence in patients over the age of 17



Source: QOF data / NHS Digital, 2015-16

## 4.2.5 Kidney disease

Chronic kidney disease is progressive loss in kidney function over a period of months or years. In BNSSG a prevalence of 4.86% is recorded on GP kidney disease registers, similar to the national average. Kidney disease is multi-factorial; however cardiovascular risk factors – particularly hypertension and diabetes – are known to cause some types of kidney disease.

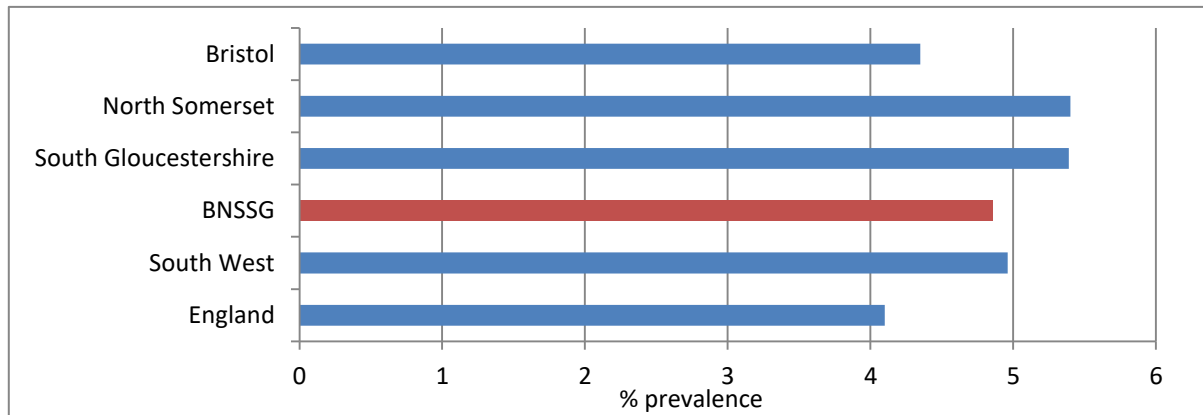
Table 29 Kidney disease prevalence in patients over the age of 18

| CCG                   | Number of patients with chronic kidney disease - aged over 18 | Total list size - aged over 18 | % prevalence |
|-----------------------|---|--------------------------------|--------------|
| Bristol               | 17,381  | 399,665                        | 4.35         |
| North Somerset        | 9,358   | 173,205                        | 5.40         |
| South Gloucestershire | 11,283  | 209,345                        | 5.39         |
| BNSSG                 | 38,022  | 782,215                        | 4.86         |
| South West            | 132,149   | 2,665,463                      | 4.96         |
| England               | 1,872,808   | 45,685,713                     | 4.10         |

Source: NHS Digital / QOF data, 2015-16



Figure 25 Chart of kidney disease prevalence in patients over the age of 18



Source: NHS Digital / QOF data, 2015-16

#### 4.2.6 Liver disease

Liver disease is one of the top causes of death in England and people are dying from it at younger ages. Deaths from liver disease are increasing in England which contrasts to most of the rest of Europe where liver disease deaths are falling. Most liver disease is preventable and much is influenced by alcohol consumption and obesity prevalence, which are both amenable to public health interventions.

Locally the rate of hospital admissions due to liver disease is highest in Bristol, where a rate of 156.3 per 100,000 population was recorded in 2014-15. This is much higher than the regional average of 113.2 and the national figure of 119.2 per 100,000. The rates for both North Somerset and South Gloucestershire are also higher than the regional and national averages.

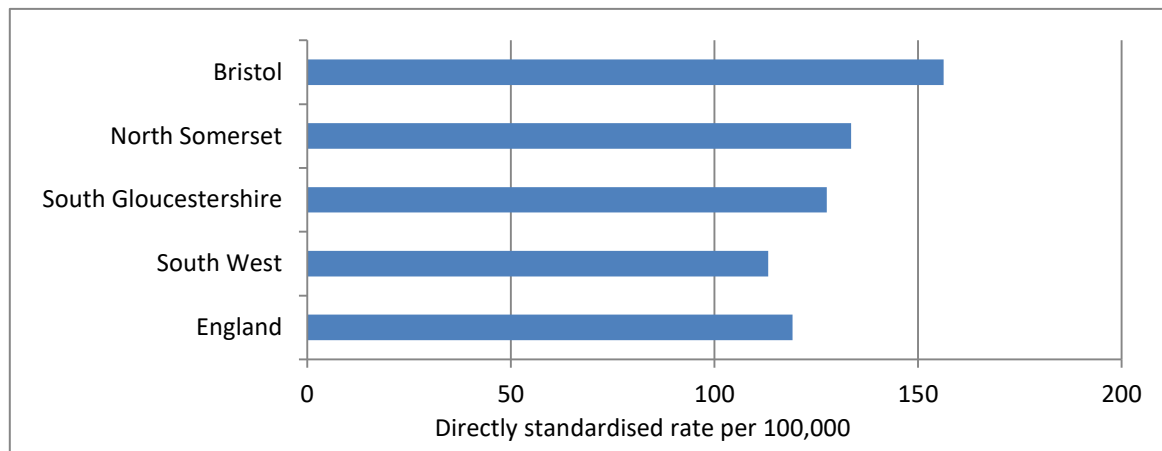
Table 30 Hospital admission rates due to liver disease

| Area                  | Directly standardised rate of hospital admissions due to liver disease per 100,000 |
|-----------------------|--|
| Bristol               | 156.3  |
| North Somerset        | 133.6  |
| South Gloucestershire | 127.6  |
| South West            | 113.2  |
| England               | 119.2  |

Source: Health and Social Care Information Centre (HSCIC) / Hospital Episode Statistics (HES) / ONS, 2014-15



Figure 26 Chart of hospital admission rates due to liver disease



Source: Health and Social Care Information Centre (HSCIC) / Hospital Episode Statistics (HES) / ONS, 2014-15

#### 4.2.7 Respiratory disease

Chronic respiratory diseases are diseases of the airways and other structures of the lung. Some of the most common are chronic obstructive pulmonary disease (COPD), asthma and pulmonary hypertension.

##### *Chronic obstructive pulmonary disease (COPD)*

COPD is the name for a group of lung conditions that cause breathing difficulties and includes emphysema and chronic bronchitis. It is often progressive and results in considerable morbidity to the patient and high use of primary and secondary health care services.

GP register data shows 16,835 BNSSG patients with COPD. This is 1.72% of all adult patients compared to the England average of 1.85%. The highest rate locally is in North Somerset where 2.01% of the adult patients have COPD.

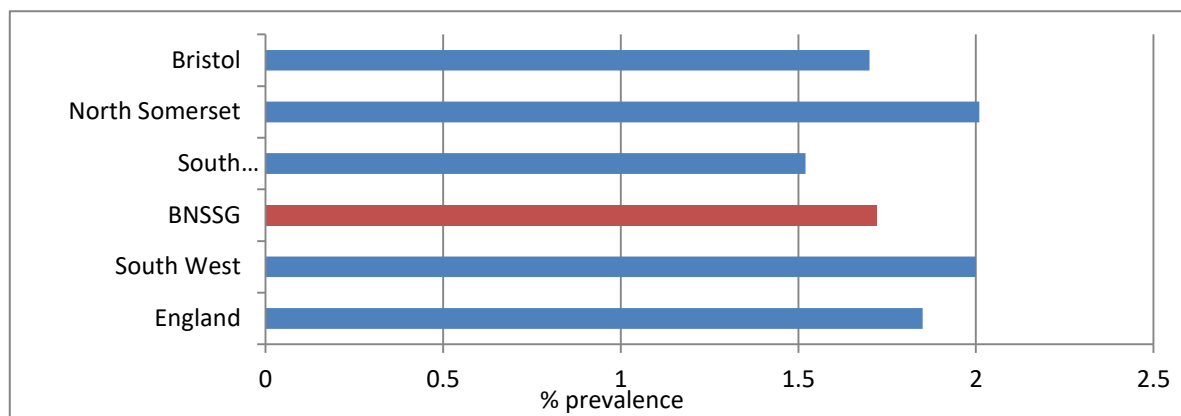
Table 31 Patients with chronic obstructive pulmonary disease (COPD) on GP registers

| CCG                   | Number of patients with COPD | Total list size - all ages | % prevalence |
|-----------------------|------------------------------|----------------------------|--------------|
| Bristol               | 8,460                        | 497,549                    | 1.70         |
| North Somerset        | 4,352                        | 216,364                    | 2.01         |
| South Gloucestershire | 4,023                        | 265,088                    | 1.52         |
| BNSSG                 | 16,835                       | 979,001                    | 1.72         |
| South West            | 66,021                       | 3,300,846                  | 2.00         |
| England               | 1,066,471                    | 57,549,410                 | 1.85         |

Source: NHS Digital / QOF data, 2015-16



Figure 27 Chart of patients with chronic obstructive pulmonary disease (COPD) on GP registers



Source: NHS Digital / QOF data, 2015-16

## Asthma

Asthma is a common lung condition that causes occasional breathing difficulties. It affects people of all ages and often starts in childhood. GP register data shows 61,245 BNSSG patients with asthma. As a prevalence rate this is 6.26% of all adult patients where the England average is 5.91%.

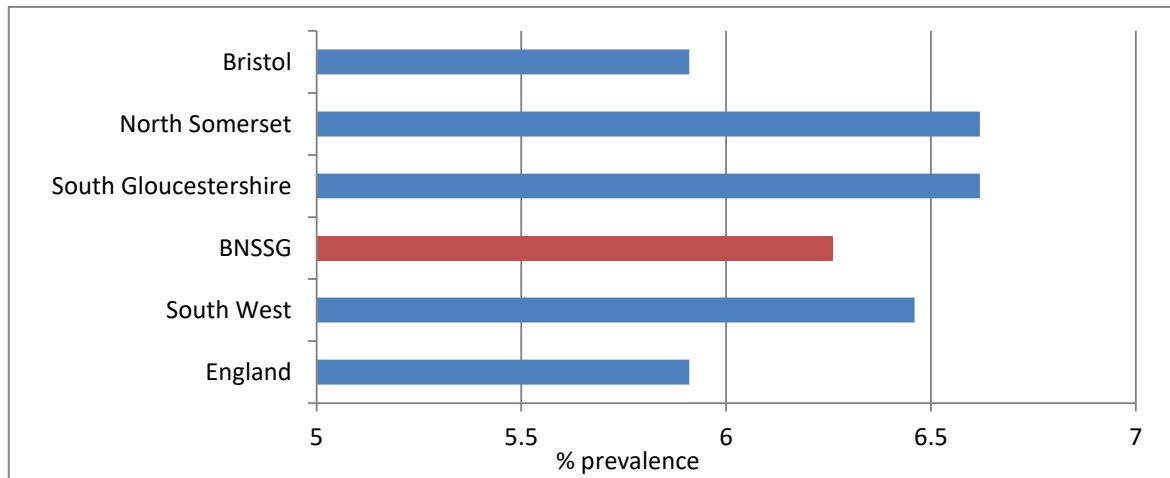
Table 32 Patients with asthma on GP registers

| CCG                   | Number of patients with asthma | Total list size - all ages | % prevalence |
|-----------------------|--------------------------------|----------------------------|--------------|
| Bristol               | 29,385                         | 497,549                    | 5.91         |
| North Somerset        | 14,320                         | 216,364                    | 6.62         |
| South Gloucestershire | 17,540                         | 265,088                    | 6.62         |
| BNSSG                 | 61,245                         | 979,001                    | 6.26         |
| South West            | 213,205                        | 3,300,846                  | 6.46         |
| England               | 3,400,679                      | 57,549,410                 | 5.91         |

Source: QOF data / NHS Digital, 2015-16



Figure 28 Chart of patients with asthma on GP registers



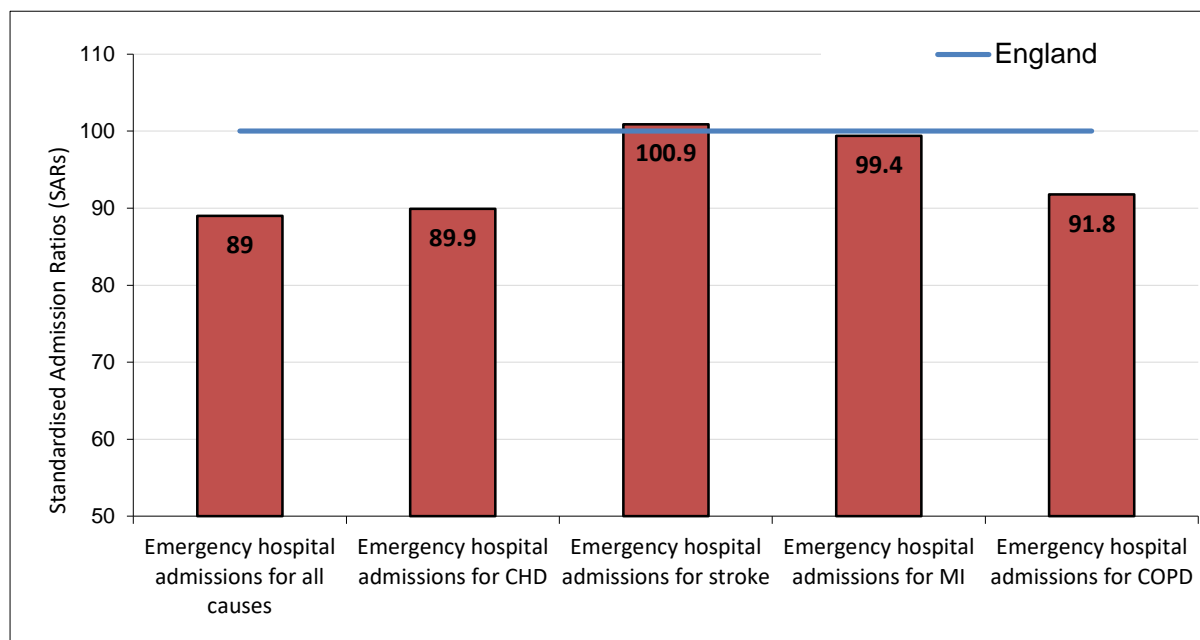
Source: QOF data / NHS Digital, 2015-16

#### 4.2.8 Emergency hospital admissions

Emergency hospital admissions, admissions that are not predicted and happen at short notice because of perceived clinical need, represent around 65% of hospital bed days in England. Avoiding emergency hospital admissions is a major concern for the NHS.



Figure 29 Chart of emergency hospital admissions in BNSSG and England



Source: PHE / HSCIC / estimated from MSOA data, 2010-15

Emergency hospital admissions for all causes in BNSSG are significantly lower than the national average, as are the admissions for CHD and COPD. Admissions for stroke and MI are not significantly different to the average across England.

Table 33 Emergency hospital admissions in BNSSG and England

| Emergency hospital admissions | BNSSG                      |                                      | England                    |                                      |
|-------------------------------|----------------------------|--------------------------------------|----------------------------|--------------------------------------|
|                               | Numbers 2010-11 to 2014-15 | Standardised Admission Ratios (SARs) | Numbers 2010-11 to 2014-15 | Standardised Admission Ratios (SARs) |
| All causes                    | 397,212                    | 89                                   | 26,462,290                 | 100                                  |
| CHD                           | 10,180                     | 89.9                                 | 690,158                    | 100                                  |
| Stroke                        | 6,524                      | 100.9                                | 389,174                    | 100                                  |
| MI                            | 5,279                      | 99.4                                 | 322,544                    | 100                                  |
| COPD                          | 8,498                      | 91.8                                 | 572,993                    | 100                                  |

Source: PHE / HSCIC / estimated from MSOA data, 2010-15



## 4.3 Children and Young People

In BNSSG there are over 165,000 children aged under 14 years, 18% of the population. There are a similar number of young people in the age group 15 to 24 years, bringing the total of children and young people to nearly 300,000 (31%).

