

# DATA SUPPLEMENT

HEALTH AND WELLBEING OF ADULTS AND OLDER PEOPLE IN BUCKINGHAMSHIRE

## DIRECTOR OF PUBLIC HEALTH'S ANNUAL REPORT 2014

Buckinghamshire Public Health © 2015



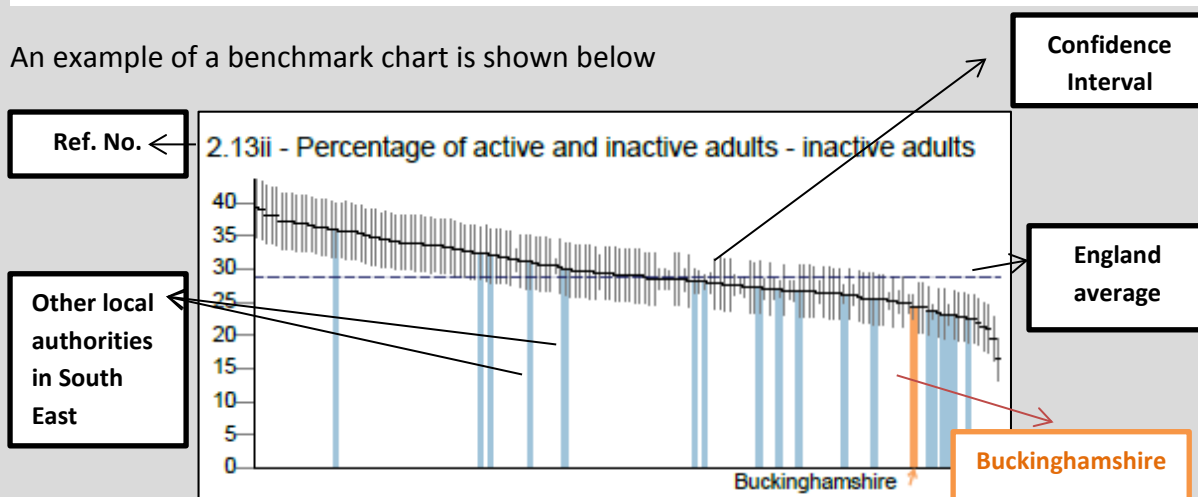
## NOTES

This report includes an update on outcomes related to the health and wellbeing of adults and older people residing in Buckinghamshire. Each indicator in this report is presented using different types of charts to show performance related to the outcomes. Definitions of the public health outcome indicators are available at [www.phoutcomes.info](http://www.phoutcomes.info)

The comparison charts (see example below) for many indicators are obtained from the Public Health Outcomes Framework (PHOF) and compare Buckinghamshire's performance against other local authorities in England and local authorities in the South East of England highlighted in blue as seen in the example below. Charts obtained from the PHOF summary profile for Buckinghamshire, display the reference number of the PHOF indicator which can be used for reference when accessing [www.phoutcomes.info](http://www.phoutcomes.info). The key used in these charts is:

--- England value and confidence interval    ↑ Buckinghamshire    ■ Other local authority in South East

An example of a benchmark chart is shown below



Other type of charts presented within this report include trend charts showing the rates or percentages for the past few years by deprivation quintile (DQ), in order to understand the outcome in the context of deprivation levels in the population. To understand inequalities related to health, the Buckinghamshire resident population is divided into five groups referred to as deprivation quintiles. DQ1 refers to 'deprivation quintile' 1 which is the least deprived population and DQ5 means 'deprivation quintile' 5, which is the most deprived population. Deprivation levels are determined using an Index of Multiple Deprivation (IMD) score, which was published in 2010. The index of multiple deprivation uses various parameters to determine the deprivation levels in population groups at postcode level. These scores are aggregated to lower layer super output areas, which cover a population of 1000 to 3000 people in around 400 to 1200 households. Some benchmark charts compare Clinical Commissioning Group locality level performance for indicators, such as hospital admissions. Information in the report is also drawn from locally published reports as well as health needs assessments, literature review and profiles.

## Key statistics on the Health and Wellbeing of Adult and Older population of Buckinghamshire

### 1. DEMOGRAPHY & WIDER DETERMINANTS OF HEALTH

a. Population profile	7
b. Deprivation	8
c. Poverty (and fuel poverty)	10
d. Unemployment	10
e. Workplace health	12
f. Killed and seriously injured on roads	13
g. Violent crime including sexual offences	14

### 2. LIFE EXPECTANCY

a. Life expectancy at birth	15
b. Life expectancy by deprivation	16
c. Slope index of inequality in life Expectancy	17
d. Ward level life expectancy	18
e. Healthy life expectancy at birth	20

### 3. HEALTH RELATED BEHAVIOUR

a. Smoking	21
b. Physical activity	22
c. Excess weight in adults	22
d. Drugs	23
e. Sexual health	25
f. Wellbeing	26
g. Injuries due to falls in population aged 65 years and over	27

### 4. LONG TERM CONDITIONS

a. Prevalence of long term conditions	28
b. Limiting long term illness	31

**5. HEALTH PROTECTION**

a. Cancer screening – Breast, Cervical, Bowel cancer	32
b. Diabetic retinopathy screening	32
c. NHS Health checks	32
d. Flu vaccination in 65+ and at risk population	33
e. Sexually transmitted infections – Chlamydia	34
f. Tuberculosis treatment completion	35
g. Late diagnosis of HIV	36

**6. HOSPITAL ADMISSIONS**

a. Emergency hospital admissions due to all causes	38
b. Emergency hospital admissions due to circulatory diseases	40
c. Hospital admissions due to coronary heart disease	40
d. Hospital admissions for elective angioplasty	41
e. Emergency hospital admissions due to stroke	42
f. Hospital admissions due to heart failure	43
g. Emergency hospital admissions due to diabetes	44
h. Emergency hospital admissions due to respiratory disease	45
i. Emergency hospital admissions due to cancer	46
j. Hospital admissions due to mental health conditions	47
k. Emergency hospital admissions due to hip fractures	50
l. Hospital admissions due to alcohol	51

**7. MORTALITY**

a. Mortality due to different causes	55
b. Premature mortality rate (<75) – All causes	55
c. Years of life lost (YLL)	56
d. Premature mortality rate (<75) – Cancer	59
e. Premature mortality rate (<75) – Cardiovascular diseases	61
f. Premature mortality rate (<75) – Respiratory diseases	61

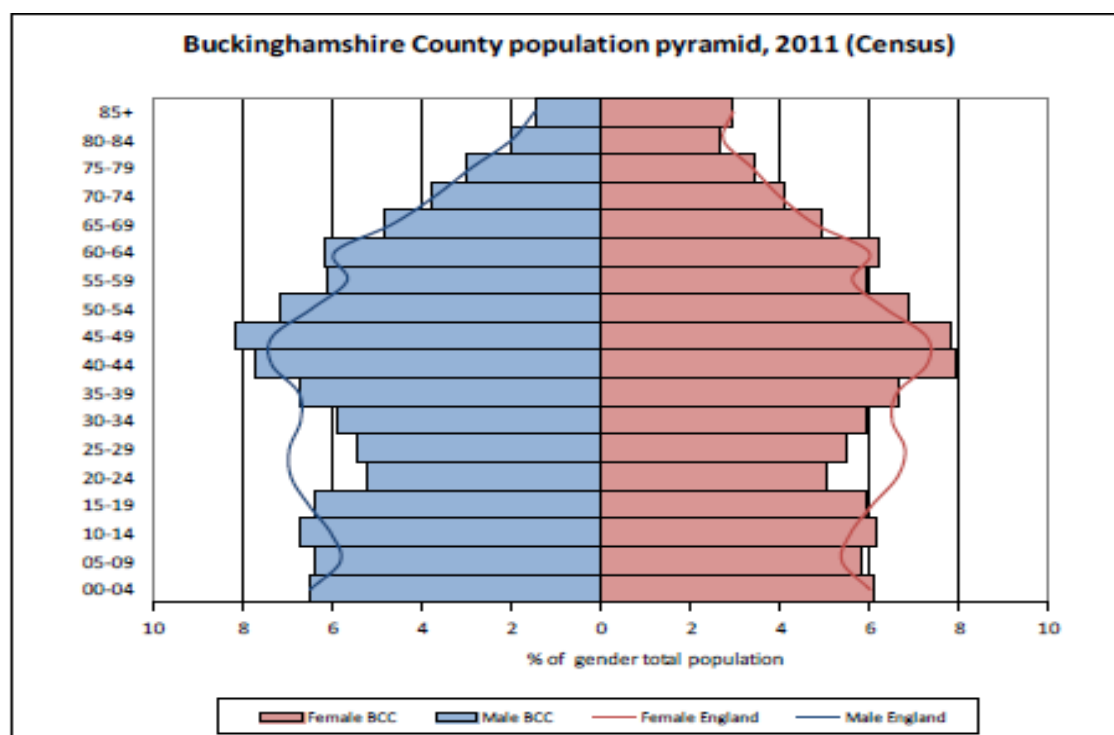
g. Premature mortality rate (<75) – Liver disease	62
h. Excess mortality in people with severe mental illness	63
i. Suicide mortality	64
j. Accidents related mortality	65
k. Falls related mortality	66
l. Excess winter deaths	66
 <b>Table of figures</b>	 68
 <b>Glossary</b>	 72
 <b>Abbreviations</b>	 73
 <b>Data Sources</b>	 74



## 1. DEMOGRAPHY AND WIDER DETERMINANTS OF HEALTH

**a. Population Profile** – In the 2011 census, the population of Buckinghamshire was recorded as 505,300 individuals residing in around 200,700 households. The age profile of the Buckinghamshire population is similar to the England average, with the exception of age bands 20-34 years, where the percentage population in Buckinghamshire is lower than the England average, and 40-54 years where the percentage of population in Buckinghamshire is greater than the England average [Fig 1]. At the time of the 2011 census, 16.7% (84,150) of the population in Buckinghamshire was aged over 65 years (16.3% in England), 7.8% (39,460) over 75 years (7.7% in England) and 2.2% (11,210) over 85 years (2.2% in England). 13.6% of the Buckinghamshire population are from a non-white ethnic background compared to 14.6% in England. 5.3% of households (10,550) were classed as lone parent households with dependent children, compared to 7.1% in England. 11.8% (23,652) of households in Buckinghamshire are classed as pensioners living alone (12.4% in England), while 9.6% are where pensioners are not living alone compared to 8.4% in England.

**Figure 1: Buckinghamshire County Population Pyramid – Census 2011**



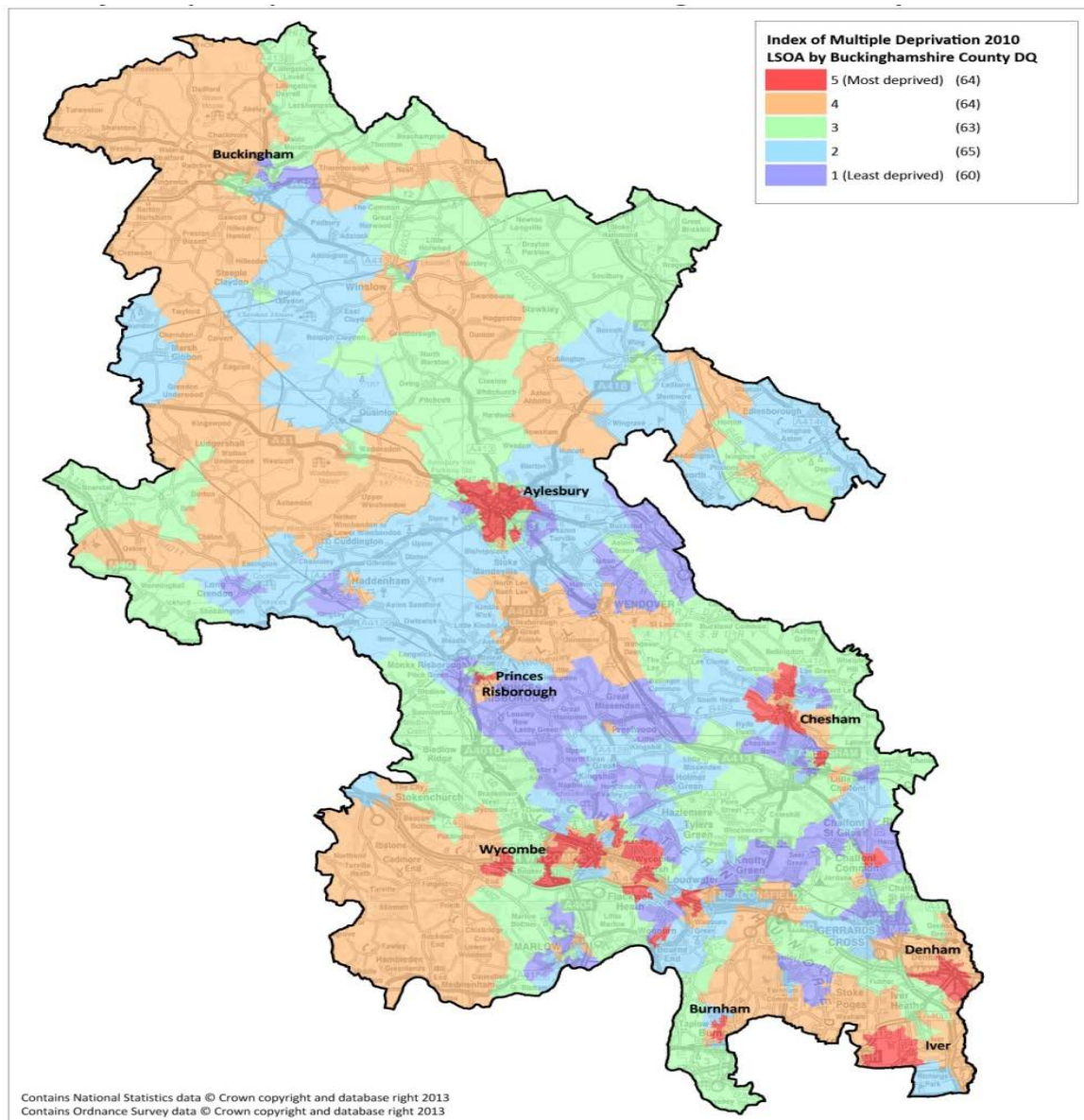
Source: Census 2011

**b. Deprivation** – Nationally, the English Indices of Multiple Deprivation (IMD) are used to understand the deprivation levels in the population. IMD 2010 provides average scores and ranks for all Local Authorities in England. Index of Multiple Deprivation scores are estimated using parameters such as income, education, housing and health to determine the deprivation levels in population groups at postcode level. These scores are aggregated to lower layer super output areas (LL-SOA) which cover a population of 1000 to 3000 in around 400 to 1200 households. Several LL-SOA are combined to create deprivation quintiles. To understand inequalities related to health, the Buckinghamshire resident population is divided into five groups referred to as deprivation quintiles (DQ 1 to DQ5). DQ1 refers to ‘deprivation quintile’ 1 which is the least deprived quintile and DQ5 means ‘deprivation quintile’ 5, which is the most deprived quintile.

Overall, Buckinghamshire has the 8<sup>th</sup> lowest deprivation score out of 150 Local Authorities in England (IMD, 2010). However, there are six Lower Super Output Areas in Aylesbury Vale District Council and six Lower Super Output Areas in Wycombe District Council that fall within the 30% most deprived in England. The number of these areas has increased since 2004. The map in Fig 2 shows the local context of deprivation at smaller geographical areas, using the IMD 2010 scores at LL-SOA level. Higher levels of deprivation, indicated on the map in red (darker areas), are concentrated in Aylesbury, High Wycombe, Iver, Chesham, and Denham.