### 4.3.1 Low birth weight

Babies born weighing less than 2500g are more likely to need additional health, education and social care support during childhood. Low birth weight might occur as a result of poor health during pregnancy or due to developmental or congenital problems.

In 2015, 3.3% of term births (those born after 37 weeks of pregnancy) were of low birth weight. This is higher than the national average of 2.8%. In South Gloucestershire, the percentage of low birth weight babies is lower than both the national and regional average, with 2.5% low birth weight births in 2015.

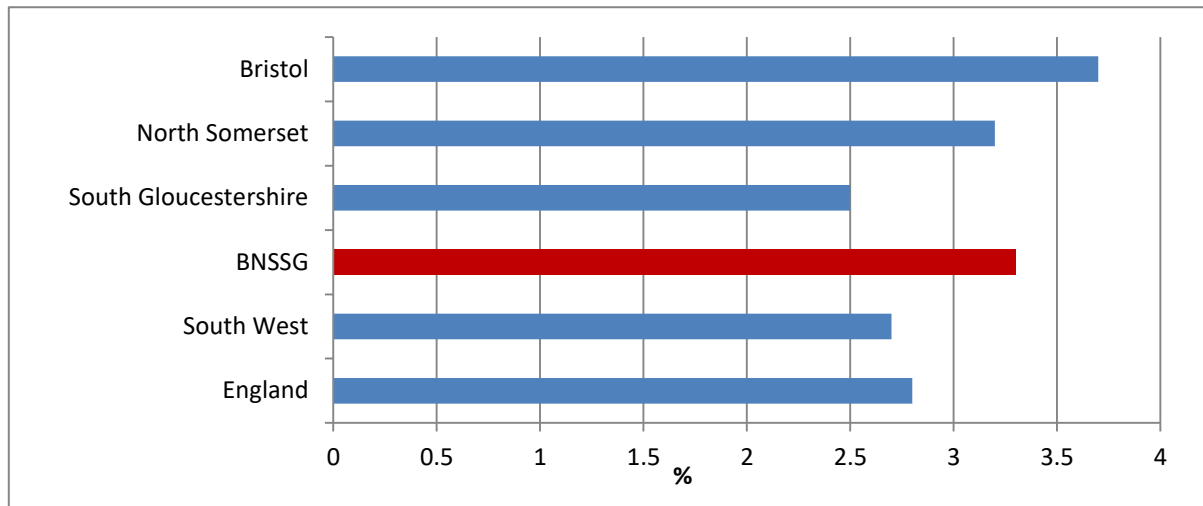
Table 34 Low birth weight births in BNSSG

| Area                  | Low birth weight births | Full term births | % low birth weight births |
|-----------------------|-------------------------|------------------|---------------------------|
| Bristol               | 209                     | 5,643            | 3.7                       |
| North Somerset        | 66                      | 2,057            | 3.2                       |
| South Gloucestershire | 69                      | 2,797            | 2.5                       |
| BNSSG                 | 344                     | 10,497           | 3.3                       |
| South West            | 1,444                   | 53,188           | 2.7                       |
| England               | 16,748                  | 603,647          | 2.8                       |

Source: ONS, 2015



Figure 30 Chart of low birth weight births in BNSSG



Source: ONS, 2015

#### 4.3.2 Infant mortality

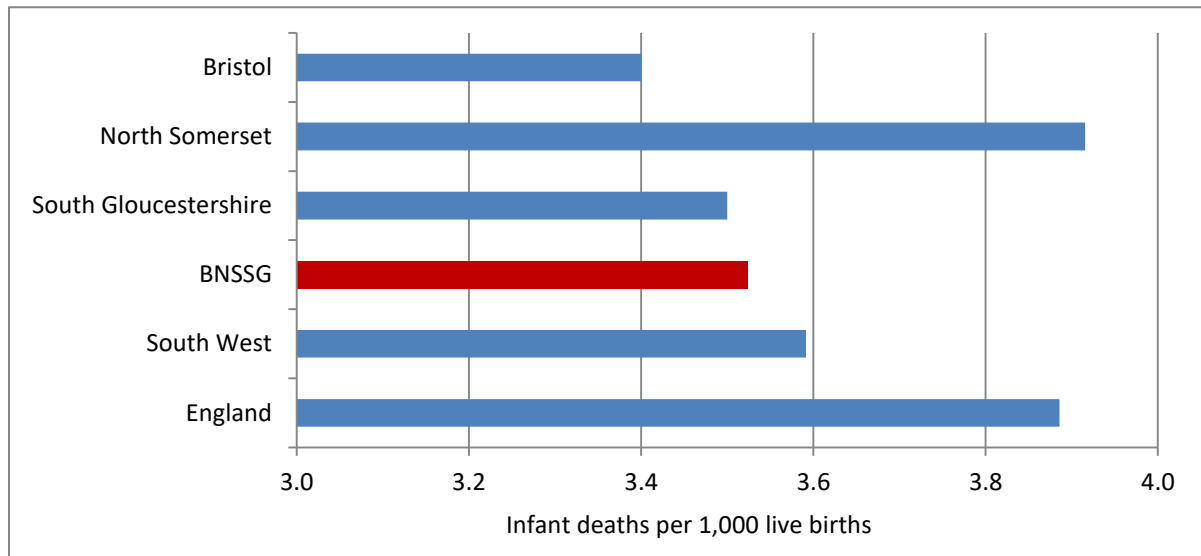
The infant mortality rate is the number of deaths in the first year of life per 1,000 live born children. Infant mortality in England is at an all-time low and is falling for all groups, yet significant inequalities do still remain with higher rates in children born into poverty.

The rate of infant mortality in BNSSG is 3.5 deaths per 1,000 live births (2015), similar to the England average (3.9 deaths per 1,000 births). However, Bristol had a lower than average recorded infant death rate of 3.4 deaths per 1,000 live births in 2015.





Figure 31 Chart of infant deaths in BNSSG



Source: ONS, 2015

Table 35 Infant deaths in BNSSG

| Area                  | Number of deaths under 1 year | Number of live births | Infant deaths per 1,000 live births |
|-----------------------|-------------------------------|-----------------------|-------------------------------------|
| Bristol               | 65                            | 19,220                | 3.4                                 |
| North Somerset        | 26                            | 6,640                 | 3.9                                 |
| South Gloucestershire | 33                            | 9,328                 | 3.5                                 |
| <b>BNSSG</b>          | <b>124</b>                    | <b>35,188</b>         | <b>3.5</b>                          |
| South West            | 629                           | 175,146               | 3.6                                 |
| England               | 7,734                         | 1,990,412             | 3.9                                 |

Source: ONS, 2015

### 4.3.3 Breastfeeding

In BNSSG the percentage of mothers who give breast milk to their babies in the first 48 hours after delivery is 80.9% which is higher than both the South West regional figure and the national average.

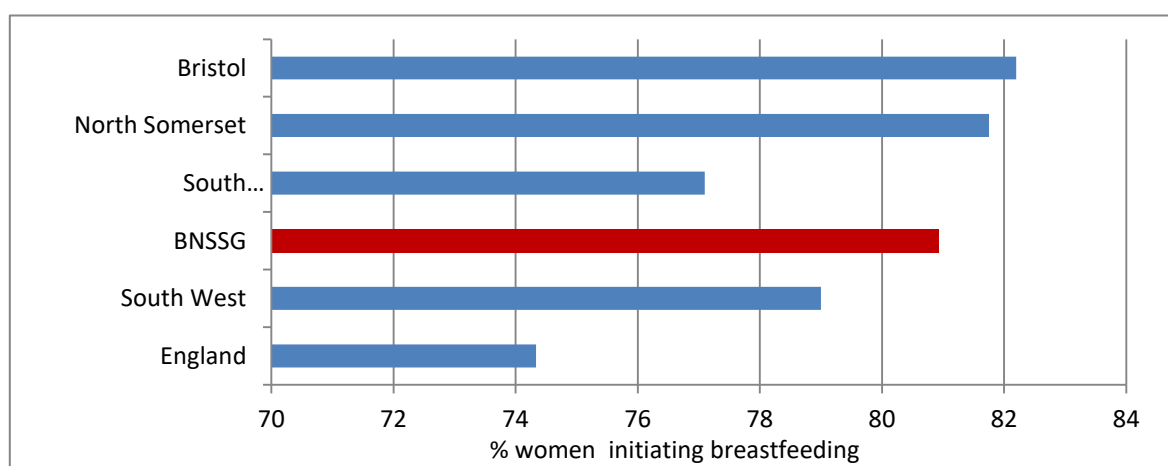


Table 36 Breastfeeding initiation in women across BNSSG in the first 48 hours after delivery

| Area                  | Number of women initiating breastfeeding | Number of maternities | % of women initiating breastfeeding |
|-----------------------|--|-----------------------|-------------------------------------|
| Bristol               | 5,403                                    | 6,572                 | 82.2                                |
| North Somerset        | 1,810                                    | 2,214                 | 81.8                                |
| South Gloucestershire | 2,079                                    | 2,695                 | 77.1                                |
| <b>BNSSG</b>          | <b>9,292</b>                             | <b>11,481</b>         | <b>80.9</b>                         |
| South West            | 44,227                                   | 55,982                | 79.0                                |
| England               | 471,561                                  | 634,378               | 74.3                                |

Source: Health Profiles / Unify2, 2014-15

Figure 32 Chart of breastfeeding initiation in women across BNSSG in the first 48 hours after delivery



Source: Health Profiles / Unify2, 2014-15

#### 4.3.4 Oral and dental health

Oral diseases can have a considerable impact on a child's general health and wellbeing. Poor oral health is associated with being underweight and a failure to thrive, and affects a child's ability to sleep, speak, play and socialise with other children.

The oral health of children in BNSSG is good when compared to the rest of England, with 79.6% of five year olds free from dental decay. Children in Bristol report the highest level of dental decay locally, with only 71.1% of five year olds reported as free from dental decay.

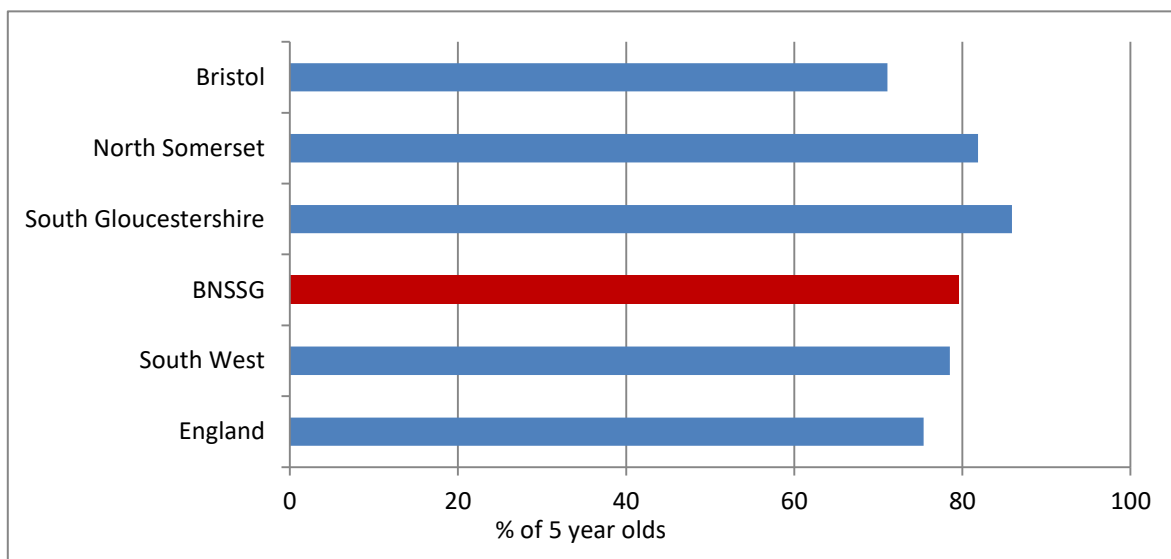


Table 37 Oral and dental health in five year olds across BNSSG

| Area                  | Number of 5 year olds free from obvious dental decay | Number of 5 year olds | Weighted % of 5 year olds free from obvious dental decay |
|-----------------------|--|-----------------------|--|
| Bristol               | 203  | 277                   | 71.1   |
| North Somerset        | 212  | 262                   | 81.9   |
| South Gloucestershire | 238  | 277                   | 85.9   |
| <b>BNSSG</b>          | <b>653</b>   | <b>816</b>            | <b>79.6</b>  |
| South West            | 7,211  | 9,135                 | 78.5   |
| England               | 84,100   | 111,500               | 75.4   |

Source: Dental Public Health Epidemiology Programme for England - oral health survey of 5 year old children, 2015

Figure 33 Chart of the percentage of five year olds reported as free from dental decay across BNSSG



Source: Dental Public Health Epidemiology Programme for England - oral health survey 5 year old children, 2015

#### 4.3.5 Injuries

Emergency hospital admission rates from unintentional or deliberate injuries to children under the age of 14 in BNSSG are similar to national rates. The rate for BNSSG is 103.7 per 10,000 children (2015-16), similar to the rate for England of 104.2 per 10,000.



In the age group 0 to 4 years, the rate of injury is higher, with a rate of 134.8 per 10,000 – higher than the national rate. Similarly, in young people aged 15 to 24 years, the injury rate is 144.1 per 10,000 in BNSSG compared to 134.1 per 10,000 in England.

Table 38 Emergency hospital admission rates from unintentional or deliberate injury to children aged 0 to 4

| Area                  | Number of hospital admissions | Number of children aged 0 to 4 | Crude rate per 10,000 |
|-----------------------|-------------------------------|--------------------------------|-----------------------|
| Bristol               | 472                           | 30,787                         | 153.3                 |
| North Somerset        | 148                           | 12,034                         | 123.0                 |
| South Gloucestershire | 178                           | 16,364                         | 108.8                 |
| BNSSG                 | 798                           | 59,185                         | 134.8                 |
| South West            | 4,155                         | 307,365                        | 135.2                 |
| England               | 44,524                        | 3,434,680                      | 129.6                 |

Source: Hospital Episode Statistics 2015-16

Table 39 Emergency hospital admission rates from unintentional or deliberate injury to children aged 0 to 14

| Area                  | Number of hospital admissions | Number of children aged 0 to 14 | Crude rate per 10,000 |
|-----------------------|-------------------------------|---------------------------------|-----------------------|
| Bristol               | 915                           | 79,380                          | 115.3                 |
| North Somerset        | 340                           | 35,599                          | 95.5                  |
| South Gloucestershire | 435                           | 47,984                          | 90.7                  |
| BNSSG                 | 1,690                         | 162,963                         | 103.7                 |
| South West            | 9,422                         | 897,656                         | 105.0                 |
| England               | 102,036                       | 9,792,438                       | 104.2                 |

Source: Hospital Episode Statistics 2015-16

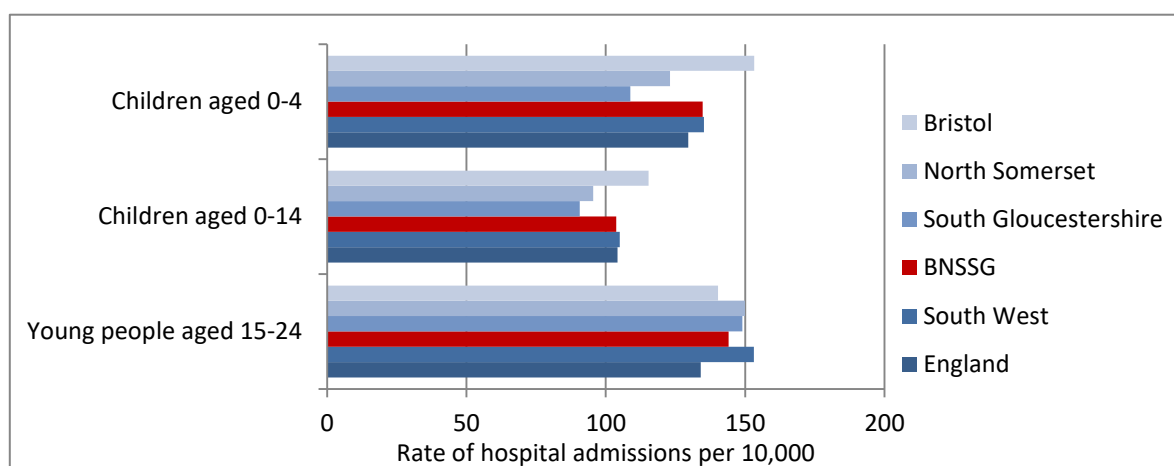


Table 40 Emergency hospital admission rates from unintentional or deliberate injury to young people aged 15 to 24

| Area                  | Number of hospital admissions | Number of young people aged 15 to 24 | Crude rate per 10,000 |
|-----------------------|-------------------------------|--------------------------------------|-----------------------|
| Bristol               | 1,050                         | 74,831                               | 140.3                 |
| North Somerset        | 314                           | 20,951                               | 149.9                 |
| South Gloucestershire | 501                           | 33,626                               | 149.0                 |
| <b>BNSSG</b>          | <b>1,865</b>                  | <b>129,408</b>                       | <b>144.1</b>          |
| South West            | 10,143                        | 662,138                              | 153.2                 |
| England               | 91,236                        | 6,805,546                            | 134.1                 |

Source: Hospital Episode Statistics 2015-16

Figure 34 Chart of emergency hospital admission rates from unintentional or deliberate injury to children and young people aged 0 to 24 per 10,000



Source: Hospital Episode Statistics 2015-16

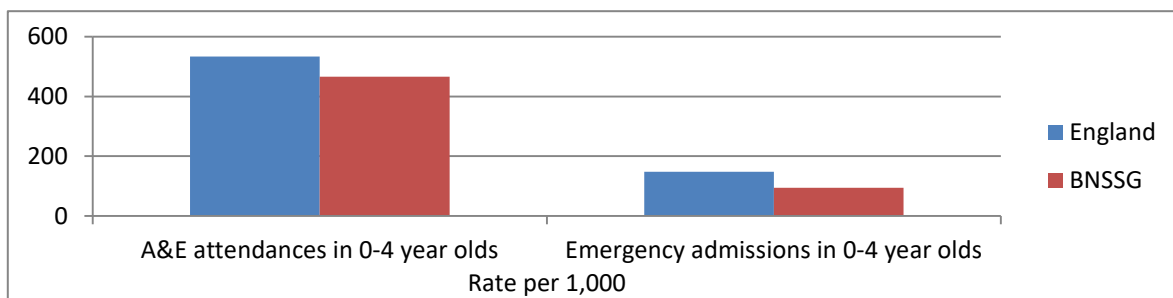
Table 41 A&E attendances and emergency hospital admission for children aged 0 to 4 years in 2012-13 to 2014-15

|                                       | BNSSG  |                | England   |                |
|---------------------------------------|--------|----------------|-----------|----------------|
|                                       | Number | Rate per 1,000 | Number    | Rate per 1,000 |
| A&E attendances in 0-4 year olds      | 82,672 | 466            | 5,463,709 | 533.6          |
| Emergency admissions in 0-4 year olds | 16,711 | 94.2           | 1,508,499 | 147.3          |

Source: PHE / Local Health

The rate of A&E attendances for the under 4s in BNSSG is lower than the national average with 466 per 1,000 young children attending A&E locally compared to 533.6 per 1,000 attending nationally.

Figure 35 Chart of A&E attendances and emergency hospital admission for children aged 0 to 4 years in 2012-13 to 2014-15



Source: PHE / Local Health

## 4.4 Older people

There are 160,700 people aged over 65 in BNSSG. This is 17% of the population, similar to the proportion across England. There are projected to be 27,600 more people over the age of 65 by 2025, and a total of potentially 240,700 by 2039.

### 4.4.1 Dementia

Dementia describes a set of symptoms that may include memory loss and difficulties with thinking, problem-solving or language. Dementia is rare at ages less than 65 years but progressively more common as people age. At the age of 65 years, it is estimated that 1 in 50 people have dementia, but this rises to 1 in 5 for those aged 85 to 89.



In BNSSG the estimated proportion of people over 65 with dementia is 4.35%, similar to the national estimates. There is slight variation within BNSSG, with a higher percentage of people with dementia in Bristol (4.73%) than other areas.

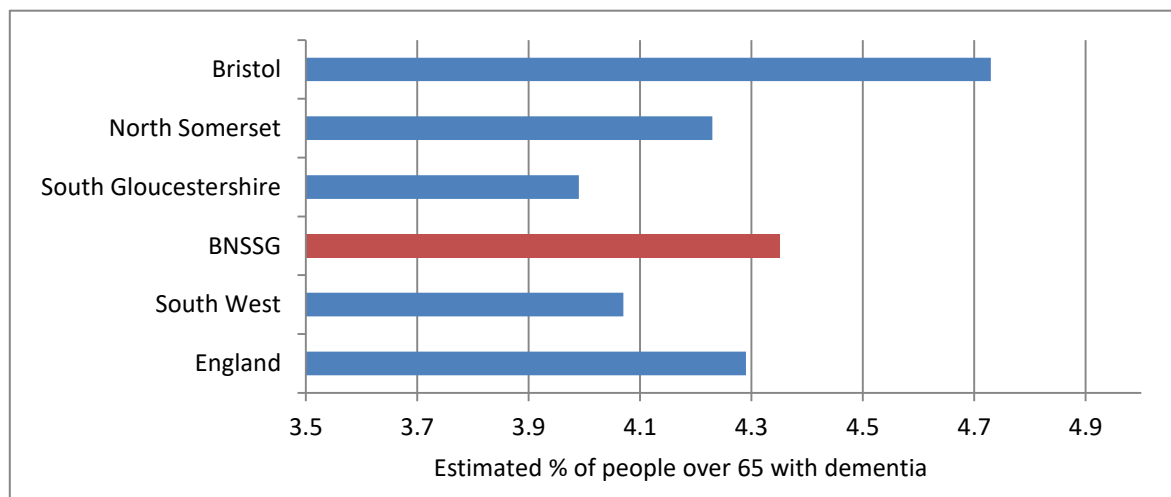
The recorded diagnoses of dementia on practice registers are likely to be an underestimate of the true prevalence. It is suspected that the actual prevalence of dementia in the over 65s is closer to 6%.

Table 42 Recorded prevalence of dementia in people aged 65 and over

| Area                  | Estimated number of people with dementia | Patients aged over 65 | Estimated % of people with dementia |
|-----------------------|--|-----------------------|-------------------------------------|
| Bristol               | 3,026                                    | 63,975                | 4.73                                |
| North Somerset        | 2,107                                    | 49,811                | 4.23                                |
| South Gloucestershire | 1,954                                    | 48,972                | 3.99                                |
| BNSSG                 | 7,087                                    | 162,758               | 4.35                                |
| South West            | 49,366                                   | 1,212,924             | 4.07                                |
| England               | 432,152                                  | 10,073,473            | 4.29                                |

Source: QOF / NHS Digital, April 2017

Figure 36 Chart of recorded prevalence of dementia in people aged 65 and over



Source: QOF / NHS Digital, April 2017

## 4.4.2 Osteoporosis

Osteoporosis is a condition that weakens bones, making them fragile and more likely to break. It develops slowly over several years and is often only diagnosed when a minor fall or sudden impact causes a bone fracture.



The prevalence of osteoporosis in the over 50s in BNSSG (0.46%) is higher than for the same age group across England (0.31%). The highest prevalence locally is found in the population of North Somerset where 0.7% of the over 50 age group have osteoporosis.

Table 43 Osteoporosis prevalence aged over 50 years

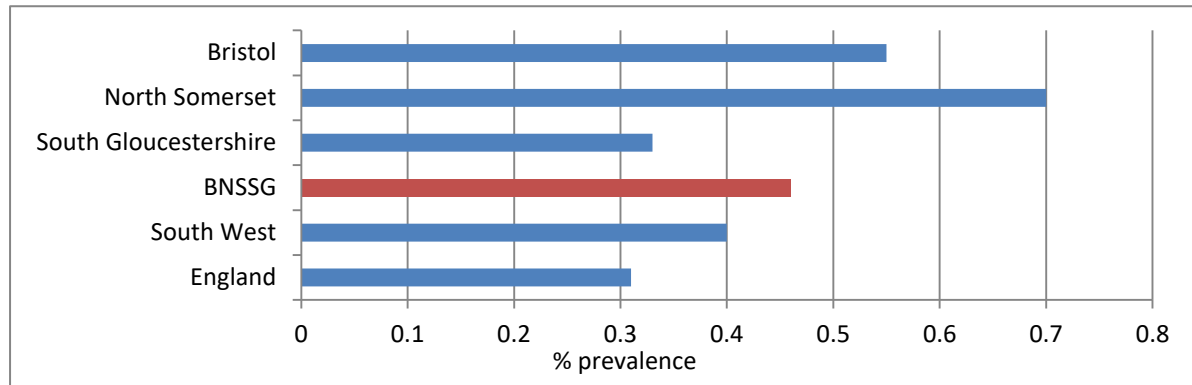
| CCG                   | Number of patients with osteoporosis aged over 50 | Total list size aged over 50 | % prevalence |
|-----------------------|---|------------------------------|--------------|
| Bristol               | 767   | 139,330                      | 0.55         |
| North Somerset        | 646   | 91,943                       | 0.70         |
| South Gloucestershire | 801   | 245,096                      | 0.33         |
| BNSSG                 | 2,214   | 476,369                      | 0.46         |
| South West            | 5,301   | 1,341,910                    | 0.40         |
| England               | 64,426  | 20,473,472                   | 0.31         |

Source: QOF data / NHS Digital, 2015-16





Figure 37 Chart of osteoporosis prevalence aged over 50 years



Source: QOF data / NHS Digital, 2015-16

#### 4.4.3 Arthritis

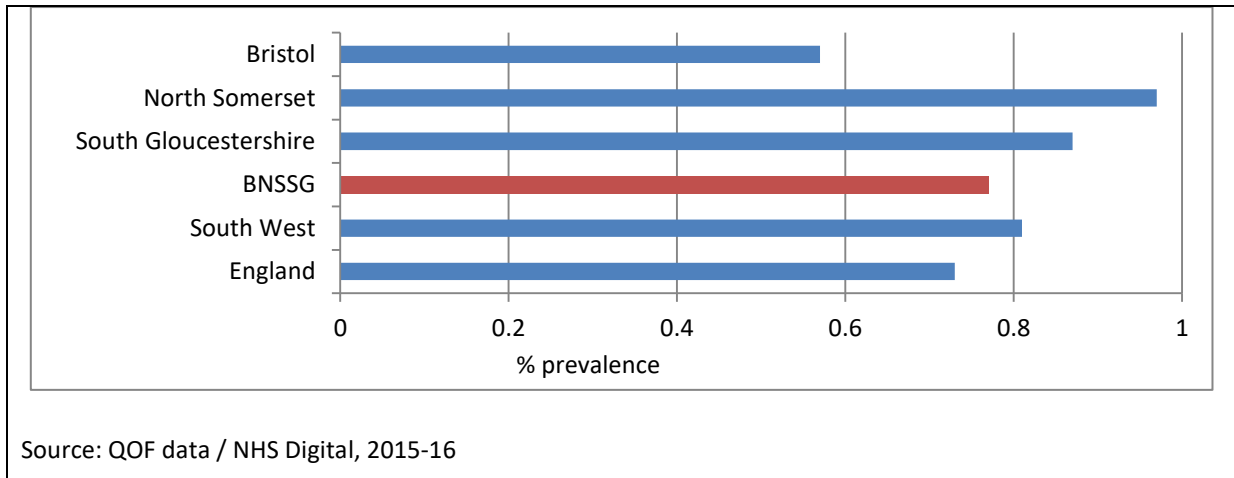
Arthritis is a common condition that causes pain and inflammation in a joint. In BNSSG over 1 million people over the age of 16 are recorded on their GP registers as having rheumatoid arthritis. This equates to 0.77% of the adult patient population and is a similar percentage to the reported prevalence for England.

Table 44 Table of rheumatoid arthritis prevalence in patients over the age of 16 in BNNSG

| CCG                   | Number of patients with rheumatoid arthritis - aged over 16 | Total list size - aged over 16 | % prevalence |
|-----------------------|---|--------------------------------|--------------|
| Bristol               | 2,335   | 408,946                        | 0.57         |
| North Somerset        | 1,735   | 178,102                        | 0.97         |
| South Gloucestershire | 4,052   | 465,401                        | 0.87         |
| BNSSG                 | 8,122   | 1,052,449                      | 0.77         |
| South West            | 22,078  | 2,737,658                      | 0.81         |
| England               | 345,064   | 46,969,403                     | 0.73         |

Source: QOF data / NHS Digital, 2015-16

Figure 38 Chart of rheumatoid arthritis prevalence in patients over the age of 16 in BNNSG



#### 4.4.4 Hip and knee replacements

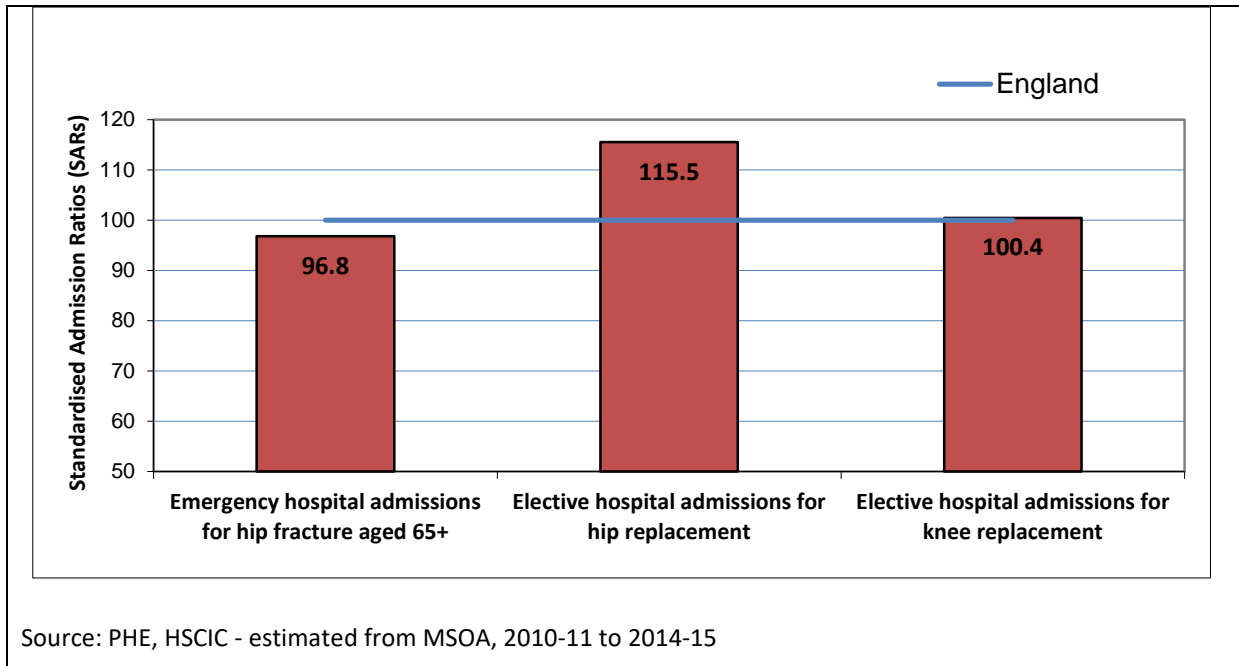
There are significantly fewer emergency hospital admissions for hip fracture in the over 65s in BNSSG when compared to the national admission rate. However, there are significantly more elective hospital admissions for hip replacements in BNSSG when compared to the average for England. There is little difference between the elective hospital admission rate for knee replacements when comparing BNSSG with the rest of the country.