**Figure 2: Deprivation map of Buckinghamshire presenting local context of deprivation at Lower Layer Super Output area (LL-SOA) (IMD, 2010)**



Source: Index of Multiple Deprivation (IMD 2010). For further information please click <https://www.gov.uk/government/publications/english-indices-of-deprivation-2010>

- c. Poverty** – Poverty can be defined in absolute and relative terms. *Absolute poverty* measures poverty in relation to the amount of money necessary to meet basic needs such as food, clothing and shelter. *Relative poverty* is defined as poverty in relation to economic status of other members of the society. Poverty is measured in the UK, using income thresholds and expressed as income poverty, child poverty, health poverty, fuel poverty and housing related poverty. Child poverty is defined as a percentage of children (aged <16 and <20) in low income families (children living in families in receipt of out of work benefits or tax credits where their reported income is <60% median income). In 2012, 9.7% of children (aged <16 years) were living in low income families in Buckinghamshire, significantly better than the England average of 19.2%.

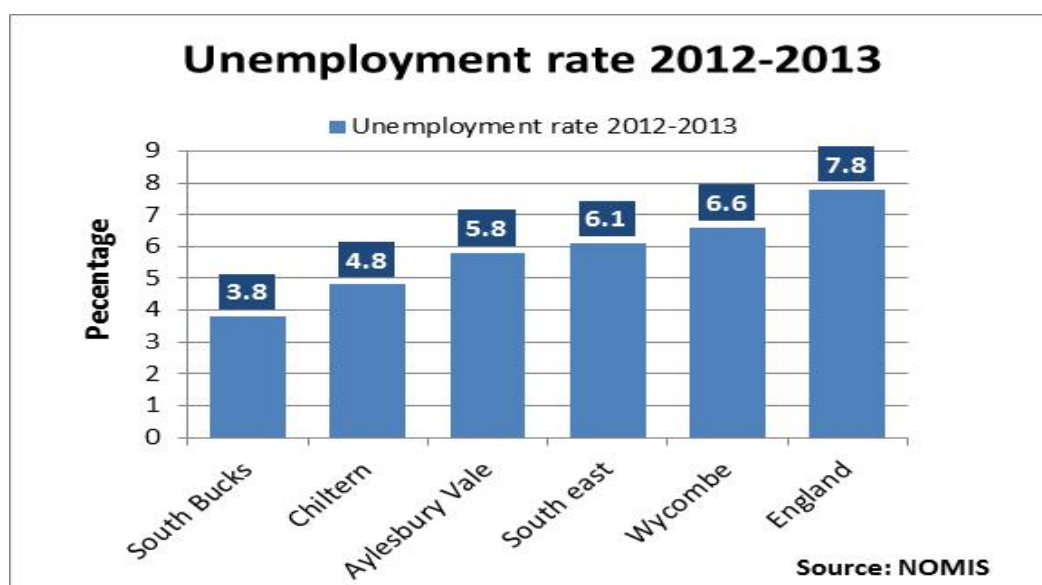
In the UK, the proportion of the working age population who are in receipt of key out of work benefits is an indicator denoting household poverty. Department for Communities and Local Government (DCLG 2010) data shows the percentage of working age population in receipt of out of work benefits in Aylesbury Vale District Council (DC) as 7.5% and ranking 348 out of 378 in the UK (where 1 is the poorest); Chiltern DC was 6.8% and ranked 369 out of 378; South Bucks DC value was 6.7% and ranked 368 out of 378; and Wycombe DC value was 8.6% and ranked 321 out of 378; and all Buckinghamshire District Councils fall within the best quartile in the country

Fuel poverty in England is measured by the '*low Income high costs*' definition, which considers a household to be in fuel poverty if, they have required fuel costs that are above average (the national median level); and were they to spend that amount, they would be left with a residual income below the official poverty line. Fuel poverty can have a major impact on health and quality of life of individuals and families. In 2012, 7.6% of households in Buckinghamshire were in fuel poverty significantly lower compared to the National average (10.4%) and ranking 25<sup>th</sup> lowest in the country. However, this still equates to around 15,200 households in Buckinghamshire that are affected due to fuel poverty.

- d. Unemployment** – Being out of work for a long period of time is linked to poorer physical health and mental wellbeing. 1,250 people in Buckinghamshire were estimated

to be on job seekers allowance for more than 12 months in 2012. The long term unemployment rate was 3.9 per 1,000 people in Buckinghamshire in 2012, significantly lower than the rate for England (9.9 per 1,000 people). There is variation in the unemployment rate between district councils with the unemployment rate in 2012-13 ranging from 3.8% in South Bucks and 4.8% in Chiltern to 5.8% in Aylesbury Vale and 6.6% in Wycombe (7.8% in England) [Fig 3].

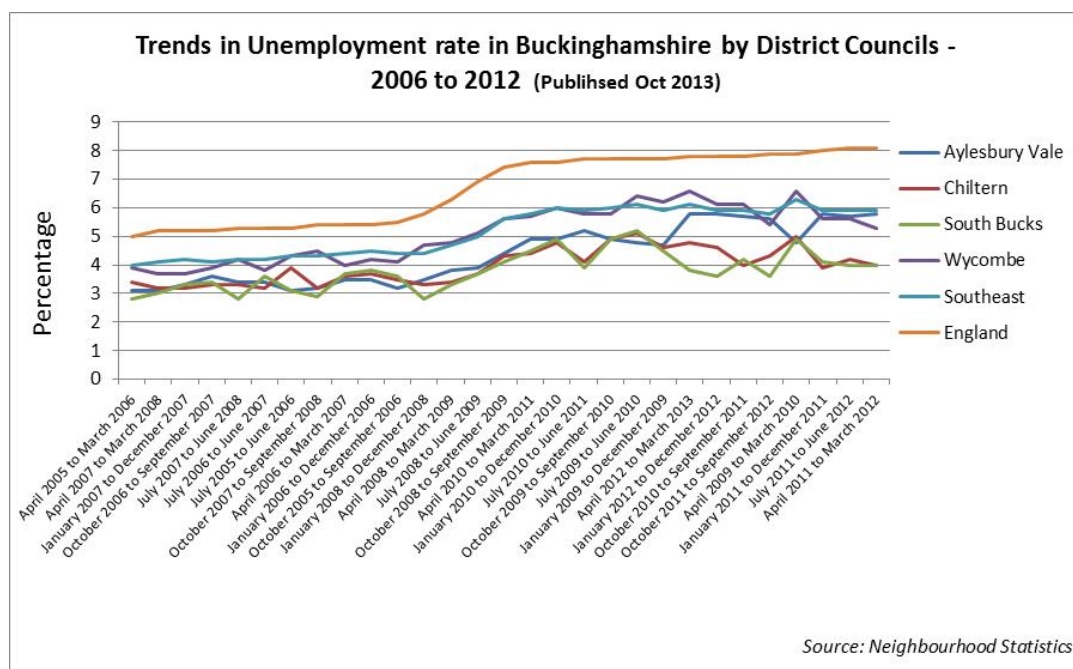
**Figure 3: Unemployment rate (percentage) in Buckinghamshire at District Council level compared to England and South East average, 2012/13**



Source: NOMIS, 2012-13

Trends in annual unemployment rates show that the rate in Buckinghamshire is lower than the England average. Rates have been flattening off over the past two years after the rise noted from 2005-06 to 2010-11 [Fig 4].

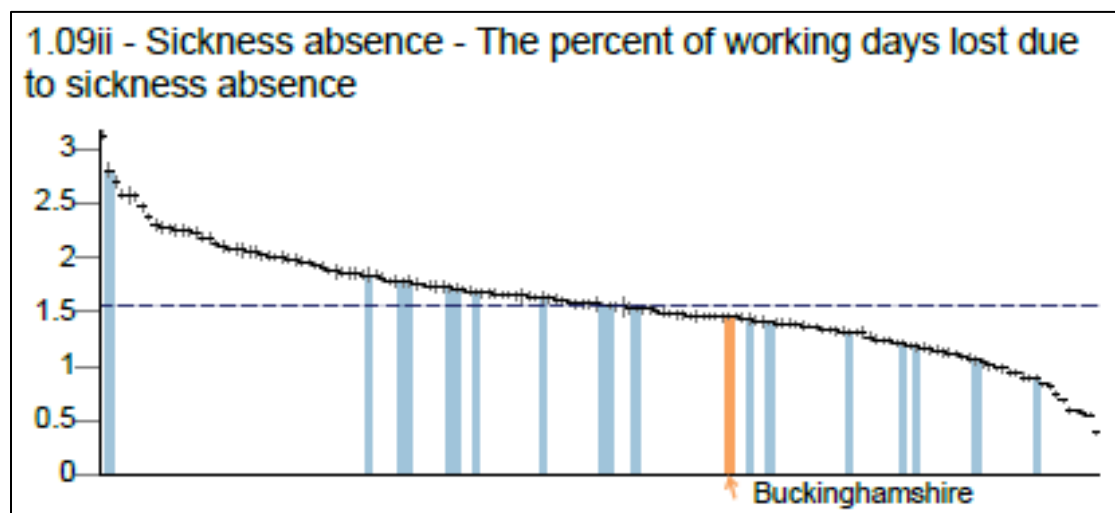
**Figure 4: Trend in Unemployment Rate (percentage) in Buckinghamshire at District Council level compared to England and South East average, 2005/06 to 2011/12**



Source: Neighbourhood statistics, 2014

- e. Workplace Health** – Workplace cultures that promote health also benefit businesses, through increased job satisfaction, reduced sickness absence and reduced staff turnover. Conversely, poor quality jobs and job insecurity, increases the risk of ill health. The percentage of employees who had at least one day off due to sickness absence in the previous week in Buckinghamshire was 2.7% (Labour Force Survey, ONS, 2009-2011) similar to the national average of 2.5%, and was significantly higher than the area with the best rate of sickness absence in the country (0.6%). Fig 5 shows the percentage of working days lost due to sickness absence in the previous working week in Buckinghamshire compared to other local authorities in England in 2010-12.

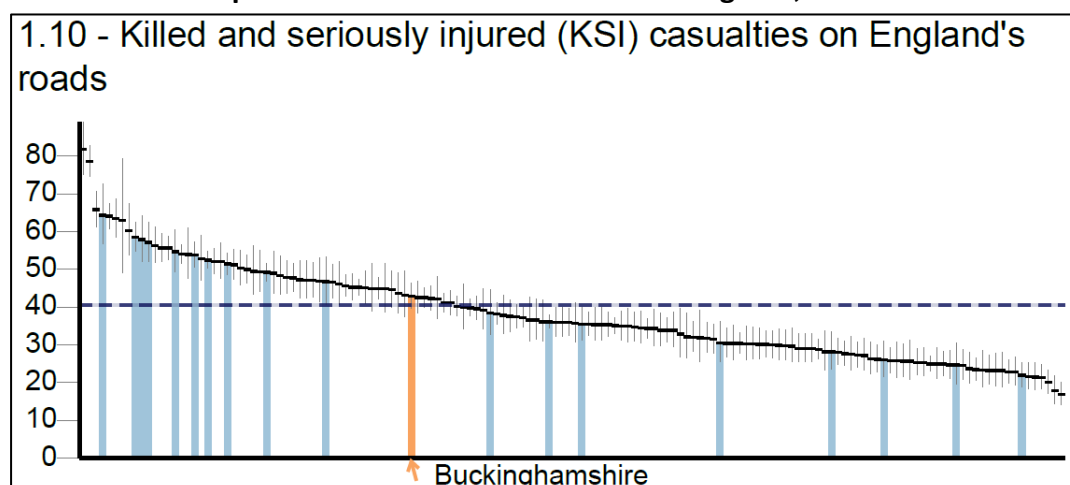
**Figure 5: Workplace Health – Percentage of working days lost due to sickness absence in the previous working week in Buckinghamshire compared to other local authorities in England, 2010-12**



Source: Public Health Outcomes Framework, 2014

- f. **Killed and seriously injured on roads** – In 2010-2012, 651 individuals were killed or seriously injured on roads in Buckinghamshire. The rate of casualties on roads that resulted in death or serious injury in Buckinghamshire was 42.8 per 100,000 population, is higher (not significantly) compared to the England rate of 40.5 per 100,000 population. Buckinghamshire ranks 100 out of 151 Local authorities in England where 1 is the best and 151 is the worst [Fig 6].

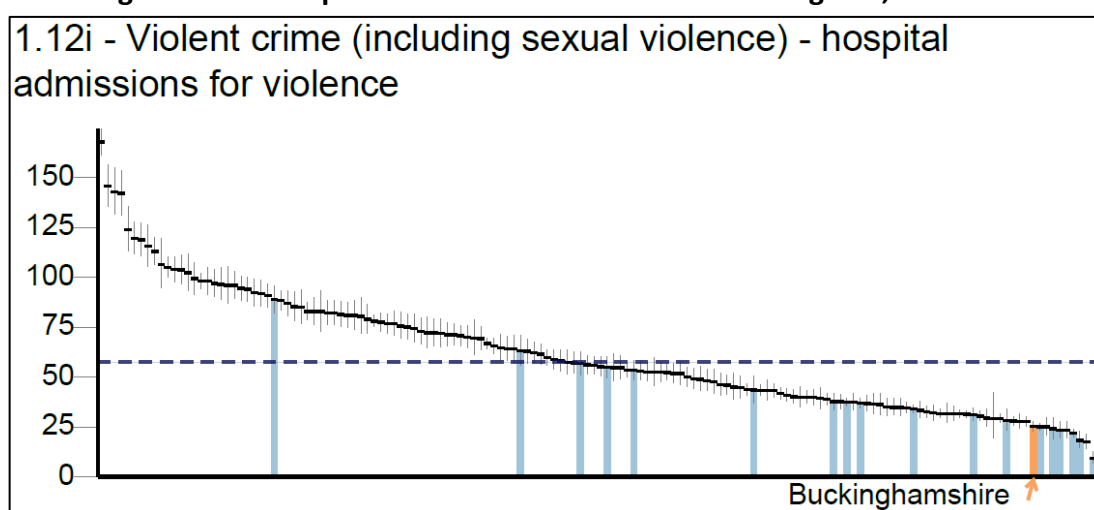
**Figure 6: Rate of population killed or seriously injured in Buckinghamshire compared to other local authorities in England, 2010-12**



Source: Public Health Outcomes Framework, 2014

- g. Violent crime including sexual offences** – In 2013-14, the rate of violence against person offences per 1000 population was 7.0 in Buckinghamshire, significantly lower than the England rate of 11.1. However, this equates to 3,558 incidents in 2013-14, which is slightly lower than the 3,612 incidents in 2011-12. Buckinghamshire ranks 12<sup>th</sup> lowest in England. The age standardised hospital admission rate related to violent offences was also significantly lower in Buckinghamshire compared to the England average with Buckinghamshire ranking 10<sup>th</sup> lowest in the country [Fig 7].

**Figure 7: Hospital admission rate due to violent crime (including sexual violence) in Buckinghamshire compared to other local authorities in England, 2010-12**

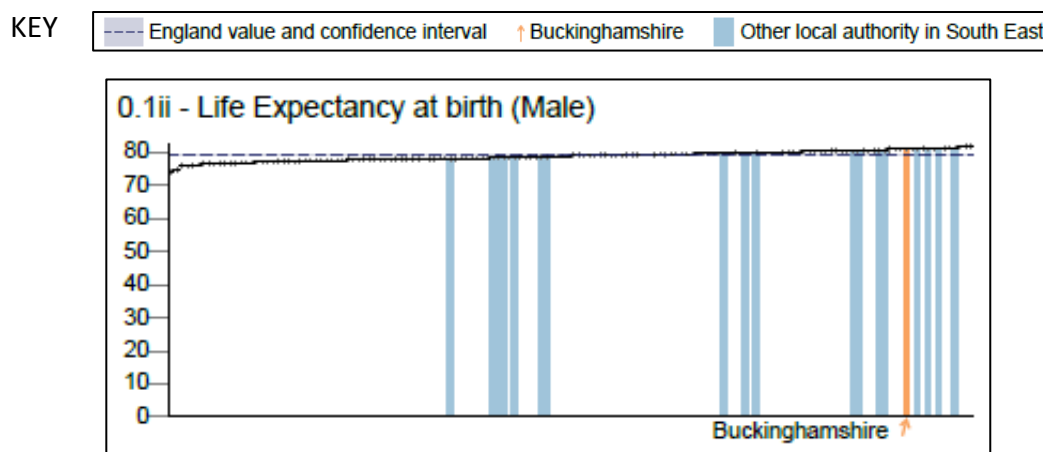


Source: Public Health Outcomes Framework, 2014

## 2. LIFE EXPECTANCY

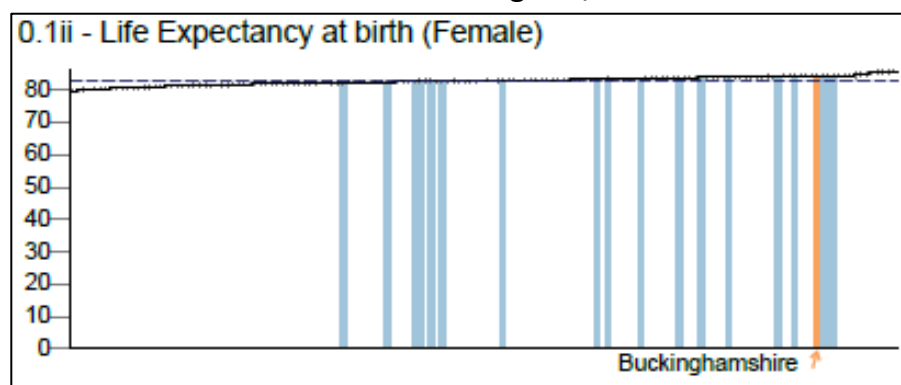
- a. **Life expectancy at birth (2010-2012)** – A baby boy born in Buckinghamshire in 2012 can expect to live up to 81.0 (confidence intervals 80.7, 81.3) years of age compared to the England average of 79.2 years for males; and a baby girl born in Buckinghamshire can expect to live up to 84.5 (confidence intervals 84.2, 84.8) years compared to the England average of 83.0 years [Fig 8 and Fig 9]. Over the past 10 years, the life expectancy (LE) of males and females in Buckinghamshire has increased by around 3.0 years for both males and females. However, women are expected to live an average of 3.5 years longer than men in Buckinghamshire. This is slightly reduced from a difference of 4 years in 2002, ten years ago.

**Figure 8: Life expectancy at birth (Male) in Buckinghamshire compared to all local authorities in England, 2010-12**



Source: Public Health Outcomes Framework, 2014

**Figure 9: Life expectancy at birth (Female) in Buckinghamshire compared to all local authorities in England, 2010-12**

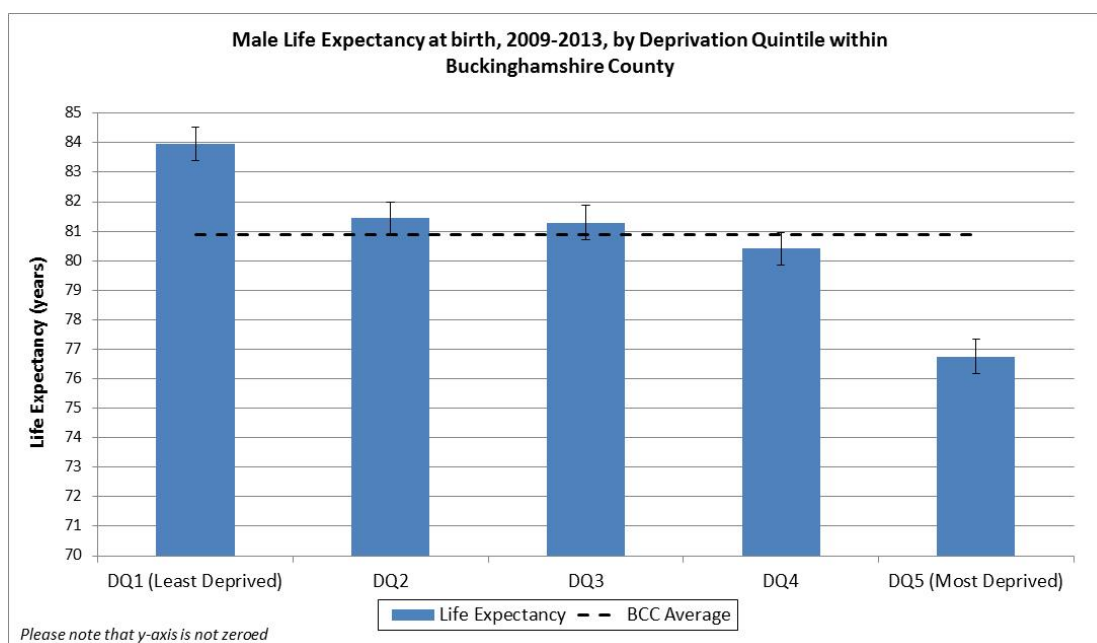


Source: Public Health Outcomes Framework, 2014



- b. Life expectancy by deprivation quintile** – Life expectancy at smaller geographical area can be calculated using mortality data and a formula derived using life tables (life table show the probability of dying for each age) to estimate survival. The mortality data can be analysed by deprivation using the IMD scores described earlier; to calculate life expectancy by deprivation quintiles in the population. From 2009 to 2013, there was a difference of around seven years in life expectancy between men living in the most and the least deprived quintiles, with males in the most deprived population expected to live up to 76.7 years while the males in the least deprived population expected to live to 84.0 years [Fig 10].

**Figure 10: Male life expectancy at birth by deprivation quintiles in Buckinghamshire compared to Buckinghamshire average, 2009-13**

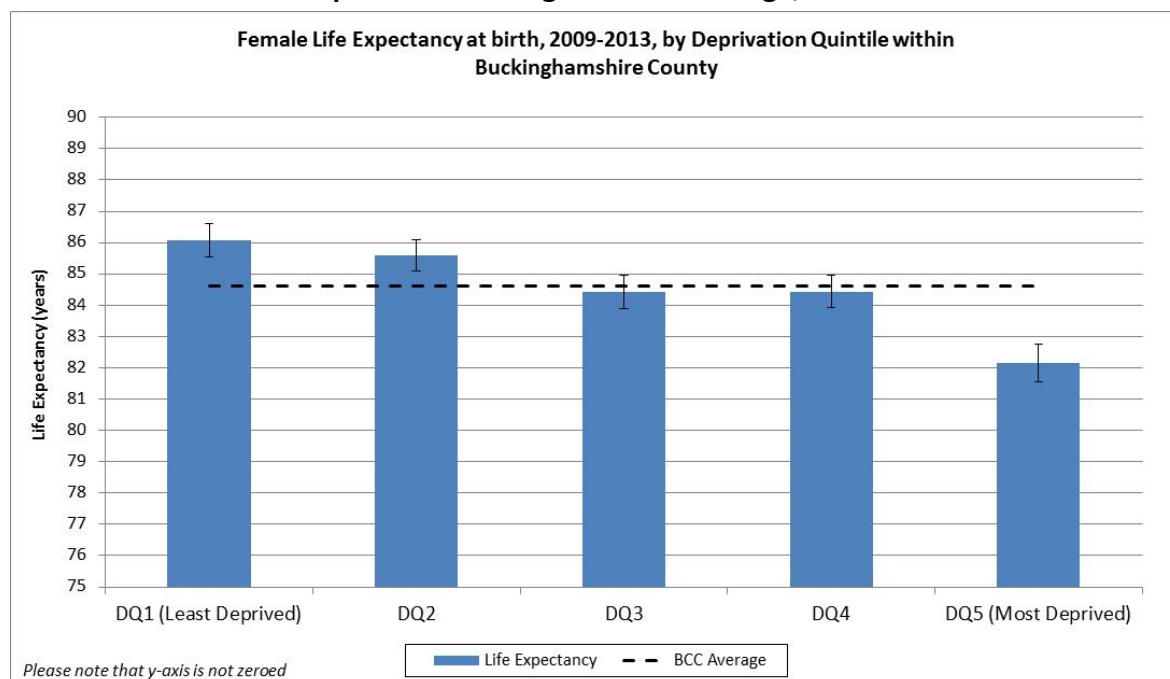


Source: Office for National Statistics (ONS) Public Health Mortality files

For females, the 2009-2013 data shows that, there is a difference of around four years in life expectancy in population between the most and the least deprived quintiles. Females living in the most deprived population can expect to live up to 82.1 years while the females in the least deprived population can expect to live up to 86.1 years [Fig 11].



**Figure 11: Female life expectancy at birth by deprivation quintiles in Buckinghamshire compared to Buckinghamshire average, 2009-13**

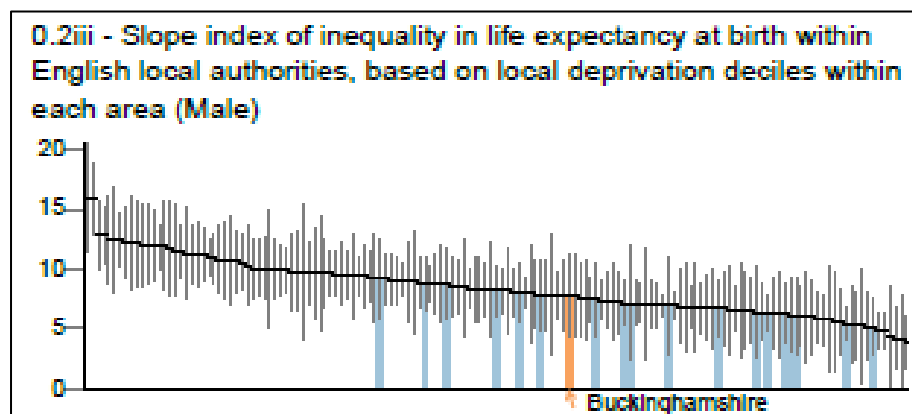


Source: Office for National Statistics (ONS) Public Health Mortality files

**c. Slope Index of inequality in life expectancy at birth in Buckinghamshire (2010-2012)**

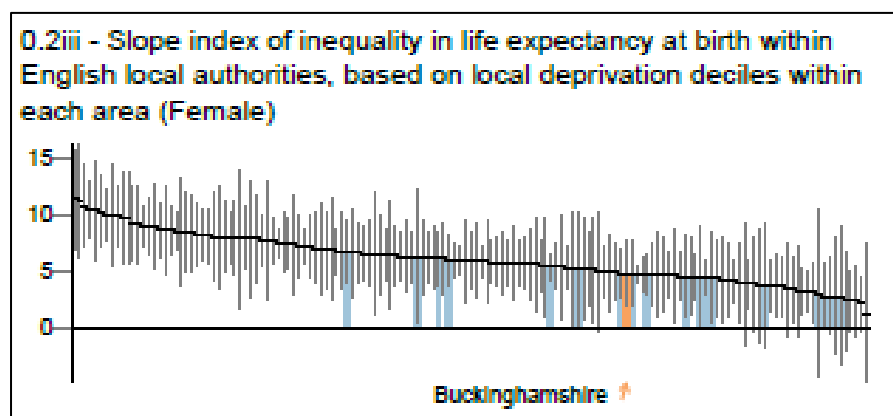
- Deprivation, lifestyle issues and certain social determinants have an impact on the general health of an individual, families and the population living in deprived areas; which consequently has an impact on their life expectancy. The slope index of inequality in life expectancy is a measure of the social gradient in life expectancy in the population. It shows how much variation exists in life expectancy in the least to the most deprived population [Fig 12 & 13].

**Figure 12: Slope index of inequality in life expectancy at birth for males in Buckinghamshire based on local deprivation deciles: the range in years of life expectancy across the social gradient, from most to least deprived; compared with other local authorities in England, 2010-2012**



Source: Public Health Outcomes Framework, 2014

**Figure 13: Slope index of inequality in life expectancy at birth for females in Buckinghamshire based on local deprivation deciles: the range in years of life expectancy across the social gradient, from most to least deprived; compared with other local authorities in England, 2010-12**

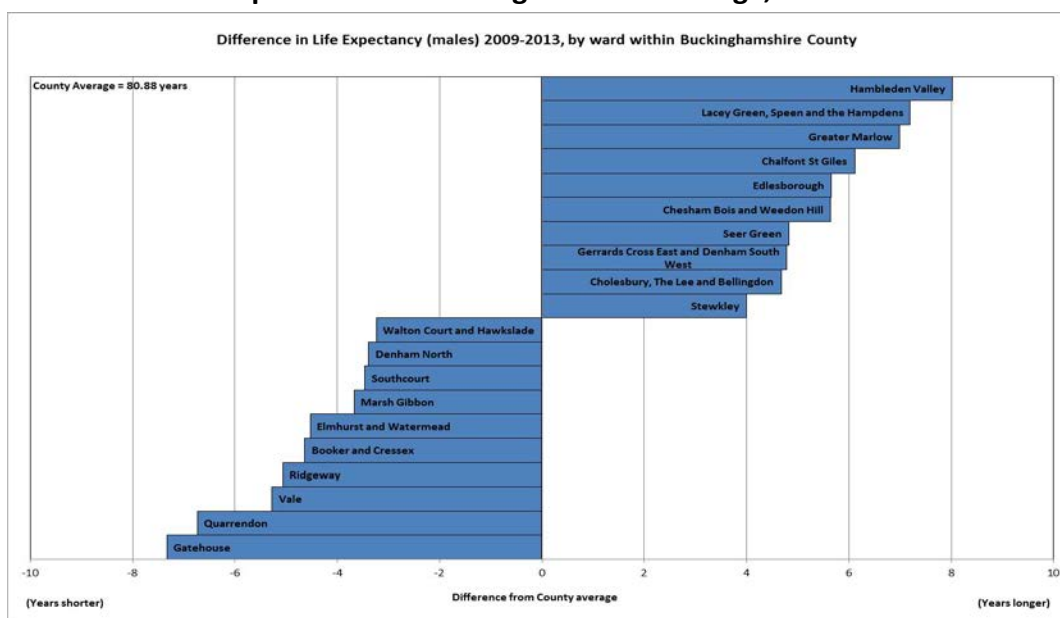


Source: Public Health Outcomes Framework, 2014

- d. Ward level life expectancy** - The ward level life expectancy estimated using mortality data for 2009 to 2013 shows a difference of 15 years in male life expectancy between wards in Buckinghamshire with the highest at 88.9 years and lowest at 73.5 years. Fig 14 shows the top 10 wards with the highest and lowest male life expectancy compared to the Buckinghamshire average. For females the difference in life

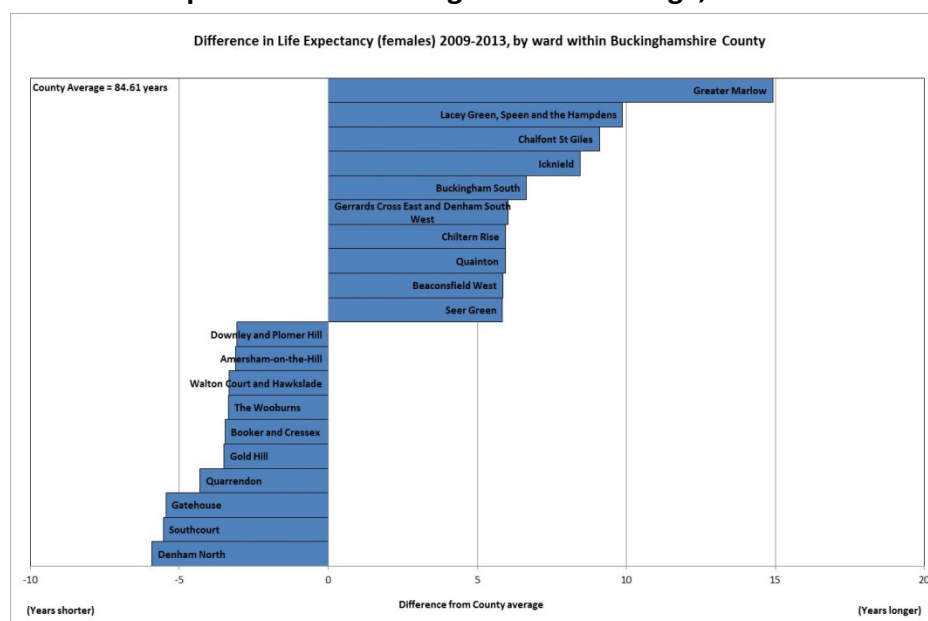
expectancy at ward level is 21 years with the highest life expectancy at 99.5 years and lowest at 78.6 years. Fig 15 shows top 10 wards with the highest and lowest female life expectancy compared to the Buckinghamshire average.