Table 45 Numbers and standardised admission ratios (SARs) of hip fractures, hip replacements and knee replacements in BNSSG

| 2010-11 to 2014-15                                      | BNSSG   |        | England |        |
|---|---------|--------|---------|--------|
|   | Numbers | Ratios | Numbers | Ratios |
| Emergency hospital admissions for hip fracture aged 65+ | 4,598   | 96.8   | 279,803 | 100    |
| Elective hospital admissions for hip replacement        | 6,186   | 115.5  | 329,316 | 100    |
| Elective hospital admissions for knee replacement       | 5,916   | 100.4  | 363,154 | 100    |

Source: PHE, HSCIC - estimated from MSOA, 2010-11 to 2014-15

Figure 39 Chart of standardised admission ratios (SARs) of hip fractures, hip and knee replacements in BNSSG



#### 4.4.5 End of life

Whilst end of life care is not exclusively relevant to older adults, in the UK many more deaths occur in those aged over 60 than under. It is important however to recognise that good end of life care is important for the whole population, and not just for those with age-related terminal illness.

Ensuring that individual preference for the place of death is met is a measure of the quality of end of life care. Dying at home is the preferred place of death for most people. In 2015 BNSSG had a higher percentage of people of all ages dying at home (23.4%) than England (22.8%).

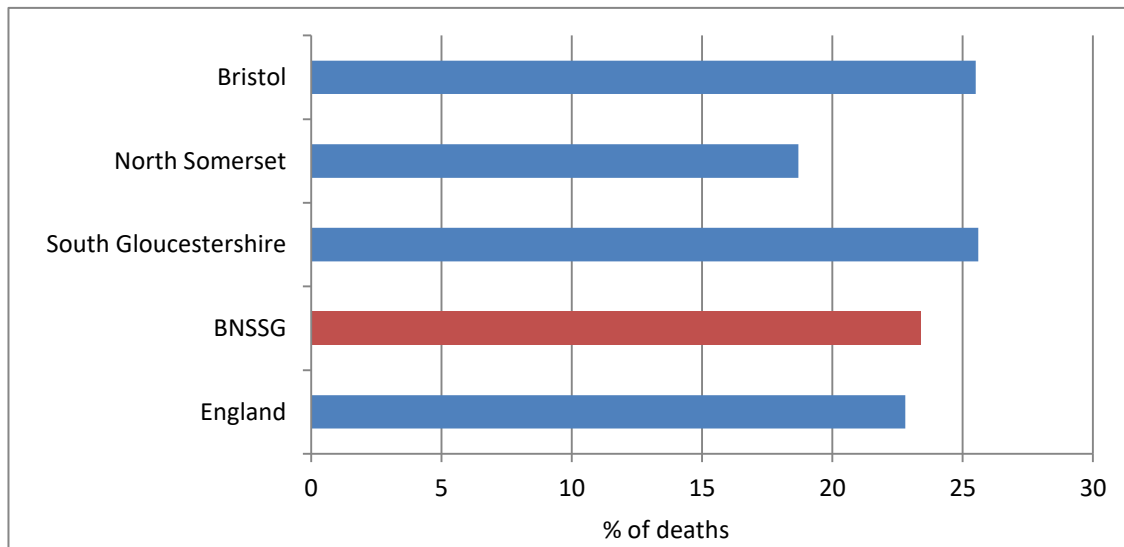
Table 46 Percentage of all deaths where the place of death is home

| CCG                   | %    |
|-----------------------|------|
| Bristol               | 25.5 |
| North Somerset        | 18.7 |
| South Gloucestershire | 25.6 |
| BNSSG                 | 23.4 |
| England               | 22.8 |

Source: ONS, 2015



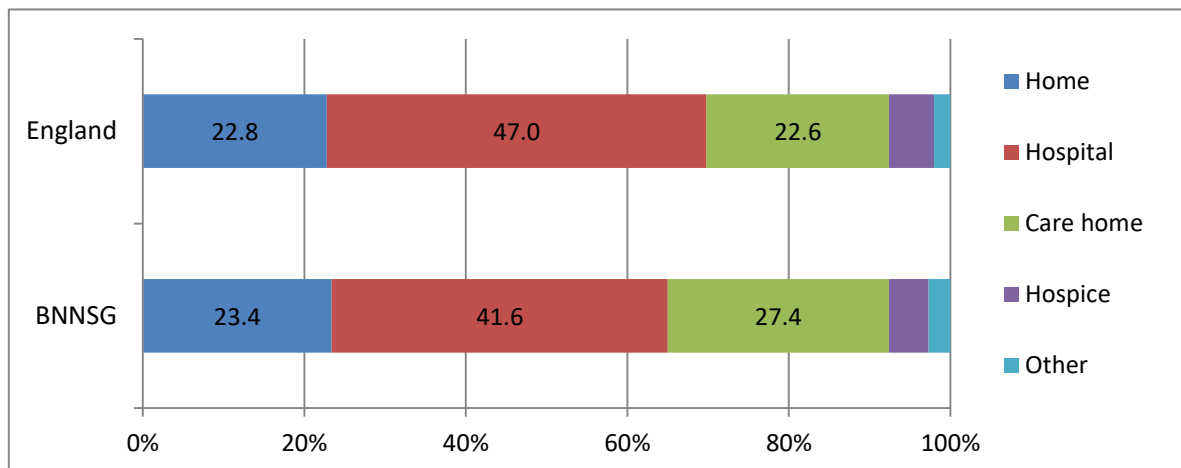
Figure 40 Chart of the percentage of all deaths where the place of death is home



Source: ONS, 2015

During 2015, 41.6% of the BNSSG deaths occurred in hospital (lower than the national average of 47%), 27.4% died in a care home (higher than the national average of 22.6%), 4.9% in a hospice (lower than the national 5.6%) and 2.7% in other places.

Figure 41 Chart of place of death in BNSSG and England



Source: ONS, 2015

## 4.5 Mental Health

Mental health conditions are one of the biggest contributors of years lived with disability in England. They are widespread, often of long duration, and have adverse effects on many areas of people's lives. Improved mental health is associated with a range of positive outcomes including better



physical health and life expectancy, better educational achievement and improved employment rates. Whilst most data on mental health pertain to clinical diagnoses, the importance of public mental health and wellbeing and sub-threshold mental illness in the population should not be overlooked.

### 4.5.1 Depression

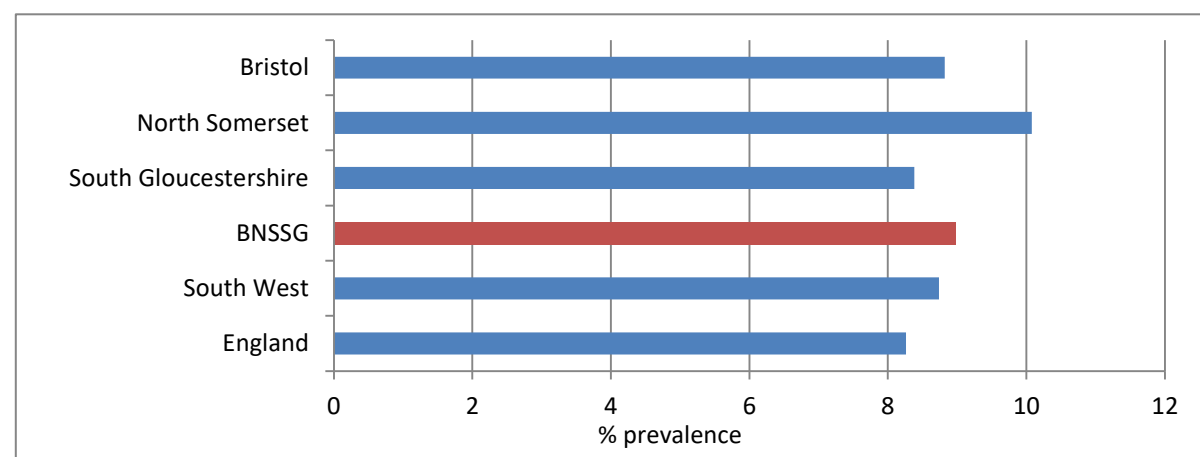
Depression is very common and it is estimated that up to 1 in 10 of people in England will experience depression in their lifetime. 782,215 patients in BNSSG (8.98%) have a diagnosis of depression, which is above the England average (8.26%). The highest prevalence locally is recorded in North Somerset where over 10% of the adult population have depression.

Table 47 Patients over the age of 18 with depression in BNSSG

| CCG                   | Number of patients with depression - aged over 18 | Total list size - aged over 18 | % prevalence |
|-----------------------|---|--------------------------------|--------------|
| Bristol               | 35,249  | 399,665                        | 8.82         |
| North Somerset        | 17,457  | 173,205                        | 10.08        |
| South Gloucestershire | 17,543  | 209,345                        | 8.38         |
| <b>BNSSG</b>          | <b>70,249</b>                                     | <b>782,215</b>                 | <b>8.98</b>  |
| South West            | 232,987   | 2,665,463                      | 8.74         |
| England               | 3,775,531   | 45,685,713                     | 8.26         |

Source: QOF data / NHS Digital, 2015-16

Figure 42 Chart of patients over the age of 18 with depression in BNSSG



Source: QOF data / NHS Digital, 2015-16



## 4.5.2 Self-harm

Self-harm might include self-inflicted injuries such as cutting, burning, biting, thumping oneself or another object, swallowing objects or substances and overdosing. People of all ages and backgrounds may harm themselves, especially at times of pressure and emotional distress. Whilst much self-harm will go on unrecorded by professionals, many individuals require treatment for self-inflicted injuries at hospital. Self-harm is a major public health concern. It accounts for an estimated 200,000 emergency hospital attendances annually in England.

The emergency hospital admissions rate for intentional self-harm is high in BNSSG, higher than the national average. This is particularly evident when comparing rates for female admissions. The age standardised rate per 100,000 for females in BNSSG is 317 and 247.8 for England. The admission rates for Bristol are also higher than the rate for the South West region.

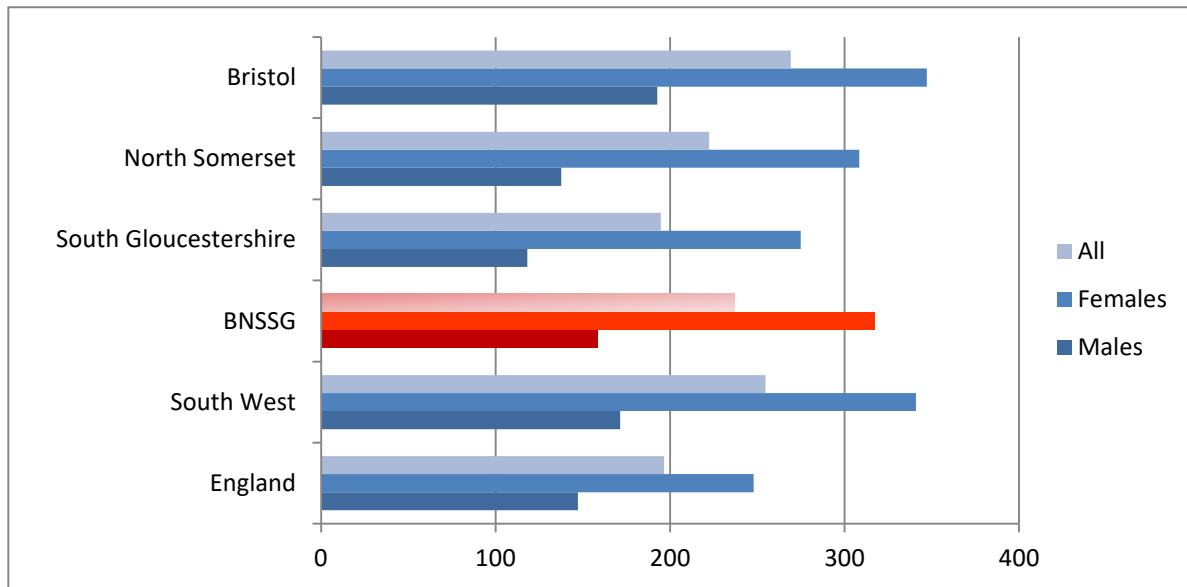
Table 48 Emergency admissions for self-harm in BNSSG

| Area                  | Number of emergency admissions for self-harm |              |              | Directly age standardised rate per 100,000 |              |              |
|-----------------------|--|--------------|--------------|--|--------------|--------------|
|                       | Males  | Females      | All          | Males                                      | Females      | All          |
| Bristol               | 466  | 861          | 1,327        | 192.7                                      | 347.1        | 269.2        |
| North Somerset        | 131  | 294          | 425          | 137.6                                      | 308.4        | 222.4        |
| South Gloucestershire | 165  | 381          | 546          | 118.1                                      | 274.8        | 194.6        |
| <b>BNSSG</b>          | <b>762</b>                                   | <b>1,536</b> | <b>2,298</b> | <b>158.6</b>                               | <b>317.0</b> | <b>236.7</b> |
| South West            | 4,546  | 9,138        | 13,684       | 171.4                                      | 340.8        | 254.7        |
| England               | 40,577                                       | 69,164       | 109,749      | 147.1                                      | 247.8        | 196.5        |

Source: Health Profiles 2015-16 / Hospital Episode Statistics (HES)



Figure 43 Chart of emergency admissions for self-harm in BNSSG



Source: Health Profiles 2015-16 / Hospital Episode Statistics (HES)

### 4.5.3 Suicide

It is estimated that over 1 million people will die by suicide worldwide each year. Most people who choose to end their lives do so for complex reasons. In the UK, research has shown many people who die by suicide have a mental illness, most commonly depression or an alcohol problem.

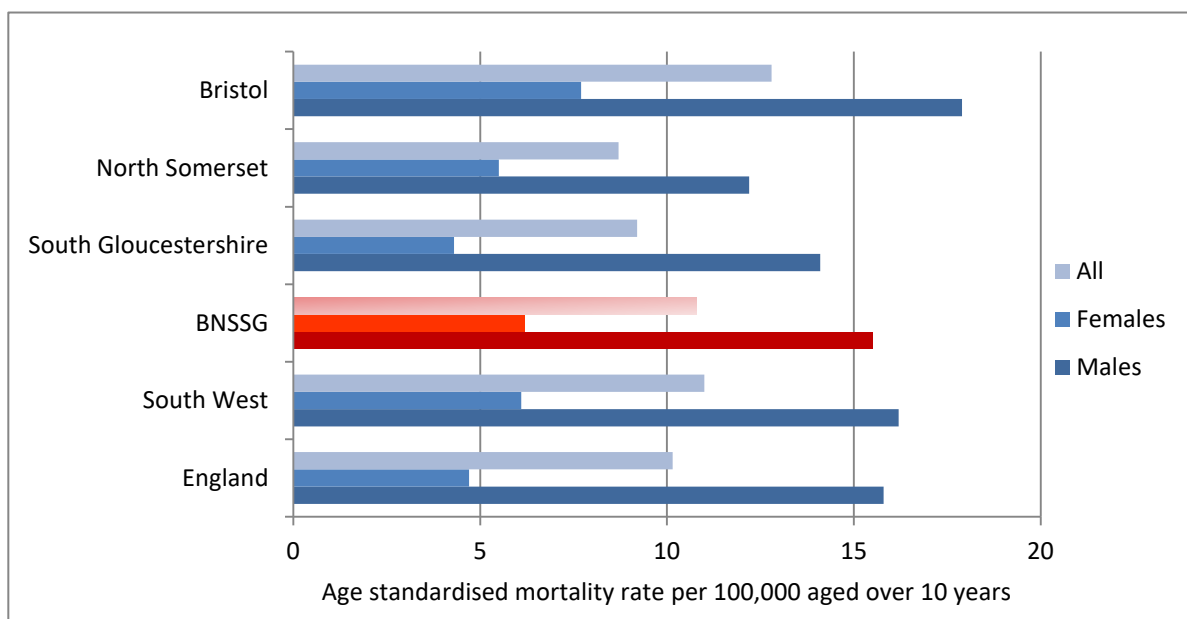
The age-standardised mortality rates for suicides in BNSSG are similar to those recorded for both the South West and England. However, the suicide rates for both males and females are high in Bristol, significantly higher than the national rates.

Table 49 Deaths by suicide and undetermined injury in BNSSG

| Area                  | Number of deaths from suicide and undetermined injury |           |            | Age standardised mortality rate per 100,000 aged over 10 years |            |             |
|-----------------------|---|-----------|------------|--|------------|-------------|
|                       | Males   | Females   | All        | Males  | Females    | All         |
| Bristol               | 102   | 45        | 147        | 17.9   | 7.7        | 12.8        |
| North Somerset        | 32  | 16        | 48         | 12.2   | 5.5*       | 8.7         |
| South Gloucestershire | 49  | 16        | 65         | 14.1   | 4.3*       | 9.2         |
| <b>BNSSG</b>          | <b>183</b>  | <b>77</b> | <b>260</b> | <b>15.5</b>  | <b>6.2</b> | <b>10.8</b> |
| South West            | 1,137   | 453       | 1,590      | 16.2   | 6.1        | 11.0        |
| England               | 10,989  | 3,440     | 14,429     | 15.8   | 4.7        | 10.1        |

Source: Health Profiles / ONS, 2013-15 \* estimates as values not provided in original outputs due to small numbers. Figures are back calculated from values for males and all persons

Figure 44 Chart of mortality rates due to suicide and undetermined injury in BNSSG



Source: Health Profiles / ONS, 2013-15

#### 4.5.4 Mental health services

The percentage of the BNSSG population aged 18-74 years who are in contact with secondary mental health services is lower than that at a regional and national level. In Bristol 4% of the adult population are in contact with mental health services, which is the highest proportion in BNSSG, but still lower than the recorded levels for the South West and England.



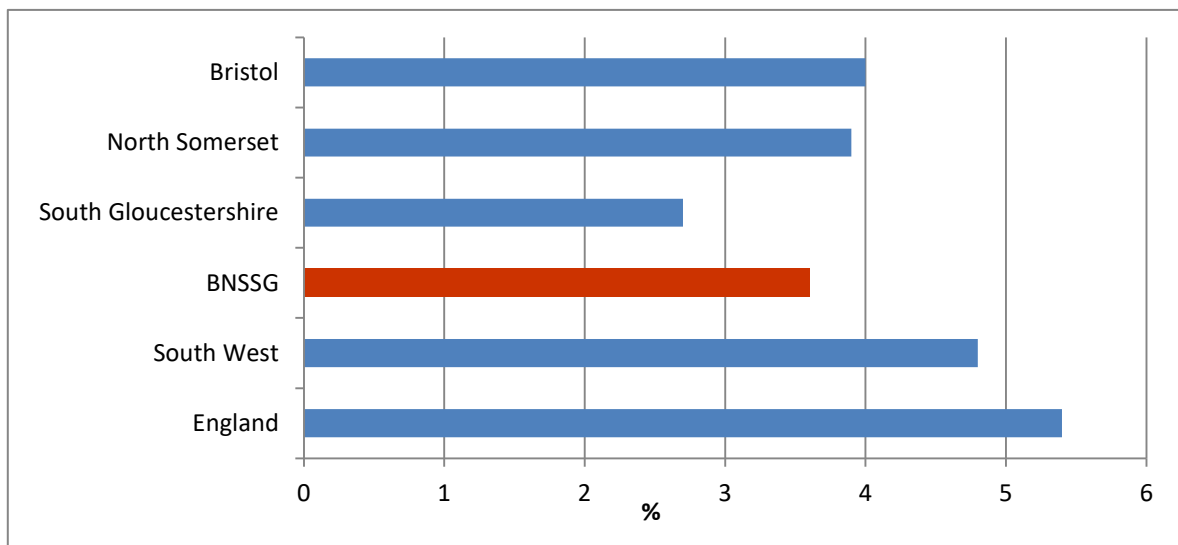


Table 50 Adults in contact with secondary mental health services in BNSSG

| Area                  | Number of people aged 18-74 years in contact with secondary mental health services | Percentage of people aged 18-74 years in contact with secondary mental health services |
|-----------------------|--|--|
| Bristol               | 12,951   | 4.0  |
| North Somerset        | 5,650  | 3.9  |
| South Gloucestershire | 5,150  | 2.7  |
| <b>BNSSG</b>          | <b>23,751</b>  | <b>3.6</b>   |
| South West            | 181,296  | 4.8  |
| England               | 2,057,327  | 5.4  |

Source: HSCIC Indicators Portal (2014-15) Public Health Outcomes Framework

Figure 45 Chart of percentage of adults in contact with secondary mental health services in BNSSG



Source: HSCIC Indicators Portal (2014-15) Public Health Outcomes Framework

## 4.6 Communicable diseases

### 4.6.1 Flu vaccination

Influenza (flu) occurs every year, usually in the winter and is a highly infectious disease with symptoms that come on very quickly. The seasonal flu immunisation programme is delivered between September and January each year targeting specific population groups, including people aged 65 and over.



Table 51 Flu vaccine uptake in individuals aged over 65 years between 1st September – 31st January 2016-17 in a primary care setting

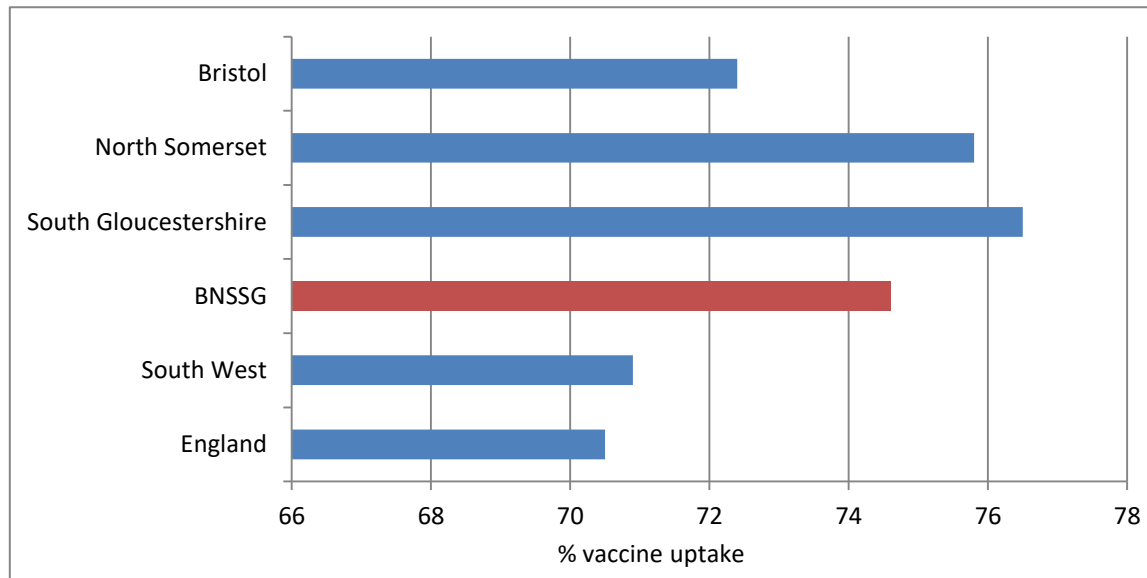
| Area                  | Number of vaccinations administered to population aged over 65 | GP registered population aged over 65 | % vaccinations given to population aged over 65 |
|-----------------------|--|---------------------------------------|---|
| Bristol               | 46,387   | 64,056                                | 72.4  |
| North Somerset        | 33,766   | 44,528                                | 75.8  |
| South Gloucestershire | 35,600   | 46,534                                | 76.5  |
| <b>BNSSG</b>          | <b>115,753</b>   | <b>155,118</b>                        | <b>74.6</b>                                     |
| South West            | 843,169  | 1,189,902                             | 70.9  |
| England               | 7,014,439  | 9,946,930                             | 70.5  |

Source: Public Health Outcomes Framework / ImmForm, 2016-17

The uptake of flu vaccination for those aged 65 or over did not achieve the 75% target in BNSSG as a whole (74.6%), but exceed the target in both North Somerset and South Gloucestershire. The vaccine uptake in Bristol falls short of the national target, reaching 72.4%, but still exceeds both the regional and national coverage levels (70.9% and 70.5% respectively).



Figure 46 Chart of flu vaccine uptake in individuals aged over 65 years



Source: Public Health Outcomes Framework / ImmForm, 2016-17

## 4.6.2 Tuberculosis

Tuberculosis (TB) is caused by the bacterium *Mycobacterium tuberculosis* and is a notifiable disease in the UK. The national TB incidence is higher than most other Western European countries and addressing this has been identified as a public health priority.

Most areas of BNSSG have a relatively low incidence of TB. However the overall rate is 12.7 per 100,000 population compared to national rate of 12 per 100,000 (2013-15). This rate appears higher due to the rate in Bristol, which is almost twice as high as the rate for England, at 20.6 per 100,000. The rates for South Gloucestershire and North Somerset remain quite low.

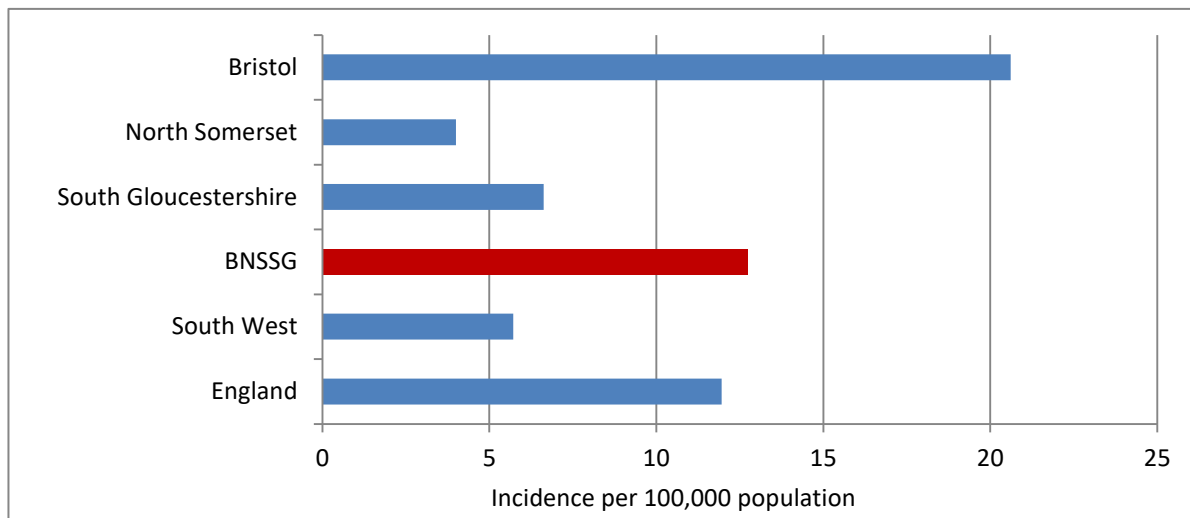
Table 52 TB incidence in the BNSSG population

| Area                  | Number of new notified TB cases | Three year incidence per 100,000 population |
|-----------------------|---------------------------------|---|
| Bristol               | 274                             | 20.6  |
| North Somerset        | 25                              | 4.0   |
| South Gloucestershire | 54                              | 6.6   |
| BNSSG                 | 353                             | 12.7  |
| South West            | 930                             | 5.7   |
| England               | 19,491                          | 12.0  |

Source: Health Profiles / PHE Enhanced TB Surveillance System, 2013-15



Figure 47 Chart of TB incidence per 100,000 population in BNSSG



Source: Health Profiles / PHE Enhanced TB Surveillance System, 2013-15

#### 4.6.3 Sexually transmitted infections

Improving the sexual health of the population is a public health priority. Sexually transmitted infections (STIs) can have lasting long-term and costly complications if not treated and are entirely preventable. At a national level the most commonly diagnosed STIs are chlamydia (half of all new STI diagnoses), genital warts and gonorrhoea.

The diagnosis rate of new STIs in BNSSG (779.1 per 100,000) is similar to the national rate. However, the rate in Bristol is higher at 1,029.8 per 100,000.

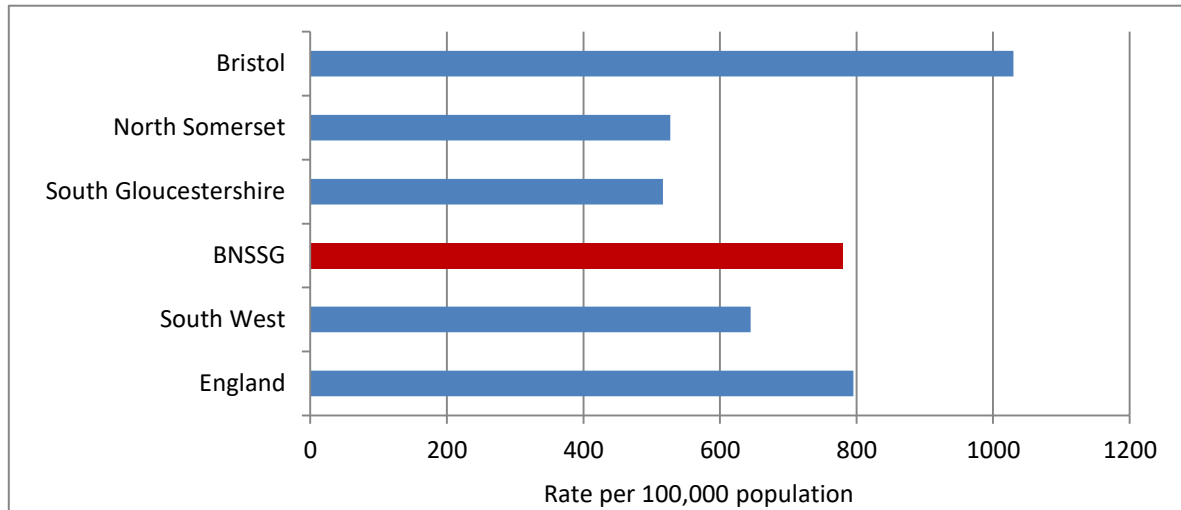
Table 53 STI diagnoses (excluding chlamydia in under 25 year olds) among people accessing specialist and non-specialist sexual health services

| Area                  | Number of new STI diagnoses | Population aged 15 to 64 | Rate per 100,000 population |
|-----------------------|-----------------------------|--------------------------|-----------------------------|
| Bristol               | 3,199                       | 310,640                  | 1,029.8                     |
| North Somerset        | 662                         | 125,547                  | 527.3                       |
| South Gloucestershire | 910                         | 176,196                  | 516.5                       |
| BNSSG                 | 4,771                       | 612,383                  | 779.1                       |
| South West            | 21,953                      | 3,404,570                | 644.8                       |
| England               | 280,622                     | 35,282,317               | 795.4                       |

Source: Health Profiles / Genitourinary Medicine Clinic Activity Dataset, 2016



Figure 48 Chart of STI diagnoses rates (excluding chlamydia in under 25 year olds) per 100,000 of the population aged 15 to 64



Source: Health Profiles / Genitourinary Medicine Clinic Activity Dataset, 2016

#### 4.6.4 HIV

There are significant health benefits for people with HIV (human immunodeficiency virus) being diagnosed earlier and starting treatment quickly, minimising the use of health and social care services. A late diagnosis will mean that the individual has tested positive for HIV at a point when their immune system is severely damaged and their CD4 count has dropped below 350.