**Figure 14: Male life expectancy at birth for top 10 wards with higher or lower LE compared to the Buckinghamshire average, 2009-13**



Source: Office for National Statistics (ONS) Public Health Mortality files

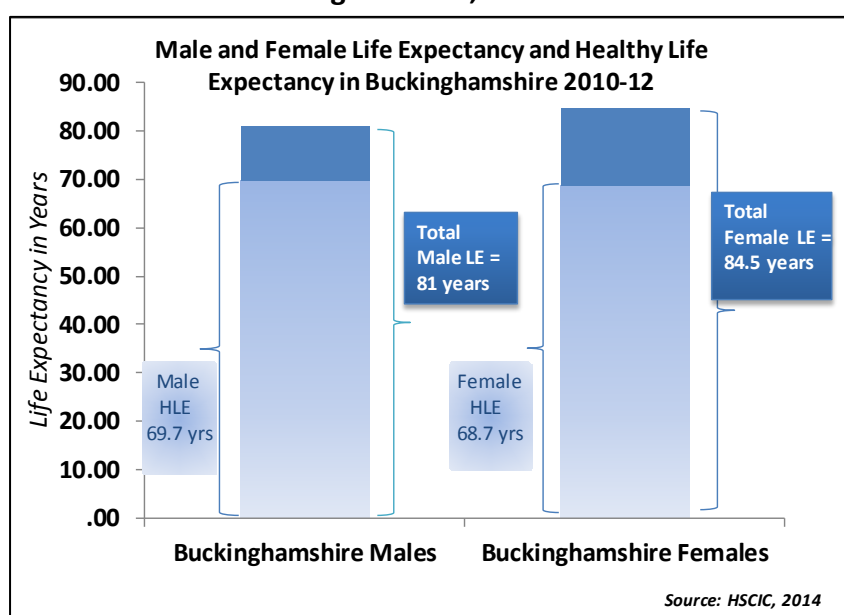
**Figure 15: Female life expectancy at birth for top 10 wards with higher or lower LE compared to the Buckinghamshire average, 2009-13**



Source: Office for National Statistics (ONS) Public Health Mortality files

- e. Healthy Life Expectancy (HLE) at birth (2010-2012)** – People in Buckinghamshire are living longer, and it is important that these extra years of life are spent in good health. The Buckinghamshire population can expect to live in good health appreciably longer than the national average. Men in Buckinghamshire live, on average, 69.7 years in good health (HLE), six years longer and significantly better than the England average of 63.3 years. Women in Buckinghamshire live in good health to the age of 68.7 years, just over four years longer and significantly better than the national average of 64.1 [Fig 16].

**Figure 16: Life expectancy and healthy life expectancy in males and females in Buckinghamshire, 2010-2012**

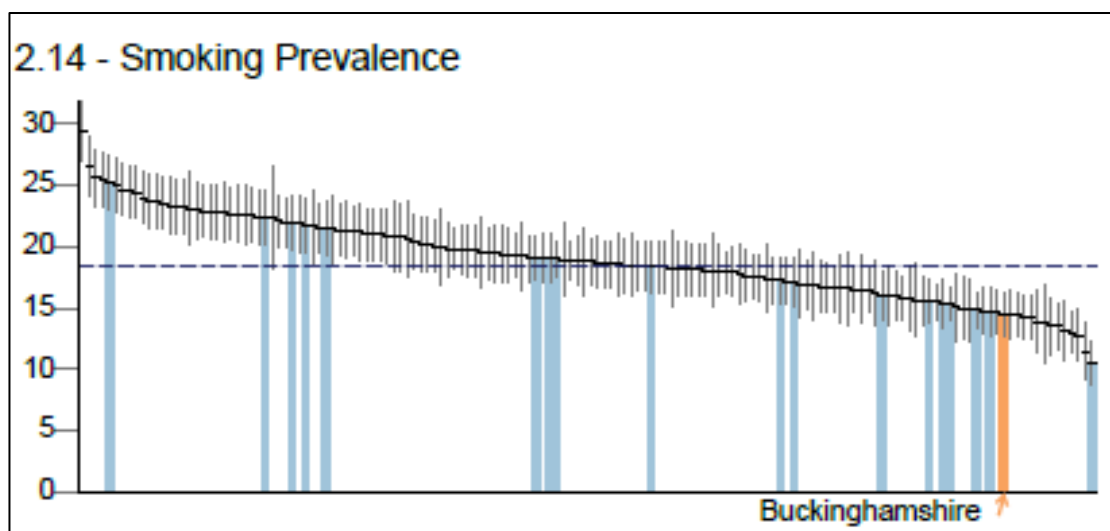


Source: Health and Social Care Information Centre, 2014

### 3. HEALTH RELATED BEHAVIOUR

**a. Smoking** – Smoking remains the leading cause of preventable illness and early deaths in the UK and accounts for over half the difference in life expectancy between the richest and poorest members of our society. Surveys consistently find that two thirds of smokers would like to stop smoking. The Integrated Household Survey (2013) reports the smoking prevalence in Buckinghamshire at 14.5%, significantly lower compared to the 18.4% in England with Buckinghamshire ranking 14<sup>th</sup> lowest in the country out of 150 local authorities [Fig 17]. However, this equates to over 56,500 adults who smoke in Buckinghamshire. Smoking prevalence is high at 26.4%, in people from routine and manual occupations in Buckinghamshire, but is 28.6% in England. Buckinghamshire ranks 43<sup>rd</sup> out of 150 Local authorities in England with regard to smoking prevalence in the routine and manual population. There were 3,212 smoking attributable hospital admissions in 2012/13 in adults aged 35 years and over, at the rate of 1,132 per 100,000, which is significantly lower than the England rate of 1,688 per 100,000, with Buckinghamshire ranking 5<sup>th</sup> lowest in the country.

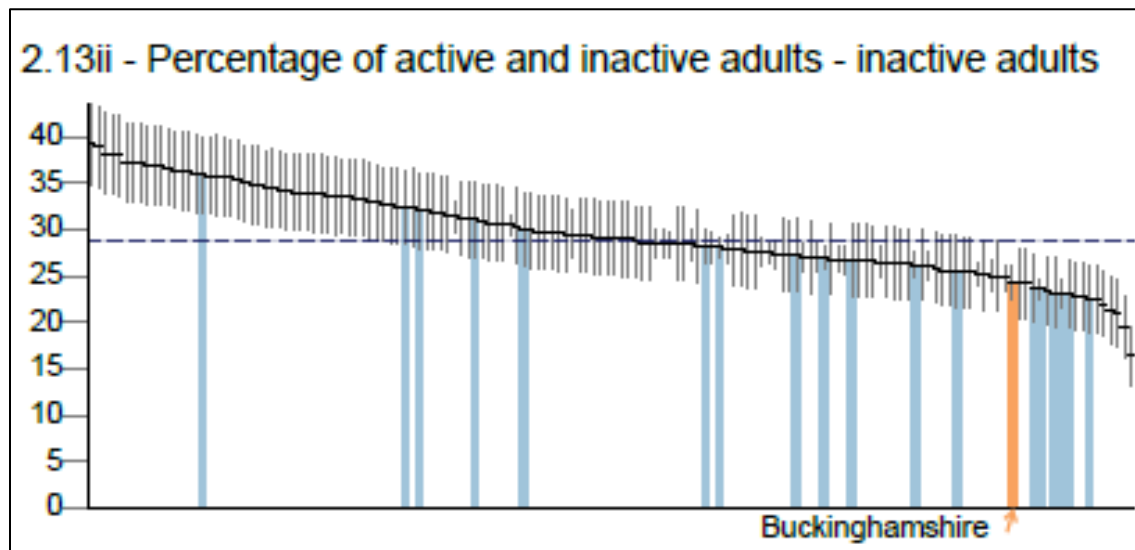
**Figure 17: Prevalence of smoking among persons aged 18 years and over in Buckinghamshire compared to other local authorities in England, 2013**



Source: Public Health Outcomes Framework, 2014

**b. Physical activity** – Being regularly active leads to an extensive range of physical, social and mental health benefits. The evidence for physical activity in the prevention and management of long term conditions is compelling; with the impact of inactivity on health of a similar magnitude to that from smoking and obesity. The Active People’s Survey conducted by Sport England measures percentage of adults classified as ‘inactive’ which are the number of respondents aged 16 and over reporting doing less than 30 minutes of at least moderate intensity physical activity per week. In 2013, 24.3% adults were reported as being ‘inactive’ in Buckinghamshire, which is significantly lower than the England average of 28.8% [Fig 18]. Buckinghamshire ranks 20<sup>th</sup> lowest in the country with the lowest recorded in Richmond upon Thames at 16.3%. Many more people are not meeting the national recommendations to be active for 150 minutes per week; 43% of people in Buckinghamshire, compared to 44% nationally.

**Figure 18: Percentage of physically inactive adults in Buckinghamshire compared to other local authorities in England, 2013**

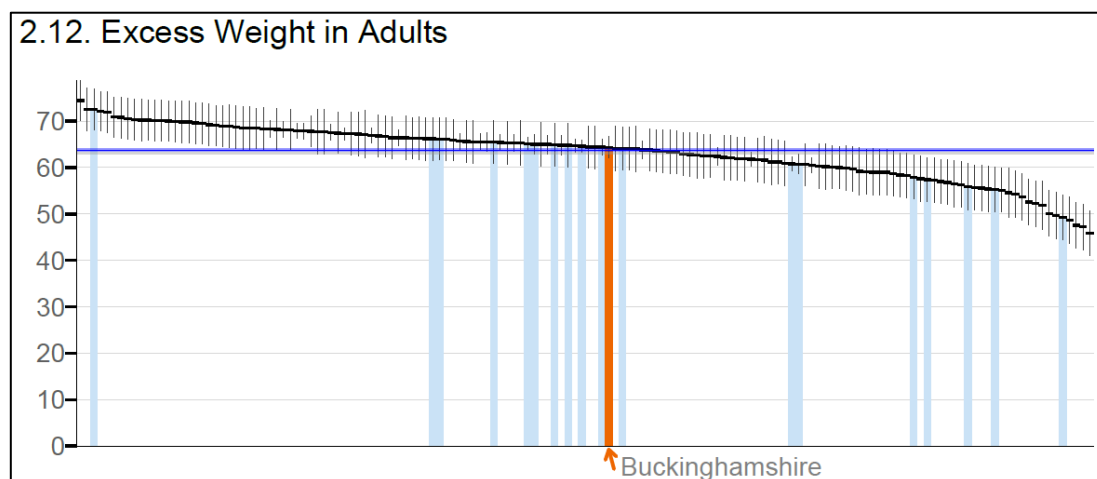


Source: Public Health Outcomes Framework, 2014

**c. Excess weight in adults** – Obesity and excess weight in the adult population is rising and poses a major challenge across the western world. The Active People Survey (2012) which contains self-reported data on height and weight, conducted by ‘Sport England’, shows the percentage of adults in Buckinghamshire classified as overweight

or obese as 64.4%, which is similar to the England average of 63.8%. This means 6 out of 10 adults are overweight or obese with an increased risk of acquiring diabetes and/or heart disease. The lowest prevalence was reported in Kensington and Chelsea (46%) and highest in Doncaster (74%) [Fig 19].

**Figure 19: Percentage of adults classified as overweight or obese in Buckinghamshire compared to other local authorities in England, 2012**

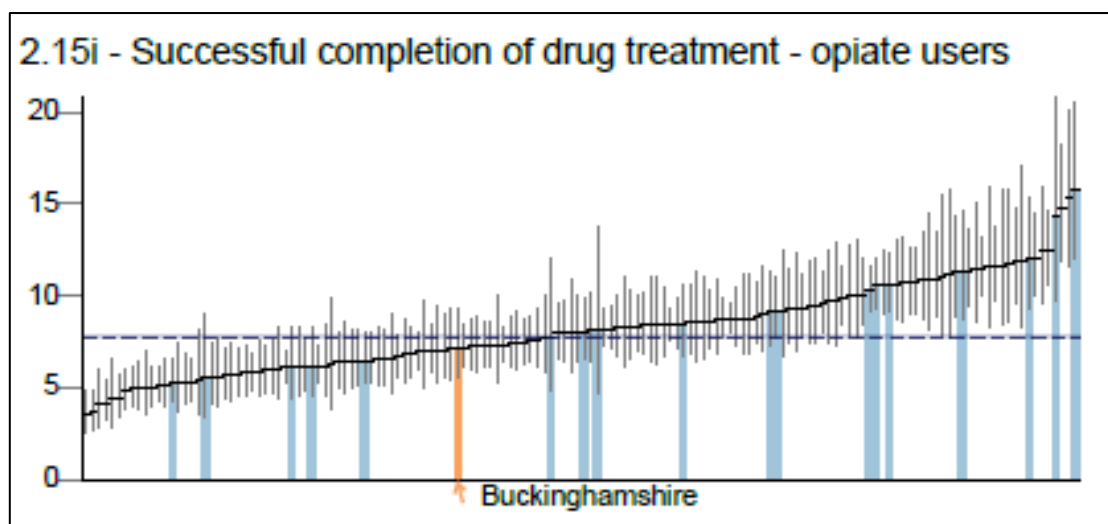


Source: Public Health Outcomes Framework, 2014

**d. Drugs (Successful completion of treatment)** – In 2013, amongst adults aged 18 to 75 years, 724 individuals entered treatment for opiate use, 179 entered treatment for non-opiate use while 306 entered treatment for alcohol addiction. In 2012, one in ten (10.2%) opiate users successfully completed drug treatment (completion of treatment means those who complete treatment and do not re-present within 6 months after treatment) in Buckinghamshire (equates to 76 people), which is higher, but not significantly, than the national average of 8.2%. Buckinghamshire ranked 36<sup>th</sup> out of 150 LAs in the country, but has a lower rate than the areas with the best results in the country (completion rates ranging from 15.0%-17.2%) [Fig 20]. Recent trend figures show a reduction in the percentage of users successfully completing treatment, but this is being addressed by Buckinghamshire County Council [Fig 21]. Half of non-opiate users (50.0%) successfully left drug treatment in Buckinghamshire in 2012 (88 people), which is significantly higher than the national average (40.2%). Buckinghamshire ranked 21<sup>st</sup> best in the country, but was significantly lower than the

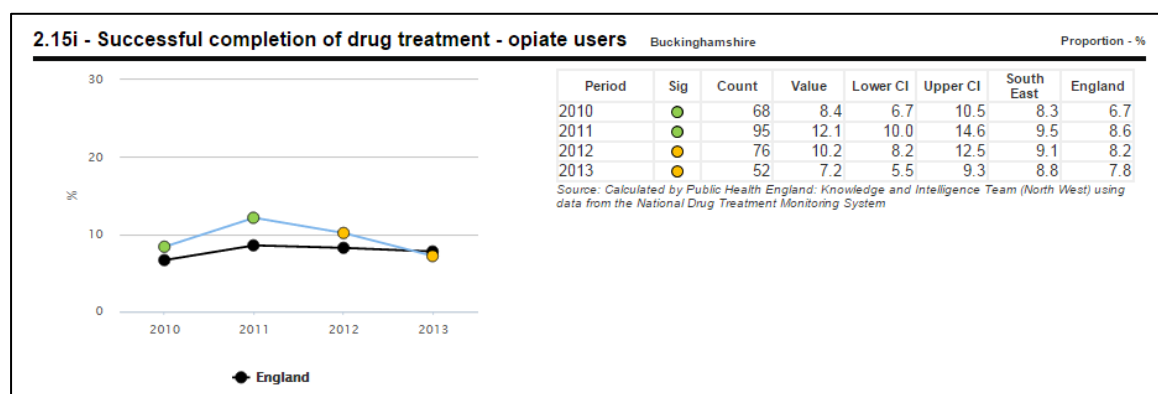
two areas with the best results in the country (completion rates of 66.3% & 68.3%) [Fig 22]. Recent trend figures show a reduction in percentage users successfully completing treatment. This is being monitored by Buckinghamshire County Council [Fig 23].