All areas of BNSSG have a higher rate of late HIV diagnosis than the national average. 44.5% of the HIV diagnoses in BNSSG are considered late, compared to 40.1% in England. The late diagnosis rate is highest in North Somerset where 56.3% of diagnoses are late.

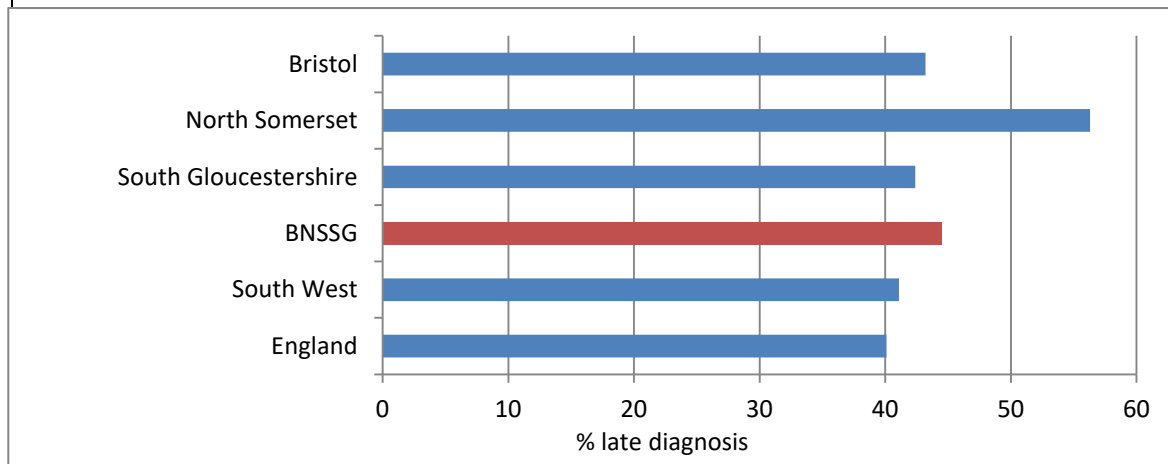
Table 54 Adults with a late diagnosis of HIV infection

| Area                  | Number of adults with late diagnosis of HIV infection | Number of new HIV diagnoses | % late diagnosis |
|-----------------------|---|-----------------------------|------------------|
| Bristol               | 38  | 88                          | 43.2             |
| North Somerset        | 9   | 16                          | 56.3             |
| South Gloucestershire | 14  | 33                          | 42.4             |
| BNSSG                 | 61  | 137                         | 44.5             |
| South West            | 258   | 628                         | 41.1             |
| England               | 5,595   | 13,962                      | 40.1             |

Source: PHOF / PHE, 2013-15



Figure 49 Chart of adults with a late diagnosis of HIV infection



Source: PHOF / PHE, 2013-15

#### 4.6.5 MMR vaccination

The measles, mumps and rubella (MMR) vaccine is a combined vaccine that protects against three separate illnesses – measles, mumps and rubella (German measles) – in a single injection. The full course of MMR vaccination requires two doses.

Measles, mumps and rubella are common, highly infectious conditions that can have serious, potentially fatal, complications, including meningitis, swelling of the brain (encephalitis), and deafness. They can also lead to complications in pregnancy that affect the unborn baby and can lead to miscarriage. The MMR vaccine is given as a single injection to babies as part of their routine vaccination schedule, usually within a month of their first birthday. They will then have a second injection of the vaccine before starting school, usually between the ages of three and five.

All areas of BNSSG have achieved good MMR coverage. Coverage has reached over 90% across BNSSG except for Bristol where the coverage of both vaccines received before the age of five has coverage of 88.2%. The overall BNSSG coverage is higher than the average for England.



Table 55 MMR vaccination coverage of the first dose received between 1 and 2 years of age

| Area                  | No. of children received 1 dose of MMR vaccination | Total number of children having second birthday in time period | % of children received 1 dose of MMR vaccination |
|-----------------------|--|--|--|
| Bristol               | 5,564  | 6,140  | 90.6   |
| North Somerset        | 2,181  | 2,302  | 94.7   |
| South Gloucestershire | 3,029  | 3,192  | 94.9   |
| <b>BNSSG</b>          | <b>10,774</b>                                      | <b>11,634</b>  | <b>92.6</b>                                      |
| South West            | 51,783   | 55,714   | 92.9   |
| England               | 609,777  | 663,413  | 91.9   |

Table 56 MMR vaccination coverage of the second dose received between 1 and 5 years of age

| Area                  | No. of children received 1 dose of MMR vaccination | Total number of children having fifth birthday in time period | % of children received 1 dose of MMR vaccination |
|-----------------------|--|---|--|
| Bristol               | 5,502  | 5,758   | 95.6   |
| North Somerset        | 2,364  | 2,427   | 97.4   |
| South Gloucestershire | 3,114  | 3,176   | 98.0   |
| <b>BNSSG</b>          | <b>10,980</b>                                      | <b>11,361</b>   | <b>96.6</b>                                      |
| South West            | 54,928   | 57,235  | 96.0   |
| England               | 661,359  | 697,664   | 94.8   |

Table 57 MMR vaccination coverage of the two doses received between 1 and 5 years of age

| Area                  | No. of children received 2 doses of MMR vaccination | Total number of children having fifth birthday in time period | % of children received 2 doses of MMR vaccination |
|-----------------------|---|---|---|
| Bristol               | 5,078   | 5,758   | 88.2  |
| North Somerset        | 2,199   | 2,427   | 90.6  |
| South Gloucestershire | 2,963   | 3,176   | 93.3  |
| <b>BNSSG</b>          | <b>10,240</b>                                       | <b>11,361</b>   | <b>90.1</b>                                       |
| South West            | 51,851  | 57,235  | 90.6  |
| England               | 615,520   | 697,664   | 88.2  |



Table 58 MMR vaccination coverage of all doses

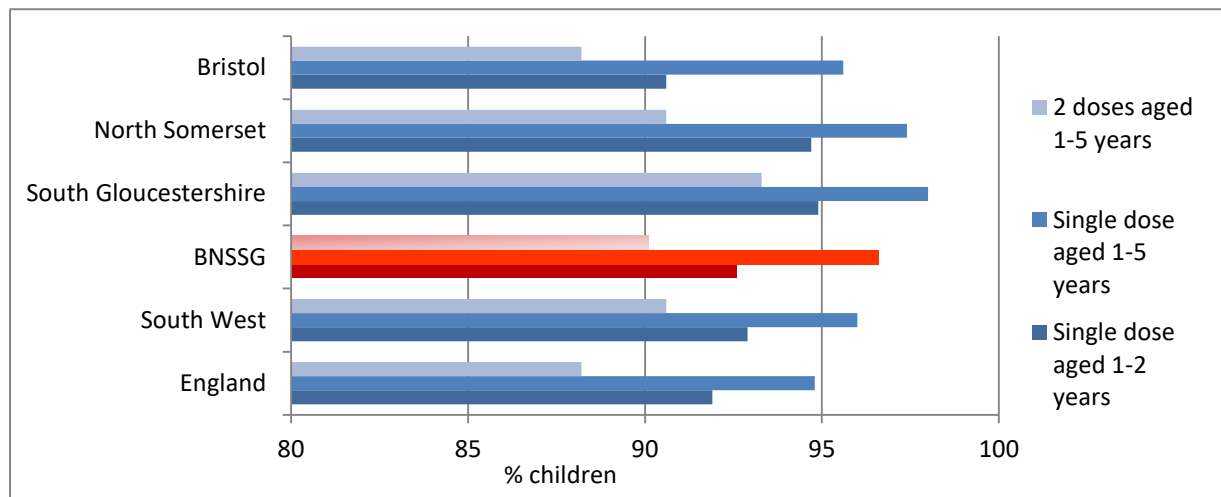
| Area                  | % of children receiving the MMR vaccination |                      |                  |
|-----------------------|---|----------------------|------------------|
|                       | Single dose aged 1-2                        | Single dose aged 1-5 | 2 doses aged 1-5 |
| Bristol               | 90.6  | 95.6                 | 88.2             |
| North Somerset        | 94.7  | 97.4                 | 90.6             |
| South Gloucestershire | 94.9  | 98.0                 | 93.3             |
| <b>BNSSG</b>          | <b>92.6</b>                                 | <b>96.6</b>          | <b>90.1</b>      |
| South West            | 92.9  | 96.0                 | 90.6             |
| England               | 91.9  | 94.8                 | 88.2             |

Source: Public Health Outcomes Framework / Cover of Vaccination Evaluated Rapidly (COVER), 2015-16





Figure 50 Chart of MMR vaccination coverage of all doses by the age of 5 years



Source: Public Health Outcomes Framework / Cover of Vaccination Evaluated Rapidly (COVER), 2015-16

## 4.7 Behavioural and lifestyle factors

Reduction in premature mortality requires action to address the risk factors, social factors, living conditions, as well as targeted and universal health services. It has been estimated the proportion of contribution to premature death as 40% for behavioural and lifestyle factors (including smoking, diet, alcohol, and physical inactivity), 30% genetic, 15% social circumstances, 10% healthcare and 5% environmental exposure.

### 4.7.1 Smoking

Smoking remains one of the biggest causes of death and illness. Every year around 100,000 people in the UK die from smoking, with many more living with debilitating smoking-related illnesses. Smoking increases the risk of developing conditions such as coronary heart disease, heart attack and stroke.

Smoking prevalence in BNSSG is generally lower than the average for England and the South West. 12.6% of the adult population are current smokers, compared to 15.5% nationally. However, 16.3% of the Bristol population are reported as smokers, slightly higher than the national average.

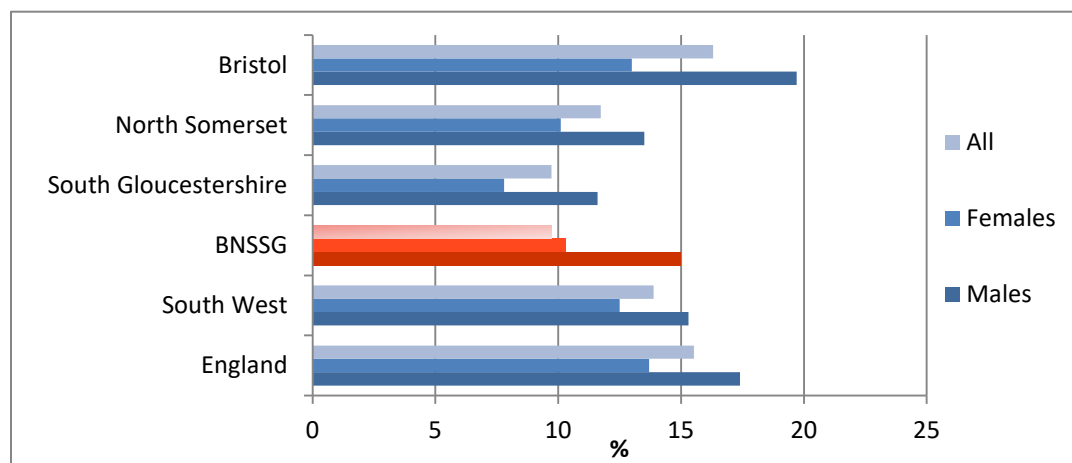


Table 59 Smoking prevalence in the adult population of BNSSG

| Area                  | % males aged over 18 who are current smokers | % females aged over 18 who are current smokers | % adults aged over 18 who are current smokers |
|-----------------------|--|--|---|
| Bristol               | 19.7   | 13.0   | 16.3  |
| North Somerset        | 13.5   | 10.1   | 11.7  |
| South Gloucestershire | 11.6   | 7.8  | 9.7   |
| BNSSG                 | 15.0   | 10.3   | 12.6  |
| South West            | 15.3   | 12.5   | 13.9  |
| England               | 17.4   | 13.7   | 15.5  |

Source: Health Profiles Annual Population Survey 2016

Figure 51 Chart of smoking prevalence in the adult population of BNSSG



Source: Health Profiles Annual Population Survey 2016

The percentage of teenage smokers is quite high in BNSSG with 9.7% of the 15 year old population smoking, compared to the national average of 6.6%. The proportion of 15 year old smokers in Bristol is particularly high at 11.3%.

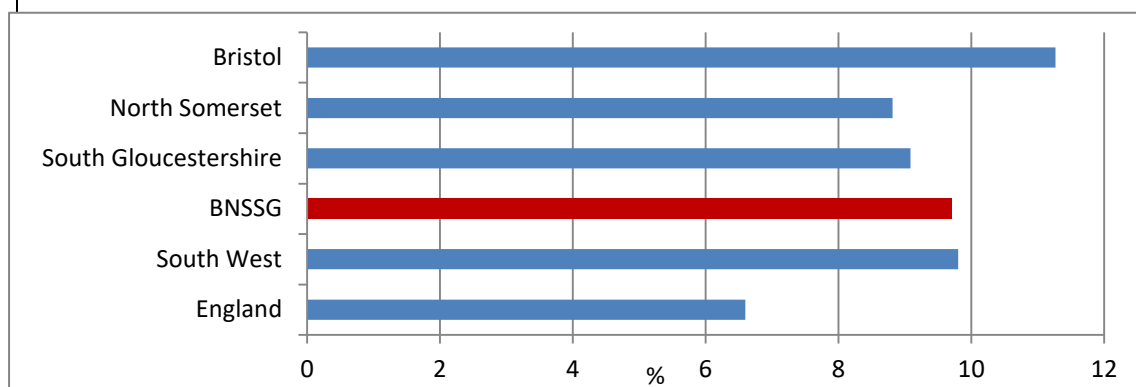


Table 60 Smoking prevalence at the age of 15 in BNSSG

| Area                  | % aged 15 who are current smokers |
|-----------------------|-----------------------------------|
| Bristol               | 11.3                              |
| North Somerset        | 8.8                               |
| South Gloucestershire | 9.1                               |
| <b>BNSSG</b>          | <b>9.7</b>                        |
| South West            | 9.8                               |
| England               | 6.6                               |

Source: Public Health Outcomes Framework / What About YOUth (WAY) survey, 2014-15

Figure 52 Chart of smoking prevalence at the age of 15 in BNSSG



Source: Public Health Outcomes Framework / What About YOUth (WAY) survey, 2014-15

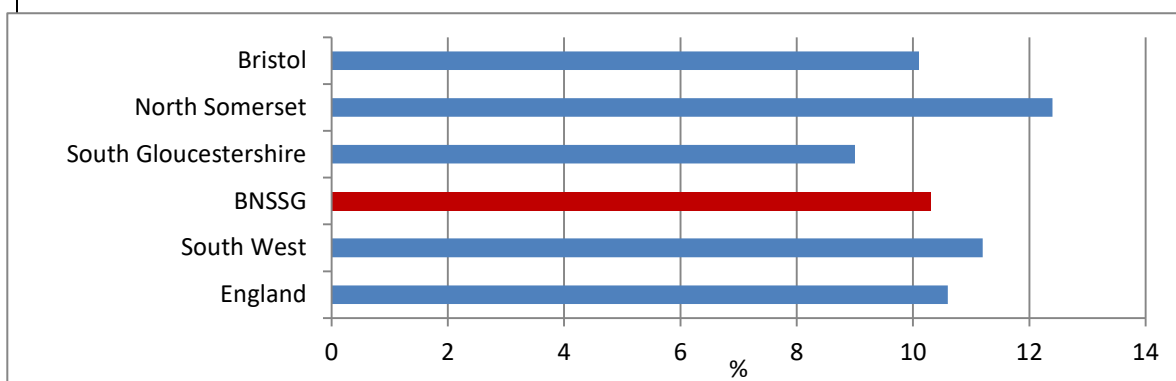
The proportion of new mothers smoking at the time of delivery is 10.3% in BNSSG, almost the same as in England. The percentage is slightly higher in North Somerset (12.4%), but lower in Bristol and South Gloucestershire.