**Figure 20: Successful completion of drug treatment – Percentage of opiate users that left drug treatment successfully who do not re-present to treatment within 6 months in Buckinghamshire compared to other local authorities in England, 2013**



Source: Public Health Outcomes Framework, 2014

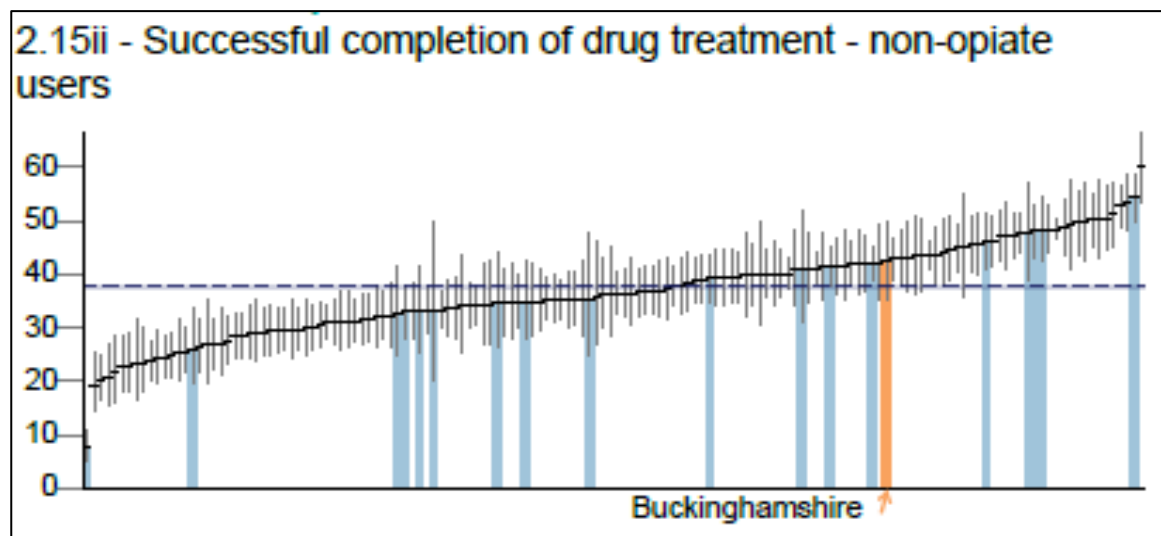
**Figure 21: Trend in percentage of opiate users that left drug treatment successfully who do not re-present to treatment within 6 months in Buckinghamshire compared to South East and England, 2010 to 2013.**



Source: Public Health Outcomes Framework, 2014

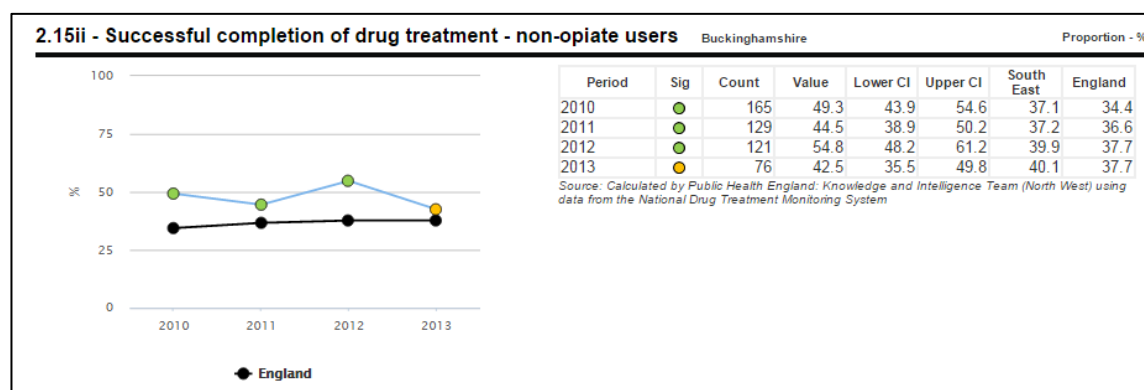


**Figure 22: Successful completion of drug treatment – Percentage of non-opiate users that left drug treatment successfully who do not re-present to treatment within 6 months in Buckinghamshire compared to other local authorities in England, 2013**



Source: Public Health Outcomes Framework, 2014

**Figure 23: Trend in percentage of non-opiate users that left drug treatment successfully who do not re-present to treatment within 6 months in Buckinghamshire compared to South East and England, 2010 to 2013.**



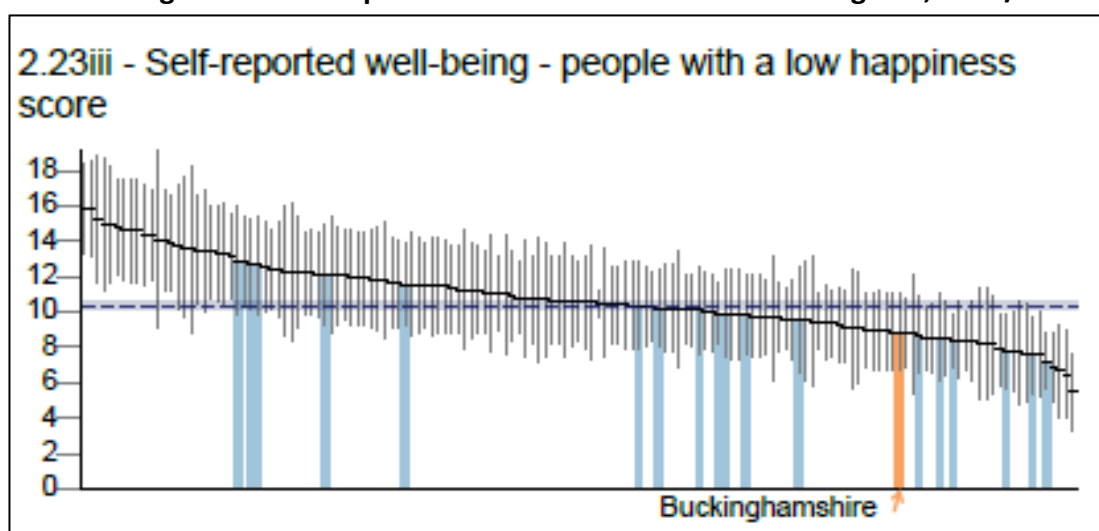
Source: Public Health Outcomes Framework, 2014

**e. Sexual health** – Sexual health profiles published by Public Health England show the rate for sexually transmitted infections (STIs), such as genital herpes, genital warts, syphilis and gonorrhoea, are significantly lower in Buckinghamshire compared to the England average. The chlamydia diagnosis rate is also reported as significantly lower than the England average of 2016 per 100,000 at 1,232 per 100,000 aged 15-24. The rate of new STI diagnoses (excluding chlamydia) in the population aged <25 in Buckinghamshire was

596 per 100,000 in 2013, significantly lower than the England average of 832 per 100,000 with Buckinghamshire ranking 36<sup>th</sup> lowest out of 150 local authorities in England. The HIV testing coverage in Genito-urinary Medicine clinics, of men who have sex with men (MSM) was 79% in Buckinghamshire in 2013; significantly lower than the England average of 86.1%. This is the HIV testing uptake among men who have sex with men who are offered a HIV test in a Genito-urinary Medicine clinic.

- f. Wellbeing (*self-reported wellbeing*)** – Mental wellbeing is central to the population’s health and quality of life. Studies suggest that on average happy people live 7.5 to 10 years longer than people who report they are unhappy. The Office for National Statistics (ONS) publishes Annual Population Survey findings showing self-reported wellbeing – people with a low happiness score. A significantly lower proportion of people in Buckinghamshire (4.1%) had low satisfaction with their life compared to the national average (5.8%) in 2012/13. A lower proportion of people in Buckinghamshire had a low happiness score compared to nationally (8.9% vs 10.4%), but the difference was not statistically significant [Fig 24].

**Figure 24: Self-reported wellbeing – Percentage of people with a low happiness score in Buckinghamshire compared to other local authorities in England, 2012/13**

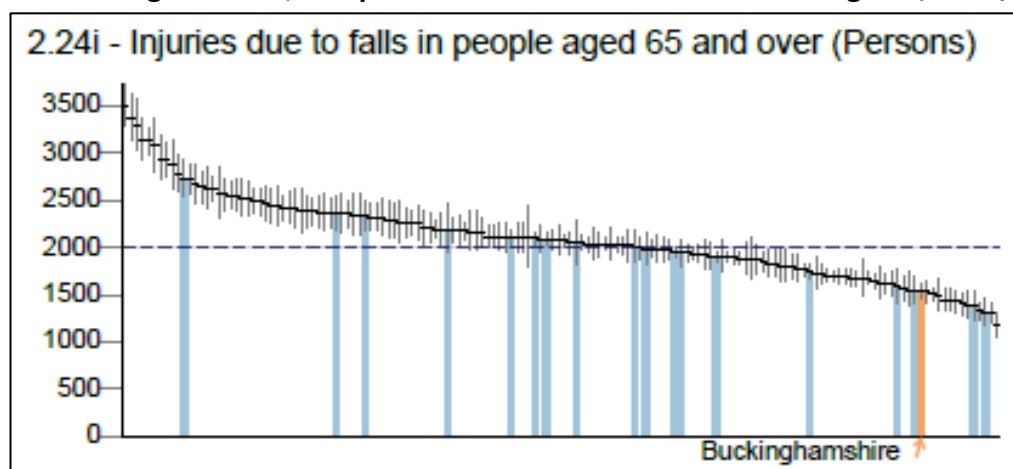


Buckinghamshire falls within the best quartile in England and ranks 27<sup>th</sup> out of 150 local authorities in England where 1 is the best. More than one in five people (21.7%)

reported feeling anxious the previous day in Buckinghamshire, similar to the national average (21.0%). With regard to loneliness and social isolation among adult social care users, a lower proportion of adult social care users in Buckinghamshire (41.7%) had as much social contact as they would like compared to nationally (43.2%) in 2012-2013. This difference was not statistically significant, but levels in Buckinghamshire were significantly lower than the two best areas in the country (53%). Social networks are known to be good for health and in reducing death rates.

**g. Injuries in population aged 65 years and over** – Falls and the fear of falling poses a high risk for older people and can have a devastating impact on their quality of life as a consequence of injuries due to a fall. In addition to physical injury, falls can lead to social isolation, reduced mobility and increased need for institutional care. In 2012-2013, the rate of all types of injuries to people aged 65 and over as a consequence of fall in Buckinghamshire was 1,533 per 100,000 people significantly lower than the national average of 2,011 per 100,000, with Buckinghamshire ranking 15<sup>th</sup> lowest in the country, but was significantly higher than the best rate in the country (903 per 100,000) [Fig 25]. The rate was higher in our most deprived areas compared to our least, but the difference was not significant.

**Figure 25: Emergency hospital admission rate for injuries due to falls in people aged 65+ in Buckinghamshire, compared to other local authorities in England, 2012/13**



Source: Public Health Outcomes Framework, 2014

#### 4. LONG TERM CONDITIONS

**a. Prevalence of long term conditions** – A long term condition is one that can be managed, but cannot be cured. General Practices maintain disease registers for a range of long term conditions so that patients can be readily reviewed and supported with good quality care, specific to their condition. As the population ages, more people are developing multiple long term conditions, and in Buckinghamshire half of people aged over 65 have two or more long term conditions. Clinical care of these people is complex, especially as they are likely to be on multiple drug treatments which can be difficult to manage. Quality of life is often significantly reduced and people with multiple long term conditions are more likely to be depressed. Those with multiple long term conditions are known to have more problems with the co-ordination of their care. Table 1 shows how the numbers of people on disease registers in Buckinghamshire has increased for all conditions except heart failure since 2008/09. These changes will be due to a range of factors, such as better detection of conditions, changing lifestyle behaviours and improved survival from previously life threatening conditions. Large increases in detected prevalence of dementia, diabetes, cancer and chronic obstructive pulmonary disease may partly be due to specific initiatives targeting improved detection in primary care, as well as the ageing of the population.

In March 2014, the GP recorded dementia prevalence in NHS Aylesbury Vale CCG was 0.6% similar to England average of 0.6%; with 1,230 patients on the practice registers and in Chiltern CCG, it was 0.5% with 1,652 patients on practice registers.

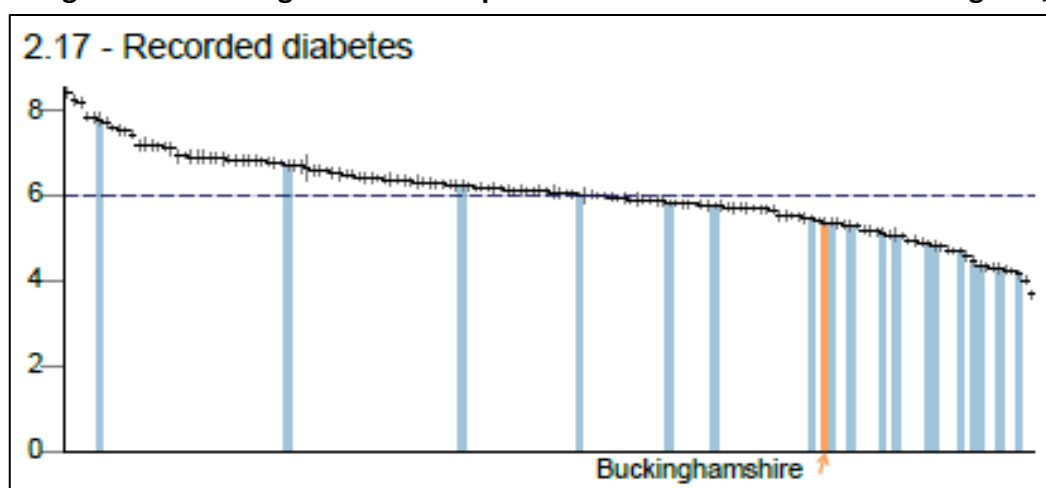
**Table 1: Number of people on GP registers for common long term conditions in Buckinghamshire, and changes between 2008/2009 and 2012/2013**

Register	Numbers on register in 2008-09	Numbers on register in 2012-13	Change in numbers 2008-09 to 2012-13	% Change 2008-09 to 2012-13
Dementia	1891	2684	793	42%
Heart Failure	3250	3046	-204	-6%
Chronic Obstructive Pulmonary Disease	5384	6876	1492	28%
Stroke TIA	7992	8315	323	4%
Atrial Fibrillation	7539	8626	1087	14%
Cancer	7115	10825	3710	52%
Coronary Heart Disease	15582	15889	307	2%
Diabetes	18250	22534	4284	23%
Asthma	32088	32521	433	1%
High Blood Pressure	64619	69308	4689	7%

Source: Quality & Outcomes Framework, HSCIC, 2014.

Diabetes is one of the most common long-term conditions, and can have serious impact on health, life expectancy, and the need for social care. Increasing levels of obesity and physical inactivity are a major cause of the increased number of people with diabetes. 5.4% of the adults in Buckinghamshire were recorded as having diabetes in 2012/13, which is below national levels (6.0%) [Fig 26].

**Figure 26: Percentage prevalence of QOF recorded cases of diabetes in primary care on GP registers in Buckinghamshire compared to other local authorities in England, 2012/13**

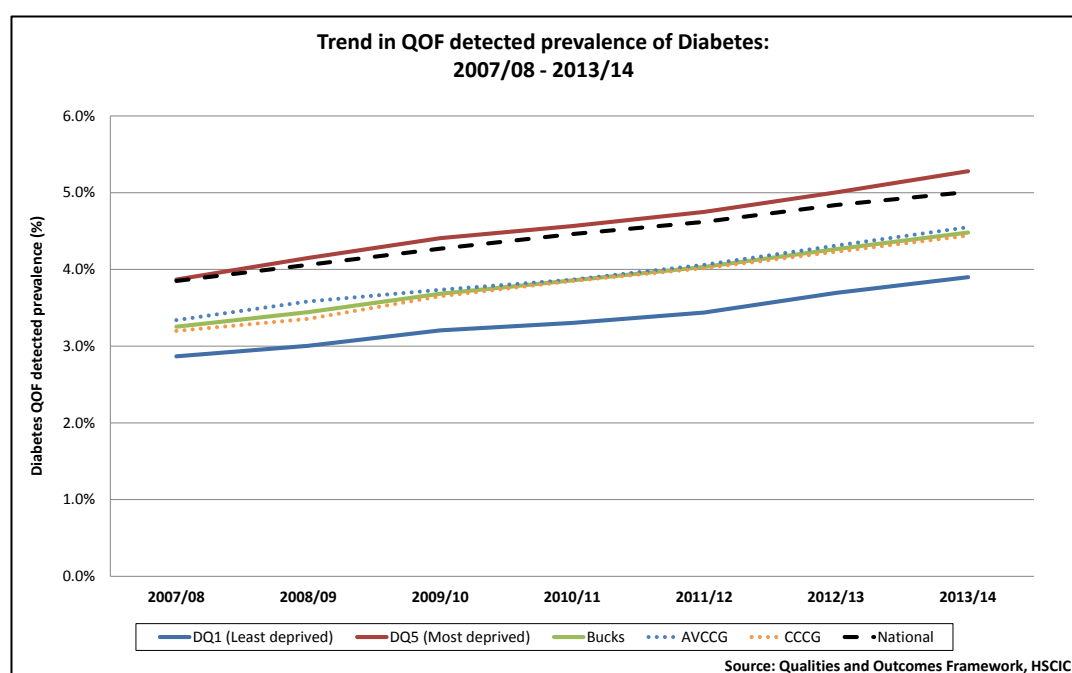


Source:

Public Health Outcomes Framework, 2014

Based on the diabetes prevalence model, the estimated diabetes prevalence in England is 7.4%, which means that a many people remain undiagnosed. In Buckinghamshire, the detected prevalence of diabetes increased by more than a fifth (22.6%) overall between 2008/09 and 2012/13, and by 17.9% in our most deprived areas over the same period, compared to an increase of 17.9% nationally. Prevalence of recorded diabetes is increasing and although consistently lower in Buckinghamshire than the national average, the prevalence in the most deprived areas in the county is above the national average [Fig 27]. Similarly the disease prevalence models show that there are likely to be undiagnosed cases of hypertension, Chronic Obstructive Pulmonary Disease (COPD) and Coronary heart Disease (CHD) in the Buckinghamshire population that need to be identified, diagnosed and managed. The 'NHS Health Checks' programme aims to prevent aims to help prevent CHD, stroke, diabetes, kidney disease and certain types of dementia in the 40 to 75 year old population.

**Figure 27: Trend in percentage prevalence of detected diabetes recorded in primary care on GP registers in Buckinghamshire by deprivation quintile compared to England and Aylesbury Vale Clinical Commissioning Group (CCG) and Chiltern CCG average - 2007/08 to 2013/14**



- b. Limiting long term illness (2011 Census)** – The National Census includes questions on health and limiting long term illnesses. In the 2011 Census, 85.8% of Buckinghamshire residents rated their health as very good or good, compared to 81.4% nationally. Almost 68,000 people (13.4%) of Buckinghamshire residents reported that they had a long term limiting illness, compared to 17.6% nationally. This proportion has increased in Buckinghamshire since the last census (2001), when 12.8% reported having a limiting long term illness.

## 5. HEALTH PROTECTION (Screening, Immunisation, Infectious Diseases)

**a. Cancer screening uptake** – National cancer screening programmes are managed and delivered by Public Health England in close partnership with NHS England.

i. Breast cancer screening uptake in Buckinghamshire in 2013 was 80.8% significantly higher than the England average of 76.3% with Buckinghamshire ranking 14<sup>th</sup> best in the country. This performance exceeds the recommended minimum standard expected uptake of 70%. However, the uptake has reduced over the past 3 years from 82.6% in 2010.

ii. Cervical cancer screening uptake in Buckinghamshire in 2013 was 75.6% significantly higher than the England average of 73.9% with Buckinghamshire ranking in the second best quartile in the country; however the uptake has reduced over the past 3 years from 78.4% in 2010.

iii. Bowel cancer screening uptake within the last 30 months in 2013/14 for 60 to 69 year olds in Buckinghamshire was 57% compared to the England average of 58.8%. This is lower than the recommended minimum uptake of 60%.

**b. Diabetic retinopathy screening** – In 2012/13 diabetic retinopathy screening uptake in those aged 18 years and over in Buckinghamshire was 92.7% compared to the England average of 91.7%, however the uptake in Buckinghamshire in 2013/14 was 83.7%. It is recommended that 100% diabetic patients are screened for retinopathy since retinopathy can lead to partial or complete blindness which can significantly affect an individual's activities of daily living as well as mental health.

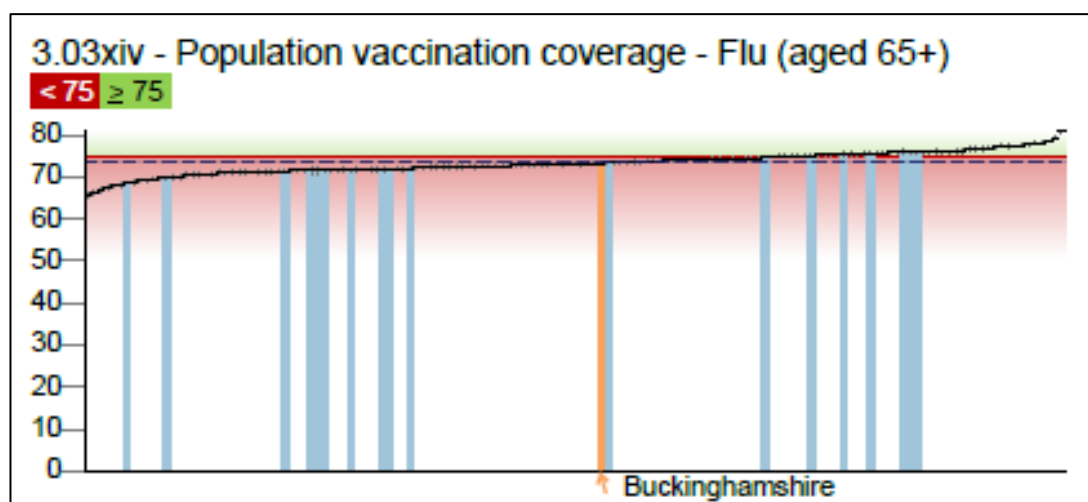
**c. NHS Health Checks uptake** – NHS Health Checks are offered to everyone aged 40 to 74 years old, who have not had a previous heart attack or stroke and who have not been diagnosed with diabetes or kidney disease, every five years. The programme identifies those at risk of developing these conditions and supports them to improve their



health. In 2013/14, 20.3% of the eligible population aged 40 to 74 years of age were offered a health check, which is significantly higher than the national average of 18.4%. Of those invited in 2013/14, 44.4% received a health check in Buckinghamshire, which is significantly lower than the national average of 49%.

- d. Flu vaccination uptake in adults aged 65 years and over and in at-risk groups –** For most people, influenza (flu) is an unpleasant but manageable illness. But for some, who are elderly or in poor health, it can lead to more serious illness which may require hospital treatment and can even be life threatening. Flu vaccination provides effective protection. In Buckinghamshire in 2012/13, 73.3% of people aged 65 years and over received the flu vaccine, which is similar to the national average (73.4%). However, it is recommended that at least 75% of over 65 year olds are immunised against seasonal flu. Buckinghamshire ranks 71<sup>st</sup> out of 150 local authorities in the country, with the best performing areas achieving vaccination rates of 80.5% [Fig 28].

**Figure 28: Percentage of eligible adults aged 65 and over who received the flu vaccine in Buckinghamshire compared to other local authorities in England, 2012/13. Performance is compared to the 75% target denoted by the red line**



Source: Public Health Outcomes Framework, 2014

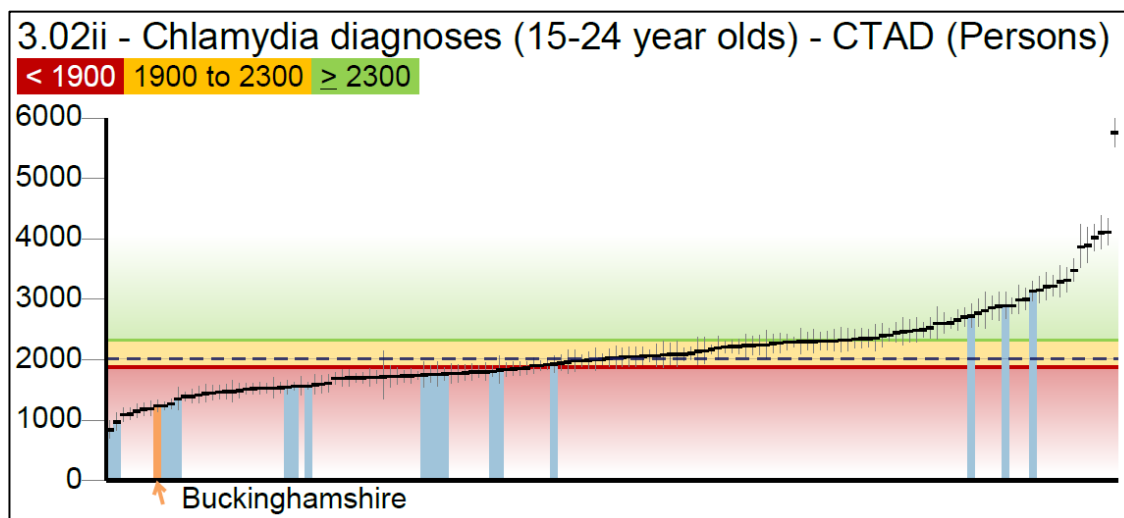
*Note: Areas shaded in red denote flu vaccination uptake of <75% and areas shaded in green denote flu vaccination coverage of 75% and more.*

Uptake levels among individuals at greater risk of complications (such as those with respiratory, cardiac and liver conditions) were comparatively poorer in Buckinghamshire. 48.3% of at risk individuals received a flu vaccine in 2012/13 in Buckinghamshire, lower (although not significantly) than the national average (51.3%). Buckinghamshire was in the second best quartile nationally, recording 42% lower uptake than the best area (68.8%) in England.

In 2013/14, the Buckinghamshire average uptake of flu vaccine by pregnant women was 43.1% compared to the England average of 39.8%. Aylesbury Vale CCG recorded 43% uptake, while Chiltern CCG recorded uptake of 39.5%. The uptake rate recorded by Chiltern CCG was lower than the nationally recommended uptake of 75%.

- e. **Sexually transmitted infections: Chlamydia** – Chlamydia is the most commonly diagnosed sexually transmitted infection which, if left untreated, can cause acute infections and complications such as pelvic inflammatory disease, ectopic pregnancy and infertility. In Buckinghamshire in 2013, the Chlamydia diagnosis rate in 15 to 24 year olds was 1,232 per 100,000 population, which is significantly lower than the England average of 2,016 per 100,000 population [Fig 29]. The numbers represent the number of tests and not individuals and data quality issues in the Chlamydia Testing Activity Dataset (CTAD) are being reviewed to improve the accuracy of the estimation of the diagnosis rate. Public Health England recommends that local authorities should work towards achieving a detection rate of at least 2,300 per 100,000 population. Low detection rates may mean lower prevalence of chlamydia, but may also mean lower detection of chlamydia in the population through chlamydia screening.

**Figure 29: Chlamydia diagnoses rate in 15-24 year olds in Buckinghamshire compared to other local authorities in England, 2012**



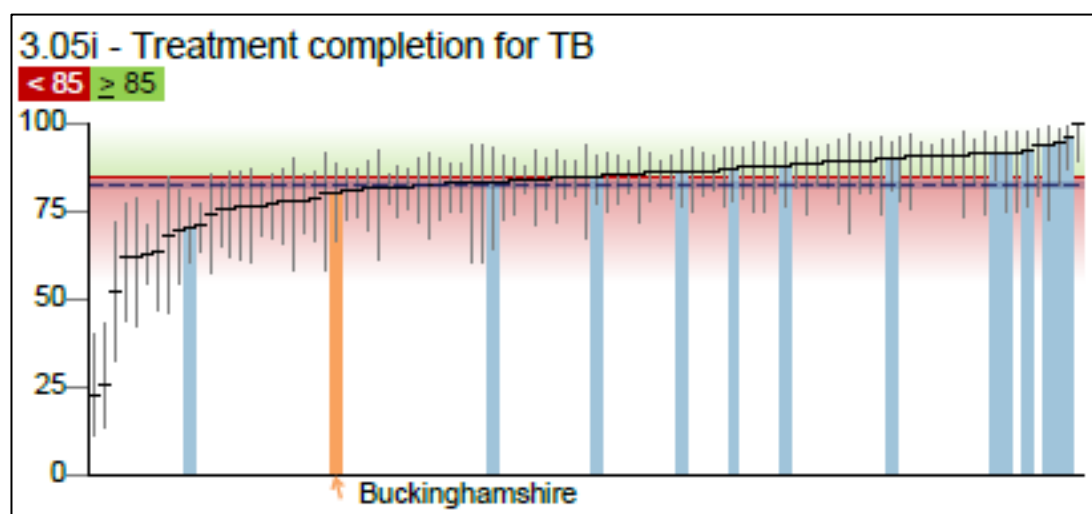
Source: Chlamydia testing activity dataset.

Source: Public Health Outcomes Framework, 2014

*Note: Areas shaded in red denote chlamydia diagnoses rate of <1900 per 100,000 population, amber denotes rate of 1900 to 2300 and green shading denotes diagnoses rate of 2300 and over.*

- f. **Tuberculosis (TB) treatment completion** – Timely and fully completed treatment for TB saves lives and prevents long-term ill health, reduces new infections, and reduces development of drug resistance. Drug resistant TB has more severe health consequences and is considerably more expensive to treat. 80% of people diagnosed with TB in Buckinghamshire in 2011 completed treatment in 2012, which is similar to national levels of 82.8%. Completion rates for Buckinghamshire were 72<sup>nd</sup> highest in the country, but were statistically significantly lower than the best area (100% completion rate) in the country [Fig 30]. However, data is not available for many areas of the country. The incidence of TB from 2010 to 2012 in Buckinghamshire was 9.9 per 100,000, which is similar to the regional average of 9.2 and significantly lower than the England rate of 15 per 100,000 population. Buckinghamshire ranks 79<sup>th</sup> lowest out of 150 local authorities in England with regard to the incidence of TB.