Table 61 Smoking at delivery by new mothers as a percentage of all maternities

| Area                  | Number of women known to smoke at time of delivery | Number of maternities | % smoking at time of delivery |
|-----------------------|--|-----------------------|-------------------------------|
| Bristol               | 637  | 6,286                 | 10.1                          |
| North Somerset        | 271  | 2,177                 | 12.4                          |
| South Gloucestershire | 237  | 2,641                 | 9.0                           |
| <b>BNSSG</b>          | <b>1,145</b>                                       | <b>11,104</b>         | <b>10.3</b>                   |
| South West            | 6,191  | 55,429                | 11.2                          |
| England               | 67,195   | 631,225               | 10.6                          |

Source: Health Profiles / NHS Digital, 2015-16

Figure 53 Chart of smoking at delivery by new mothers as a percentage of all maternities



Source: Health Profiles / NHS Digital, 2015-16

## 4.7.2 Alcohol

Excessive alcohol drinking has negative effects on health and on crime and is recognised as a major cause of a wide range of diseases and injuries.

### *Binge drinking*

Binge drinking usually refers to drinking lots of alcohol in a short space of time or drinking to get drunk. In BNSSG nearly a quarter of the adult population (22.7%) report binge drinking, which is higher than the average nationally (20%).



Table 62 Binge drinking adults

|                       | BNSSG   |                       | England   |                       |
|-----------------------|---------|-----------------------|-----------|-----------------------|
|                       | Number  | % of adult population | Number    | % of adult population |
| Binge drinking adults | 163,231 | 22.7%                 | 8,290,798 | 20.0%                 |

Source: PHE, estimated from MSOA level data, 2006-08

### *Hospital stays for alcohol related harm*

The rate of hospital admissions attributable to alcohol is high for BNSSG and particularly high for Bristol. Across BNSSG the rate of admissions is 708.5 per 100,000 compared to a national average of 646.6 per 100,000. In Bristol the rate is 801.8 per 100,000 whilst North Somerset and South Gloucestershire have estimate much lower than the national average.

Table 63 Admissions to hospital where the primary or secondary diagnosis is attributable to alcohol

| Area                  | Number of alcohol related admissions | Mid-year population estimate | Directly age standardised rate per 100,000 |
|-----------------------|--------------------------------------|------------------------------|--|
| Bristol               | 3,111                                | 449,328                      | 801.8                                      |
| North Somerset        | 1,326                                | 209,944                      | 616.4                                      |
| South Gloucestershire | 1,671                                | 274,661                      | 626.4                                      |
| BNSSG                 | 6,108                                | 933,933                      | 708.5                                      |
| South West            | 35,753                               | 5,471,180                    | 650.1                                      |
| England               | 339,282                              | 54,786,327                   | 646.6                                      |

Source: Health Profiles / Hospital Episode Statistics (HES), 2015-16

The rates are higher for males in all areas, reaching a rate of 975.3 per 100,000 in Bristol. The BNSSG estimated rate is 859.9 per 100,000 compared to a rate of 573.7 per 100,000 for females.

Table 64 Admissions to hospital attributable to alcohol by gender

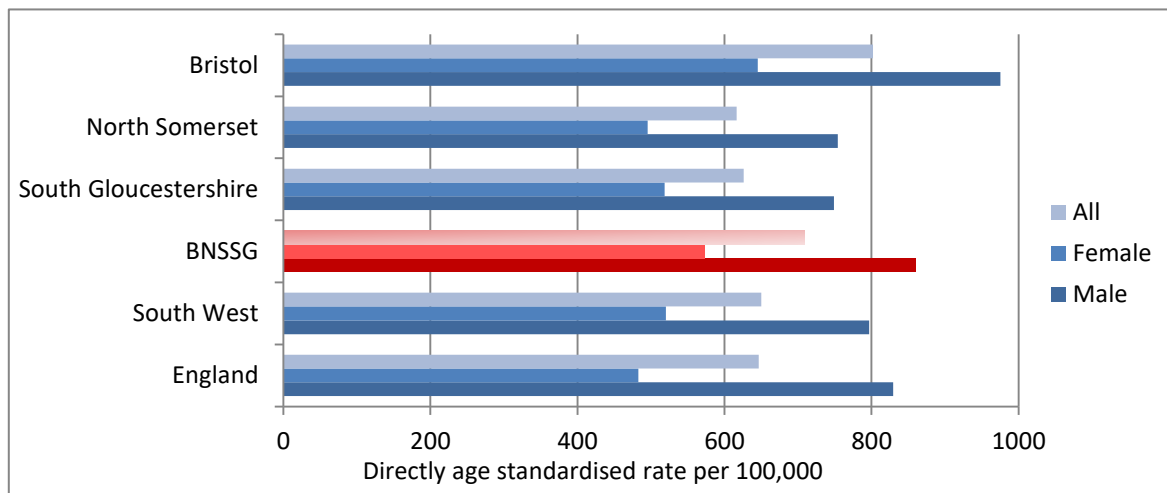
| Area                  | Directly age standardised rate per 100,000 | Directly age standardised rate per 100,000 | Directly age standardised rate per 100,000 |
|-----------------------|--|--|--|
|                       | Males                                      | Females                                    | All  |
| Bristol               | 975.3                                      | 645.3                                      | 801.8                                      |
| North Somerset        | 754.2                                      | 495.3                                      | 616.4                                      |
| South Gloucestershire | 749.1                                      | 518.5                                      | 626.4                                      |



|            |       |       |       |
|------------|-------|-------|-------|
| BNSSG      | 859.9 | 573.7 | 708.5 |
| South West | 796.7 | 520.2 | 650.1 |
| England    | 829.5 | 482.7 | 646.6 |

Source: Health Profiles / Hospital Episode Statistics (HES), 2015-16

Figure 54 Chart of admissions to hospital where the primary or secondary diagnosis is attributable to alcohol



Source: Health Profiles / Hospital Episode Statistics (HES), 2015-16

### 4.7.3 Substance misuse

Opiates, including heroin, and crack have historically been the most prominent drugs used by people seeking specialist drug treatment and are closely linked to poor health. People who inject drugs are particularly vulnerable to a wide range of viral and bacterial infections and experience elevated risk of overdose.

The estimated rate of opiate and crack use in Bristol is significantly higher than the national average, compared to a lower than average use in South Gloucestershire. North Somerset has a comparable level of use to the national average



Table 65 Estimated use of opiates and crack

| Area                  | Estimated use of opiates and/or crack cocaine<br>Rate per 1,000 | Estimate of injecting of opiates and/or crack cocaine<br>Rate per 1,000 |
|-----------------------|---|---|
| Bristol               | 18.0  | 5.04  |
| North Somerset        | 7.9   | 3.33  |
| South Gloucestershire | 5.2   | 1.15  |
| England               | 8.4   | 2.49  |

Source: Healthier Lives / PHE / PHOF, 2015-16

#### 4.7.4 Excess weight

The prevalence of obesity is a major public health challenge. Obesity increases the risk of death from a number of conditions, including cancer, heart disease and stroke, and is associated with increased risk of poor physical, mental and social health.

Certain population groups are disproportionately affected by excess weight, including those from low income families, some ethnic groups and people with physical and learning difficulties. Obesity reduces life expectancy by between 3 and 13 years.

##### *Excess weight in children*

Children are classified as overweight, including obese, if their BMI is on or above the 85<sup>th</sup> percentile of the British growth reference according to age and sex. Obesity is defined as a BMI at or above the 95<sup>th</sup> percentile for children. As with adults, childhood obesity is substantially higher in more deprived areas.

In 2015-16, 20.9% of reception age children in BNSSG were overweight or obese. This is lower than the South West and England averages. In Year 6 age children, 31.8% were overweight or obese. This figure is lower than the England average, but higher than the average for the South West. It also means that by the age of 11, nearly 1 in 3 of the children in BNSSG weigh more than is healthy.

In addition, more than 1 in 6 (17.9%) of the children in BNSSG are classifiable as obese, higher than the regional average. In Bristol, this rate rises to 21.2% (1 in 5).

Table 66 Children aged 4-5 or 10-11 classified as overweight or obese

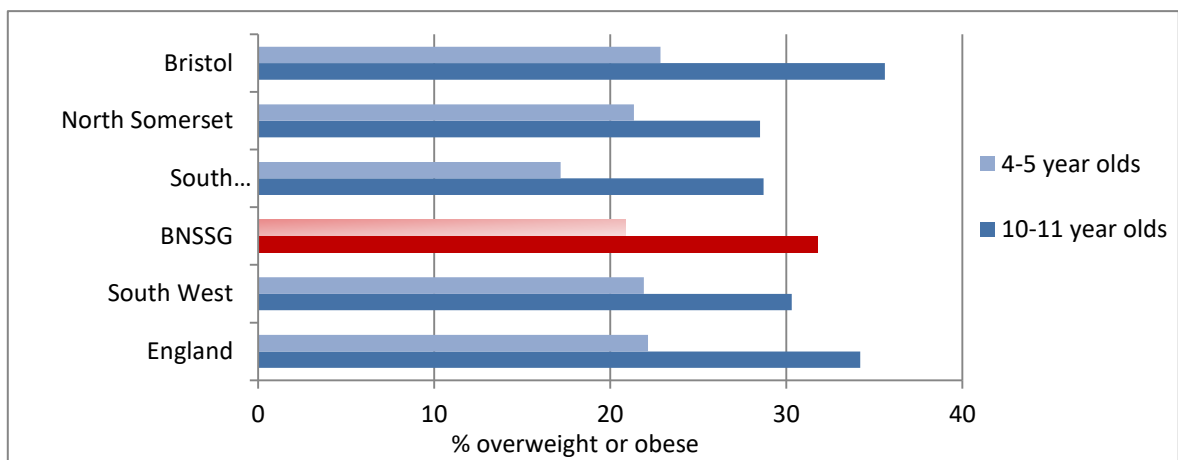
| Area           | % overweight or obese<br>4-5 year olds | % overweight or obese<br>10-11 year olds | % obese<br>10-11 year olds |
|----------------|--|--|----------------------------|
| Bristol        | 22.9                                   | 35.6                                     | 21.2                       |
| North Somerset | 21.4                                   | 28.5                                     | 14.6                       |



|                       |             |             |             |
|-----------------------|-------------|-------------|-------------|
| South Gloucestershire | 17.2        | 28.7        | 15.5        |
| <b>BNSSG</b>          | <b>20.9</b> | <b>31.8</b> | <b>17.9</b> |
| South West            | 21.9        | 30.3        | 16.3        |
| England               | 22.1        | 34.2        | 19.8        |

Source: National Child Measurement Programme / Public Health Outcomes Framework, 2015-16

Figure 55 Chart of children aged 4-5 or 10-11 classified as overweight or obese



Source: National Child Measurement Programme / Public Health Outcomes Framework, 2015-16

### Excess weight in adults

In 2013-15, 61.3% of adults in BNSSG were estimated to be either overweight or obese. This is slightly lower than the South West average of 64.7% and the England average of 64.8%, but still represents nearly two thirds of the adult population. The proportion of adults in Bristol classified as either overweight or obese is lower at 57.8%.

Table 67 Adults classified as overweight or obese

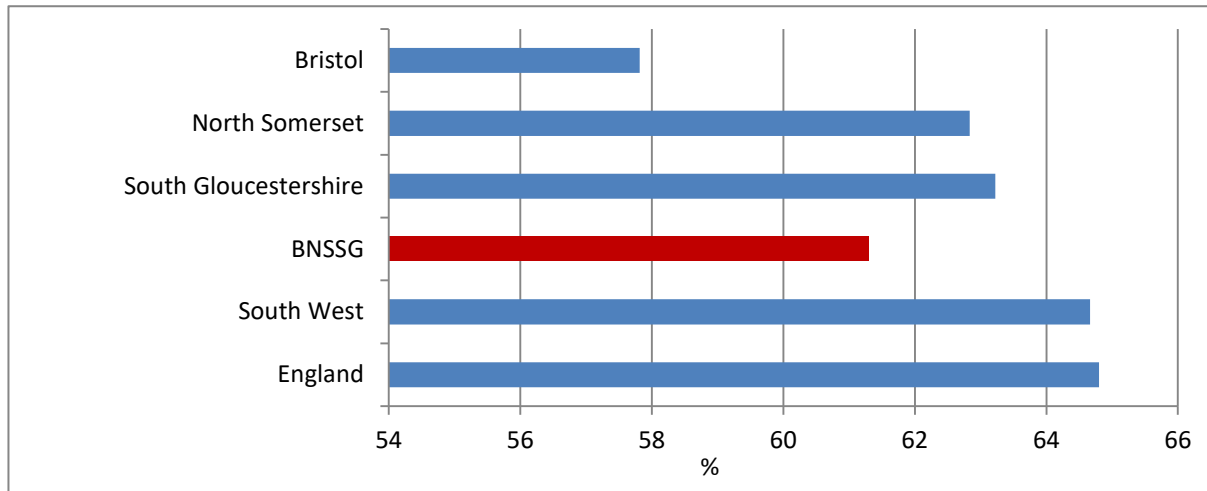
| Area                  | % of overweight adults |
|-----------------------|------------------------|
| Bristol               | 57.8                   |
| North Somerset        | 62.8                   |
| South Gloucestershire | 63.2                   |
| <b>BNSSG</b>          | <b>61.3</b>            |
| South West            | 64.7                   |
| England               | 64.8                   |

Source: Health Profiles / Active People Survey, 2013-15





Figure 56 Chart of adults classified as overweight or obese



Source: Health Profiles / Active People Survey, 2013-15

According to GP practice registers, the proportion of adults classified as obese in BNSSG is 8.19%, a little lower than the national average, but still nearly 1 in 10. It should be noted that obesity prevalence in the GP register (QOF) records is generally regarded as an underestimate of the true levels of obesity in the population.

Table 68 Patients aged 18 and over with a BMI greater than or equal to 30, classified as obese, in the previous 12 months and recorded on GP registers

| CCG                   | Number    | %    |
|-----------------------|-----------|------|
| Bristol               | 30,514    | 7.63 |
| North Somerset        | 14,825    | 8.56 |
| South Gloucestershire | 18,691    | 8.93 |
| BNSSG                 | 64,030    | 8.19 |
| England               | 4,317,919 | 9.45 |

Source: QOF, 2015-16

#### 4.7.5 Diet

Achieving a healthy diet involves consuming a wide range of foods and limiting intake of foods high in fat, sugar and salt. Eating a lot of high-sugar foods and drinks is likely to have an impact on levels of obesity and type 2 diabetes.

Within BNSSG, over half of adults (55.3%) meet the recommended five or more portions of fruit and vegetables a day target. This is a similar rate to the national average (52.3%).