**Figure 30: Percentage of people completing treatment for TB in 12 months in Buckinghamshire compared to other local authorities in England, 2012. Performance is compared using 85% target which is established nationally and internationally by the WHO**

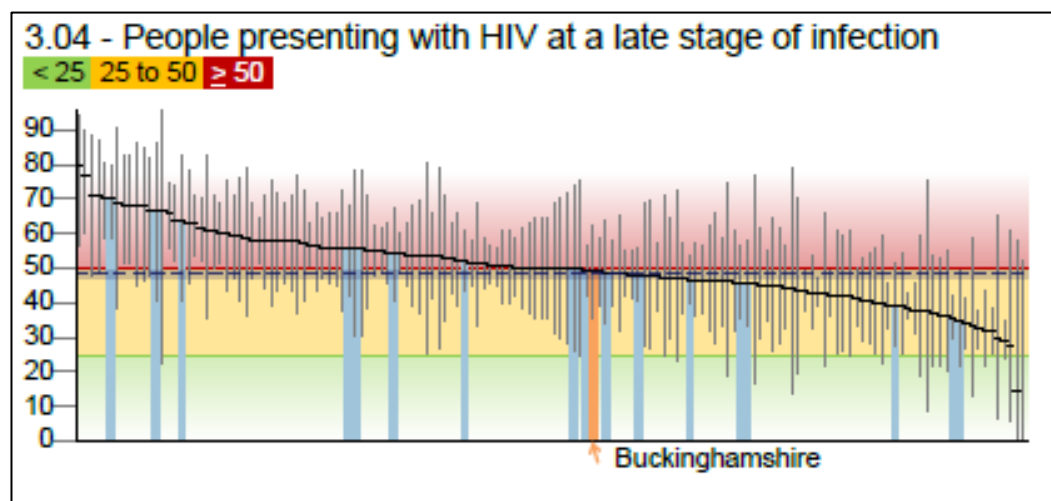


Source: Public Health Outcomes Framework, 2014

*Note: Areas shaded in red denote TB treatment completion rate of less than 85% and areas shaded in green denote TB treatment completion of 85% and more.*

- g. **Late diagnosis of HIV (Human Immuno-deficiency Virus)** – Early diagnosis of HIV and effective treatment is vital both for the individual affected, to maintain them in good health and to reduce HIV transmission to other people. From 2010 to 2012, 50% (31 people) in Buckinghamshire newly diagnosed with HIV presented at a late stage of infection similar to the national rate of 47.9%. Buckinghamshire ranks 69<sup>th</sup> best out of 148 local authorities in England [Fig 31]. *(Data is suppressed for 4 local authorities in England).*

**Figure 31: Percentage of adults aged 15+ newly diagnosed with HIV with a CD4 count <350 cells per mm<sup>3</sup> in Buckinghamshire compared to other local authorities England, 2010-12. Performance of 50%+ is considered worse; 25-50% as average and <25% as good**



Source: Public Health Outcomes Framework, 2014

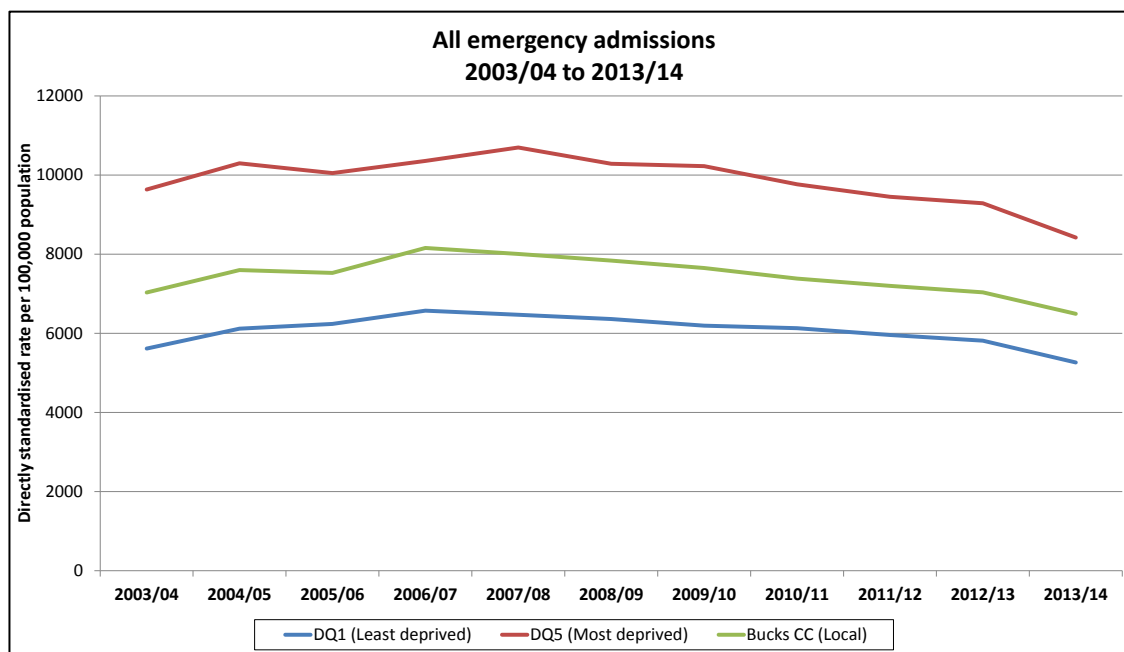
*Note: Areas shaded in red denote 50% or more patient diagnosed at a late stage of infection. Amber shading denotes 25-50% patients diagnosed at a late stage and green shading denotes <25% diagnosed at late stage of infection.*

## 6. HOSPITAL ADMISSIONS (SECONDARY CARE)

Monitoring of health care service use is essential to understand the demand and uptake in relation to the need in the population. Elective or planned hospital admissions and non-elective or emergency admissions are monitored annually. Reducing the number and duration of emergency hospital admissions has been a priority for Buckinghamshire for several years, even though admission rates are among the lowest in the country. Developing more integrated and responsive health and social care alongside effective self-management and prevention is a focus for the Health and Wellbeing Board. This section provides a summary of outcomes related to emergency hospital admissions of patients residing in Buckinghamshire.

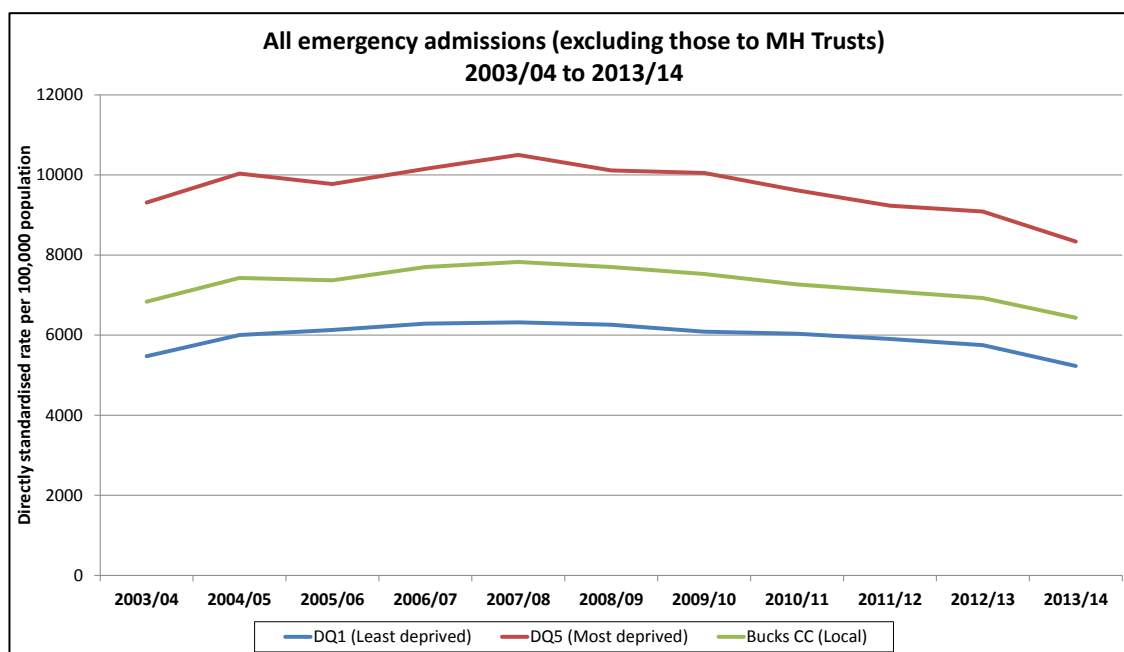
- a. **Emergency hospital admissions due to all causes** – In 2013/14 there were 33,077 emergency hospital admissions for all causes in Buckinghamshire, at a rate of 6,494 per 100,000 people. The rate in the most deprived areas of Buckinghamshire (8,424 per 100,000 people) was significantly higher than the rate in the least deprived areas (5,263 per 100,000 people). Between 2003/04 and 2013/14, the overall emergency hospital admission rate due to all causes in Buckinghamshire reduced by 7.7% with a significant reduction (13%) in the most deprived areas compared to the least deprived areas (6%); an absolute narrowing of the gap between the most and least deprived areas of 4% [Fig 32]. There is a declining trend in rate of emergency hospital admissions due to all causes (excluding those to mental health trusts) in the most and the least deprived areas of Buckinghamshire [Fig 33].

**Figure 32. Trends in emergency hospital admission rates from all causes in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14**



Source: Secondary Uses Services, Admitted patient care dataset.

**Figure 33. Trends in emergency hospital admission rates from all causes excluding those to Mental Health Trusts in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14**

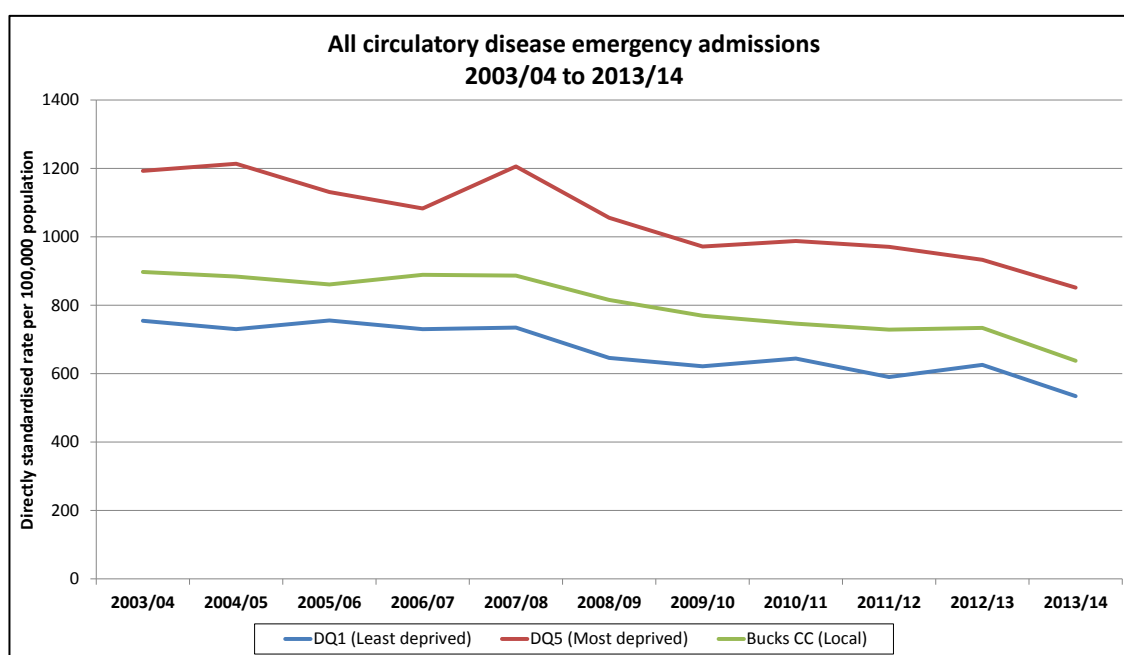


Source: Secondary Uses Services, Admitted patient care dataset

**b. Emergency hospital admissions due to circulatory diseases (heart disease and stroke)**

– In 2013/14 there were 3,005 emergency hospital admissions for cardiovascular conditions, a rate of 638 per 100,000 people. The rate for the most deprived areas of Buckinghamshire (852 per 100,000 people) was significantly higher (1.5 times higher) than the rate in the least deprived areas (534 per 100,000 people) [Fig 34]. Between 2003/04 and 2013/14, the overall emergency hospital admission rate due to cardiovascular conditions in Buckinghamshire reduced by 29% with a similar reduction in the most and least deprived areas.

**Figure 34: Trends in emergency hospital admission rates due to circulatory diseases in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14**



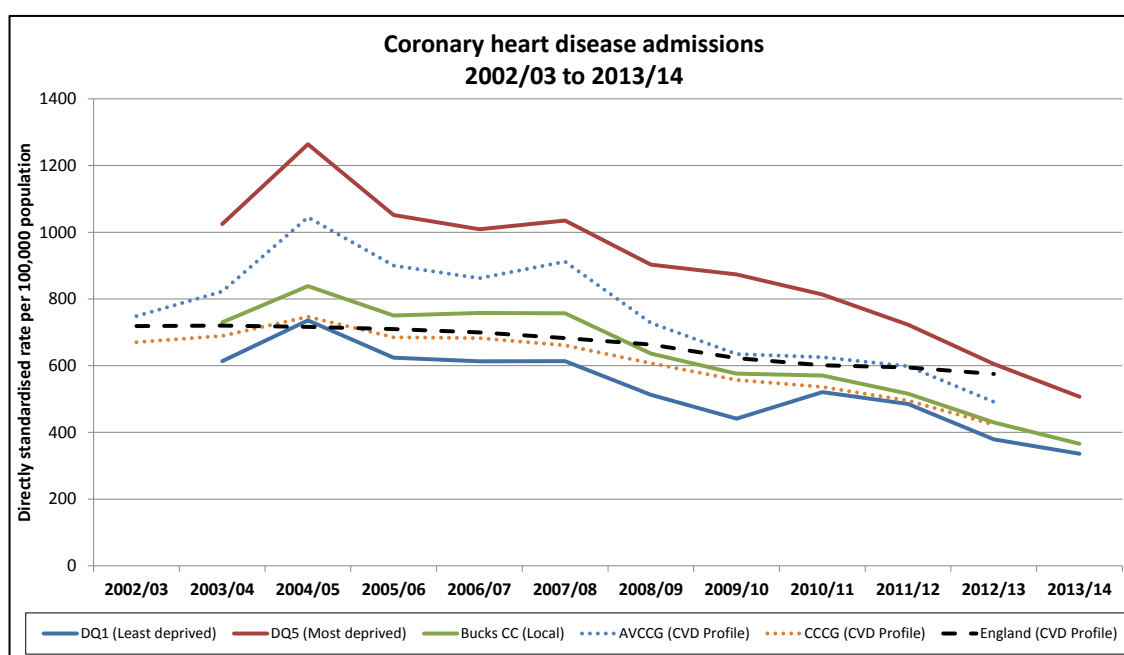
Source: Secondary Uses Services, Admitted patient care dataset

- c. Hospital admissions due to coronary heart disease (CHD)** - In 2013/14 there were 1,721 hospital admissions due to coronary heart disease (CHD), at a rate of 366 per 100,000 people. The rate for the most deprived areas of Buckinghamshire (506 per 100,000 people) was significantly higher (1.5 times higher) than the rate in the least deprived areas (336 per 100,000 people). Between 2003/04 and 2013/14, the overall emergency hospital admission rate due to coronary heart disease in Buckinghamshire reduced by 50%. There has also been a reduction in the gap between the most and



least deprived areas over the past 10 years, with a greater reduction seen in the most deprived areas (50%), compared to least deprived areas (45%) [Fig 35]. The National Cardiovascular profiles state that the rate of emergency hospital admissions due to heart disease in Aylesbury Vale CCG is higher (not significantly) than Chiltern CCG (2012/13); with both CCGs having a significantly lower rate compared to the England average.