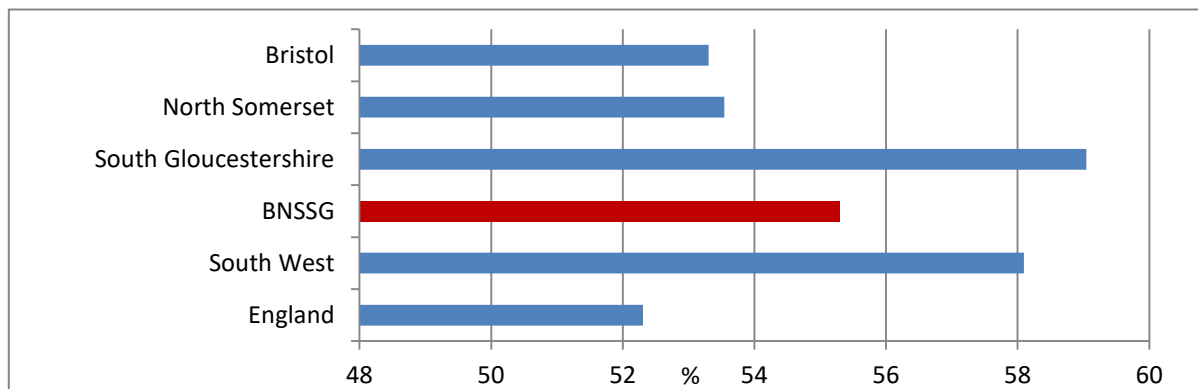


Table 69 The proportion of the population reporting to eat five or more portions of fruit and vegetables on a usual day

| Area                  | % eating 5 portions of fruit and vegetables a day |
|-----------------------|---|
| Bristol               | 53.3  |
| North Somerset        | 53.5  |
| South Gloucestershire | 59.0  |
| <b>BNSSG</b>          | <b>55.3</b>                                       |
| South West            | 58.1  |
| England               | 52.3  |

Source: Public Health Outcomes Framework / Sport England Active People Survey, 2015

Figure 57 Chart of adults reporting to eat five or more portions of fruit and vegetables each day



Source: Public Health Outcomes Framework / Sport England Active People Survey, 2015

#### 4.7.6 Physical activity

The adult population of BNSSG generally report being very active. Data on physical activity are limited in their reliability as they use self-report measures, which are known to over-estimate the amount of physical activity actually undertaken.

National survey data indicates that 61.1% of adults in BNSSG are considered active, which is significantly higher than the national average (57%). Each individual area of BNSSG exceeds the national level of physical activity, with the proportion of physically active adults in Bristol reaching 62.2%.

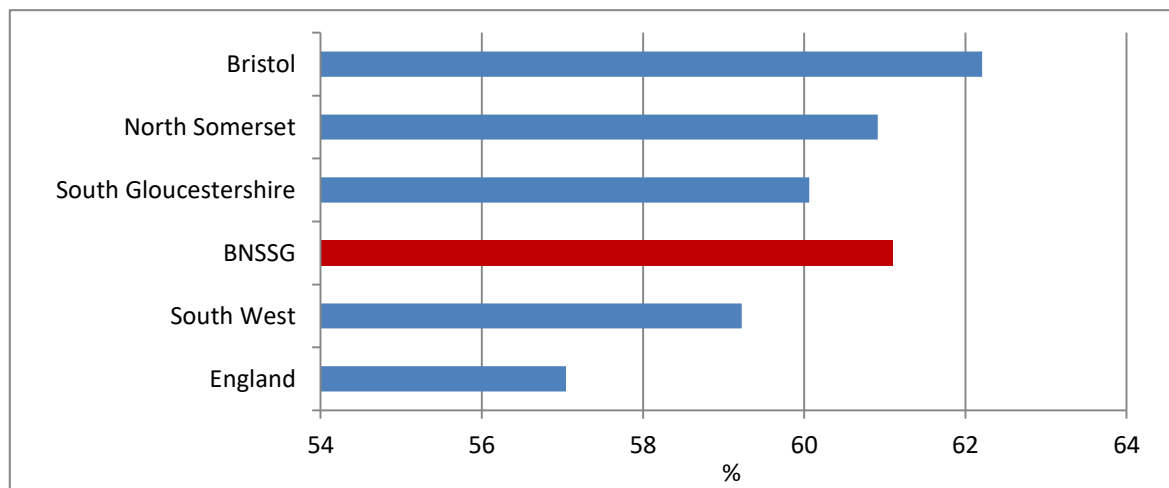


Table 70 Physically active adults in BNSSG

| Area                  | % of physically active adults |
|-----------------------|-------------------------------|
| Bristol               | 62.2                          |
| North Somerset        | 60.9                          |
| South Gloucestershire | 60.1                          |
| <b>BNSSG</b>          | <b>61.1</b>                   |
| South West            | 59.2                          |
| England               | 57.0                          |

Source: Public Health Outcome Framework / Active People Survey, Sport England, 2015

Figure 58 Chart of adults aged 16 and over doing at least 150 minutes of at least moderate intensity physical activity per week



Source: Public Health Outcome Framework / Active People Survey, Sport England, 2015

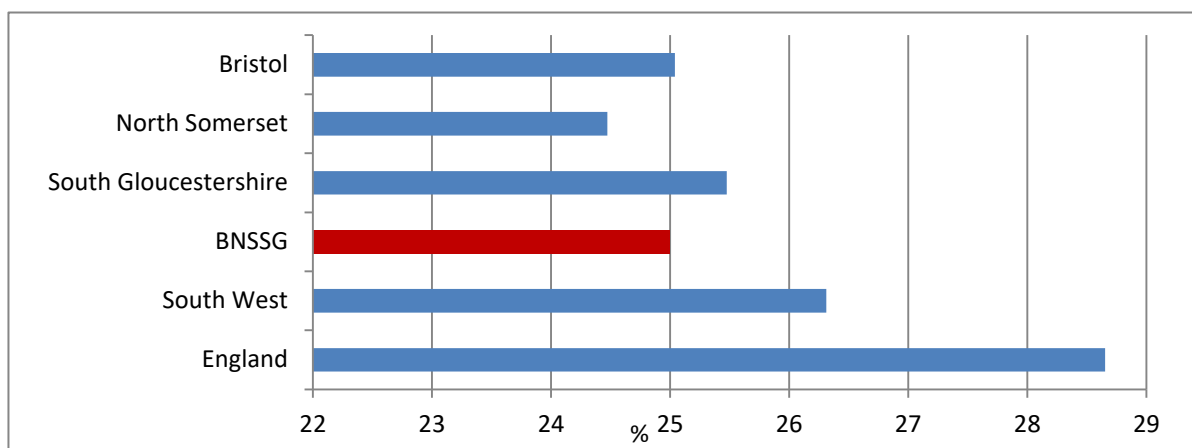
Although the activity levels amongst adults in BNSSG is quite high, particularly when compared with the England population as a whole, there are substantial levels of inactivity. Approximately 1 in 4 (25%) of the adult population in BNSSG do less than 30 minutes of moderate intensity physical activity per week. In England, on average, 28.7% of the adult population are inactive.

Table 71 Inactivity in adults in BNSSG

| Area                  | % of physically inactive adults |
|-----------------------|---------------------------------|
| Bristol               | 25.0                            |
| North Somerset        | 24.5                            |
| South Gloucestershire | 25.5                            |
| BNSSG                 | 25.0                            |
| South West            | 26.3                            |
| England               | 28.7                            |

Source: Public Health Outcome Framework / Active People Survey, Sport England, 2015

Figure 59 Chart of adults aged 16 and over doing less than 30 minutes of moderate physical activity per week



Source: Public Health Outcome Framework / Active People Survey, Sport England, 2015

#### 4.7.7 Under 18 conceptions

Becoming a parent whilst a teenager is associated with poorer health for both the mother and baby. Early parenthood reduces the life chances of young people and perpetuates social exclusion. Young people who live in care, are homeless, underachieving at school, are children of teenage parents, members of some ethnic groups, involved in crime or living in areas with higher social deprivation are more vulnerable to becoming teenage parents. Young women living in socially disadvantaged areas are also less likely to opt for an abortion if they get pregnant.

The UK continues to have the highest teenage birth rates in Western Europe despite a drop of 10% to 20,351 conceptions in girls under 18 in 2015 when compared to the previous year.



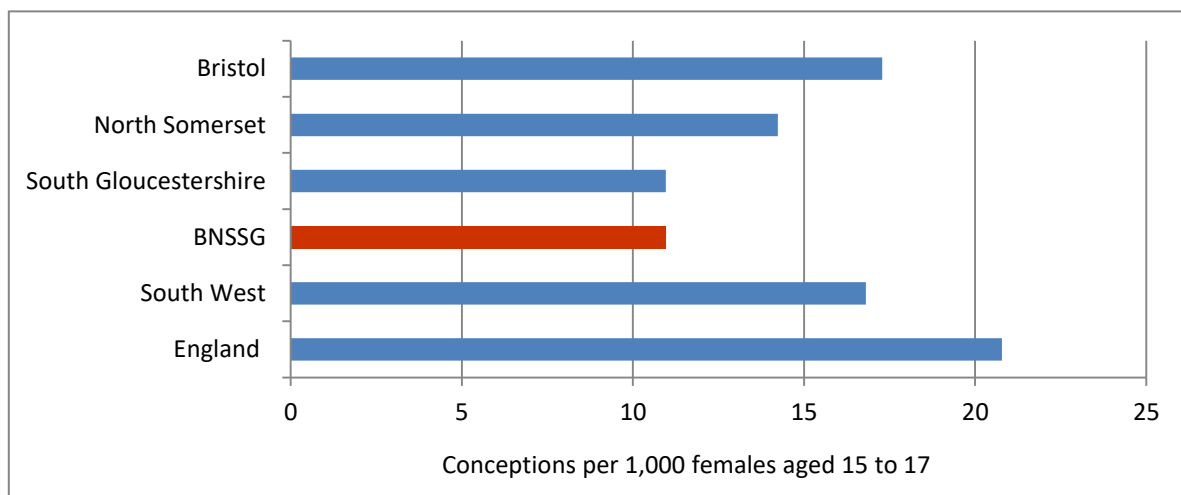
The rate of conceptions to women aged under 18 is approximately 15 per 1,000 young women in BNSSG. The rate is higher across the country where there were 21 pregnancies among every 1,000 girls under 18. Within BNSSG, Bristol has the highest rate of teenage pregnancies, with 17 per 1,000 women aged 15 to 17.

Table 72 Conceptions in women under the age of 18

| Area                  | Number of conceptions in women under 18 | Number of women aged 15 to 17 | Under 18 conceptions per 1,000 women aged 15 to 17 |
|-----------------------|---|-------------------------------|--|
| Bristol               | 113                                     | 6,538                         | 17.3   |
| North Somerset        | 49                                      | 3,441                         | 14.2   |
| South Gloucestershire | 50                                      | 4,560                         | 11.0   |
| <b>BNSSG</b>          | <b>212</b>                              | <b>14,539</b>                 | <b>14.6</b>  |
| South West            | 1,518                                   | 90,310                        | 16.8   |
| England               | 19,080                                  | 918,011                       | 20.8   |

Source: Health Profiles / ONS, 2015

Figure 60 Chart of conceptions in women aged under 18 per 1,000 females aged 15 to 17



Source: Health Profiles / ONS, 2015



## 5. Key challenges and messages

The data collated and presented here highlight some key challenges and opportunities for improvement which can be met by health and social care services across BNSSG. These can be summarised as:

1. Behavioural and cardiovascular risk factors
2. Variation in health outcomes and socially-determined health inequalities
3. Wider determinants of health

### 5.1 Behavioural and cardiovascular risk factors

Identification of the key risk factors for the most prevalent causes of death and disability is key to reducing the burden of disease. Investment in services that will prevent illness or enable early intervention is logical if it can prevent development, progression or complications of disease. Acting upstream to address behavioural or lifestyle factors will therefore make a considerable difference to the health of the population in BNSSG and reduce the burden on health and social care services.

Many of the main causes of death and disability share a common set of risk factors and these can be addressed throughout the life course:

- Smoking remains one of the biggest threats to health, as a major causative risk factor for cancer, heart disease and stroke. In Bristol, over 16% of the adult population smoke. Teenagers in BNSSG also smoke more than their peers in other parts of the country, with 1 in 10 15 year olds smoking.
- Liver disease is one of the main causes of premature mortality in BNSSG and is almost entirely related to excessive and harmful alcohol intake. Hospital admissions attributable to alcohol are high for BNSSG and higher when looking at figures for just Bristol. Binge drinking is also an area of concern as nearly a quarter of the adult population in BNSSG report binge drinking behaviour – higher than the national average. By reducing alcohol intake across the population we can reduce both the direct harm from acute intoxication and associated injuries, and the longer-term effects of alcohol as a causative factor in cancer and liver disease.
- Physical activity and diet are challenges facing the whole country and BNSSG is no different, with high levels of overweight and obesity and low physical activity levels amongst the population. High body mass index causes morbidity and is a risk factor for many health conditions, including diabetes which is linked to cardiovascular disease. Improving the cardiovascular risk profile of the population is key to addressing the mortality and morbidity from heart disease and stroke in the population.

Not all conditions and risk factors are easily recognised and recorded. There is often a gap between the number of patients identified and recorded on primary care disease registers and the true level of disease in the population. Examples of conditions that are potentially under-diagnosed include



hypertension, atrial fibrillation, diabetes and COPD. Better identification of these conditions should lead to improved patient experience and an overall reduction in cardiovascular disease risk.

Finally, the importance of enhancing public mental health and wellbeing, and reducing the incidence and morbidity association with mental illness, should be a key priority for BNSSG. There is evidence that self-harm is a major concern locally and accounts for over 2,200 emergency hospital admissions annually in BNSSG. The number is particularly high amongst females and is more of an issue in Bristol than other areas. It is likely that these admissions represent a small proportion of the population in need of mental health and wellbeing care in BNSSG.

## 5.2 Variation in health outcomes and socially-determined health inequalities

The health of the population of BNSSG as a whole is generally good when compared to the health of the population of England. However, there is significant underlying variation in both health and outcomes for the population within the individual areas of BNSSG, and within the individual wards in each area. It is important to consider the local inequalities in life expectancy and premature mortality and design a system to address these, even where the overarching picture for BNSSG may conceal this local variation.

Although deprivation levels for BNSSG are lower than the national average, there are striking differences between areas. People living in the more deprived areas experience comparatively poor health, with a life expectancy considerably lower than those living in the more affluent areas. The difference in life expectancy between the most and least deprived areas of BNSSG is 6.3 years. This gap is even bigger in Bristol, with a seven year difference between those living in different areas of the city.

## 5.3 Wider determinants of health

A focus on the social and wider determinants of health must be a priority in the challenge to address the existing health inequalities and variation in life expectancy for the population of BNSSG.

Health inequalities are caused by many things including housing, income, education, social isolation and disability, all of which are strongly affected by economic and social status. Addressing local health inequalities requires action across all wider determinants of health such as education, employment, income and housing. To reduce health inequalities we need to ensure every child has the best start in life, workplaces and houses are safe, and we must strengthen the role of prevention and target services to those with the worst health outcomes.



## 5.4 Recommendations

### *Further analyses using individual-level and whole-population data*

This document, comprising the health and wellbeing analyses for the first phase of the case for change, has used routinely available data collated together on a BNSSG footprint. The value of this is that these data have never before been brought together in one place to aid BNSSG-wide decision-making. This report is therefore a high level, comprehensive overview of the health and care needs in BNSSG. It may be used to signpost to overarching health needs and variation between the three areas, which can then be investigated in more depth. Planned further work will be in-depth and, where possible, use individual-level data and population segmentation. The analyses conducted as part of the first phase and presented here will support this next phase of work by highlighting the areas of greatest need and where the focus should lie for further modelling and risk stratification.

### *Embedding prevention into the BNSSG health and social care system*

It is recommended that these findings drive the collaborative development of a Prevention Strategy for BNSSG, to be embedded and implemented across the entire system.



# Healthier Together



Improving health and care in Bristol,  
North Somerset and South Gloucestershire