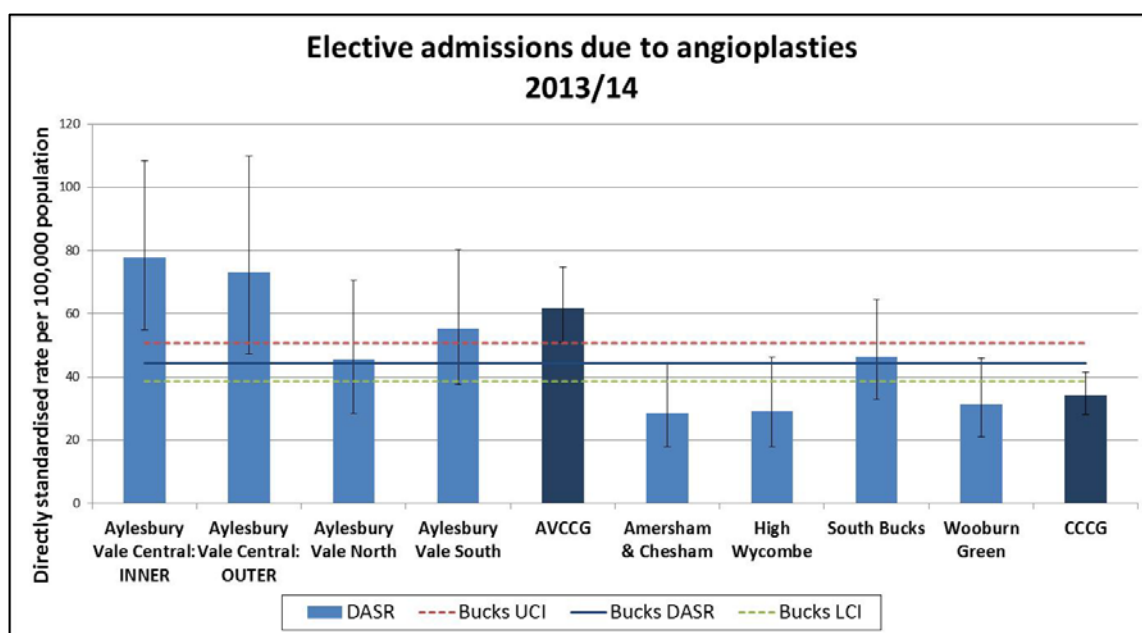
**Figure 35: Trends in hospital admission rates due to coronary heart disease (CHD) in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14**



Source: Secondary Uses Services, Admitted patient care dataset

- d. **Hospital admissions for elective angioplasty** - In 2013/14 there were 216 hospital admissions for elective angioplasty in Buckinghamshire, at a rate of 44 per 100,000 people. The rate in Aylesbury Vale CCG was 61.7 (per 100,000) significantly higher than the rate in Chiltern CCG (34 per 100,000). There is variation in primary care localities in Buckinghamshire with the rate ranging from 28 per 100,000 in Amersham and Chesham, to 77 per 100,000 in Aylesbury Vale Inner Locality [Fig 36].

**Figure 36: Hospital admission rates for elective angioplasty at any hospital provider at primary care locality level in Buckinghamshire CCGs – Aylesbury Vale CCG, Chiltern CCG - 2013/14**



Source: Secondary Uses Services, Admitted patient care dataset

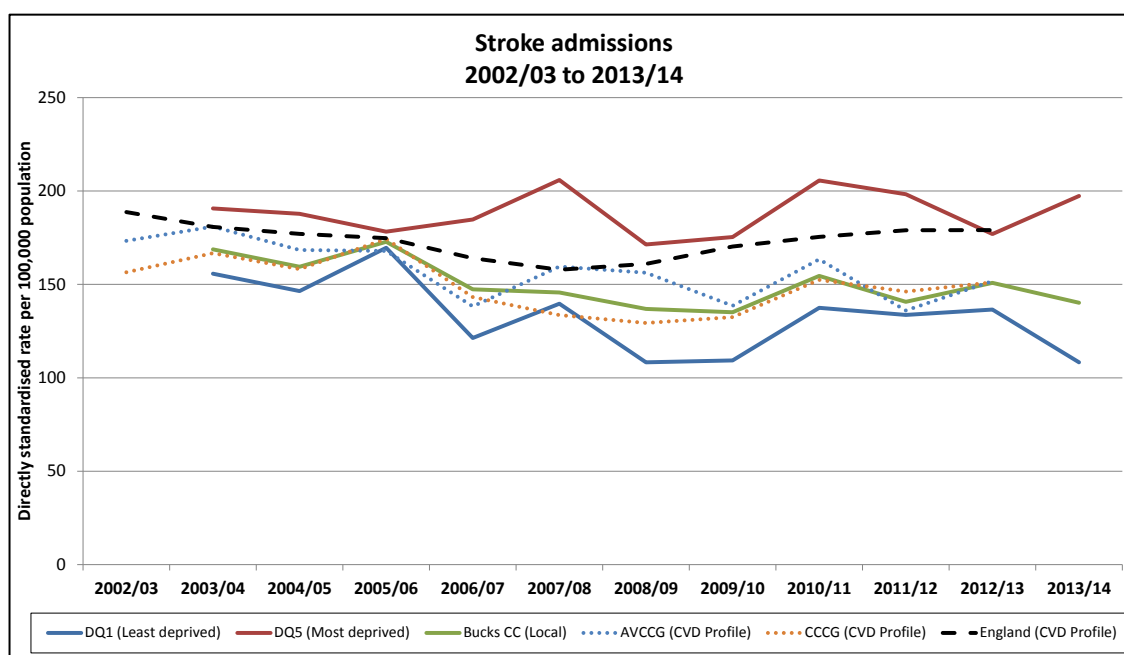
Between 2005/06 and 2013/14, the overall hospital admission rate for elective angioplasty in Buckinghamshire reduced by 41%, with a 46% reduction in Chiltern CCG, compared to a 37% reduction in Aylesbury Vale CCG. A slight variation is seen between the localities in the CCGs, with Central Locality, South Locality in AVCCG and Southern Locality in CCCG having higher (not significant) rates compared to Buckinghamshire average.

The National Cardiovascular profiles state that according to the National Audit Project, in 2012/13 77.2% of eligible patients received primary angioplasty within 120 minutes of calling for help (call-to-balloon), including those admitted directly or transferred to a Heart Attack Centre in Thames Valley area. The aim is to get 100% patients to undergo primary percutaneous intervention within 120 minutes, for better outcomes.

- e. **Hospital admissions due to stroke** - In 2013/14 there were 655 hospital admissions for stroke, at a rate of 140 per 100,000 people in Buckinghamshire. The rate for the most

deprived areas of Buckinghamshire (197 per 100,000 people) was significantly higher than the rate in the least deprived areas (108 per 100,000 people). According to the National Cardiovascular disease profiles, in 2012/13 the admission rate for stroke, in NHS Chiltern CCG was 151.1 per 100,000 (453 admissions). This is significantly lower than England (179.1). The admission rate for stroke in Chiltern CCG decreased by 3.5% between 2004/05 and 2012/13. In 2012/13 the admission rate for stroke, in NHS Aylesbury Vale CCG was 151.7 per 100,000 (261 admissions). This is significantly lower than England (179.1). The admission rate for stroke in Aylesbury Vale CCG decreased by 12.5% between 2004/05 and 2012/13. Between 2003/04 and 2013/14, the overall hospital admission rate due to stroke in Buckinghamshire reduced by 17%, however, the percentage gap between the most and least deprived has widened due to a faster reduction in the least deprived areas compared to most deprived areas [Fig 37].

**Figure 37: Trends in hospital admission rates due to stroke in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14**

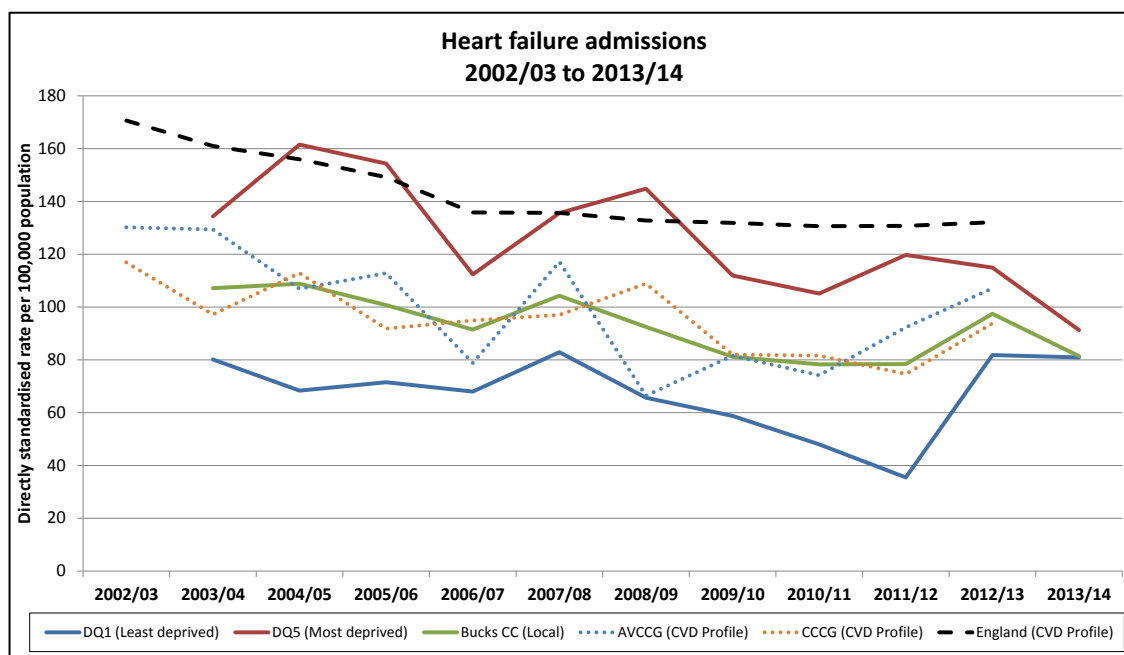


Source: Secondary Uses Services, Admitted patient care dataset

- f. **Hospital admissions due to heart failure** - In 2013/14 there were 376 hospital admissions for heart failure, at a rate of 81 per 100,000 people in Buckinghamshire. The rate in the most deprived areas of Buckinghamshire (91 per 100,000 people) was slightly higher (not significantly) than the rate in the least deprived areas (81 per

100,000 people). Between 2003/04 and 2013/14, the overall hospital admission rate due to heart failure in Buckinghamshire reduced by 24%, with a greater reduction in the most deprived areas (32%), compared to no change in the least deprived areas resulting in a narrowing of the gap between the most and least deprived areas [Fig 38].

**Figure 38: Trends in hospital admission rates due to heart failure in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14**

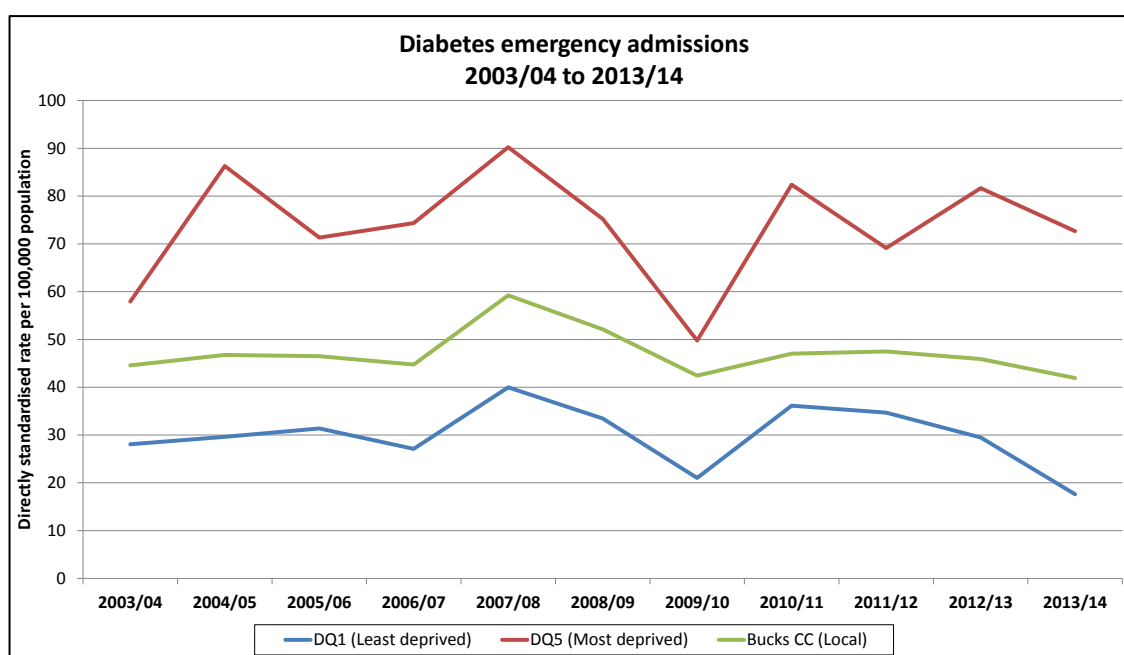


Source: Secondary Uses Services, Admitted patient care dataset

- g. **Emergency hospital admissions due to diabetes** – In 2013/14 there were 211 emergency hospital admissions due to diabetes in Buckinghamshire, at a rate of 42 per 100,000 people. The rate in the most deprived areas of Buckinghamshire (73 per 100,000 people) was significantly higher than the rate in the least deprived areas (18 per 100,000 people). Between 2003/04 and 2013/14, the overall emergency hospital admission rate due to diabetes in Buckinghamshire reduced by 6% with a reduction of 37% in the least deprived areas, but an increase of 25% in the most deprived areas leading to a widening of the gap between the most and least deprived areas by 24% [Fig 39]. From 2011 to 2014 there were 660 emergency hospital admissions due to diabetes in Buckinghamshire at a rate of 43 per 100,000. The rate in Aylesbury Vale CCG patients (45 per 100,000) was similar to Chiltern CCG patients (41 per 100,000).

Analysis at GP locality level shows the rate of emergency hospital admissions due to diabetes significantly higher in Central (Inner) Locality in Aylesbury Vale CCG and in Wycombe Locality in Chiltern CCG, compared to the Buckinghamshire average. The rate was significantly lower in Aylesbury Vale Central (Outer) and South Locality in Aylesbury Vale CCG and Southern Locality in Chiltern CCG compared to the Buckinghamshire average.

**Figure 39: Trends in emergency hospital admission rates due to diabetes in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14**

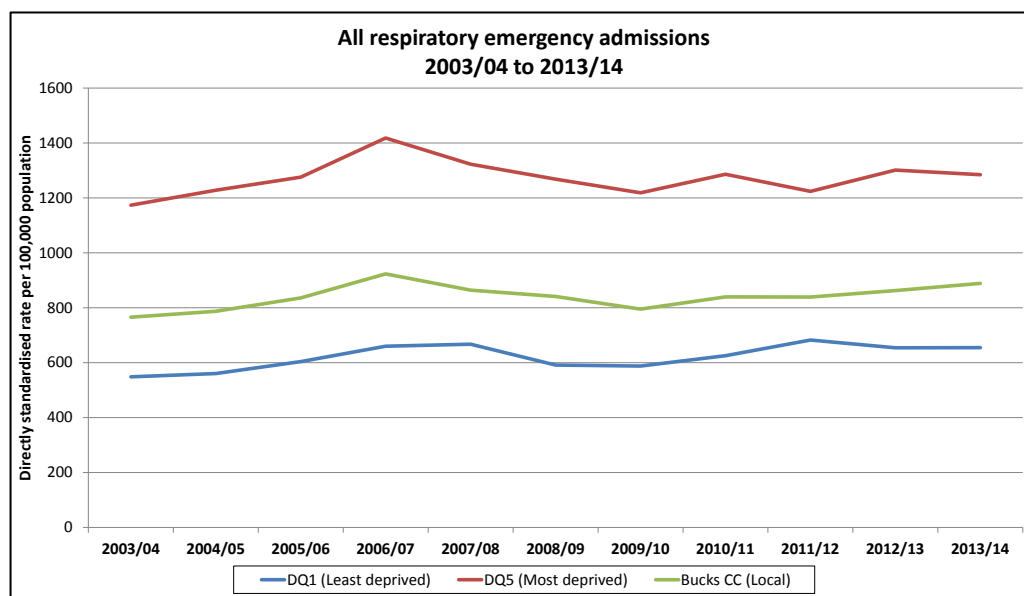


Source: Secondary Uses Services, Admitted patient care dataset

- h. **Emergency hospital admissions due to respiratory diseases** – In 2013/14 there were 4,659 hospital admissions related to respiratory diseases, at a rate of 888 per 100,000 people in Buckinghamshire. The rate in the most deprived areas of Buckinghamshire (1,284 per 100,000 people) was significantly higher than the rate in the least deprived areas (654 per 100,000 people). Between 2003/04 and 2013/14, the overall hospital admission rate due to all respiratory conditions in Buckinghamshire increased by 16% with a greater increase (19%) in the least deprived areas compared to most deprived areas where the rate increased by 9.5% over the same period. The gap between the most and least deprived areas has reduced by 4%, but this is attributable to an

increase in hospital admissions in the least deprived areas rather than a decrease in hospital admissions in the most deprived areas [Fig 40].

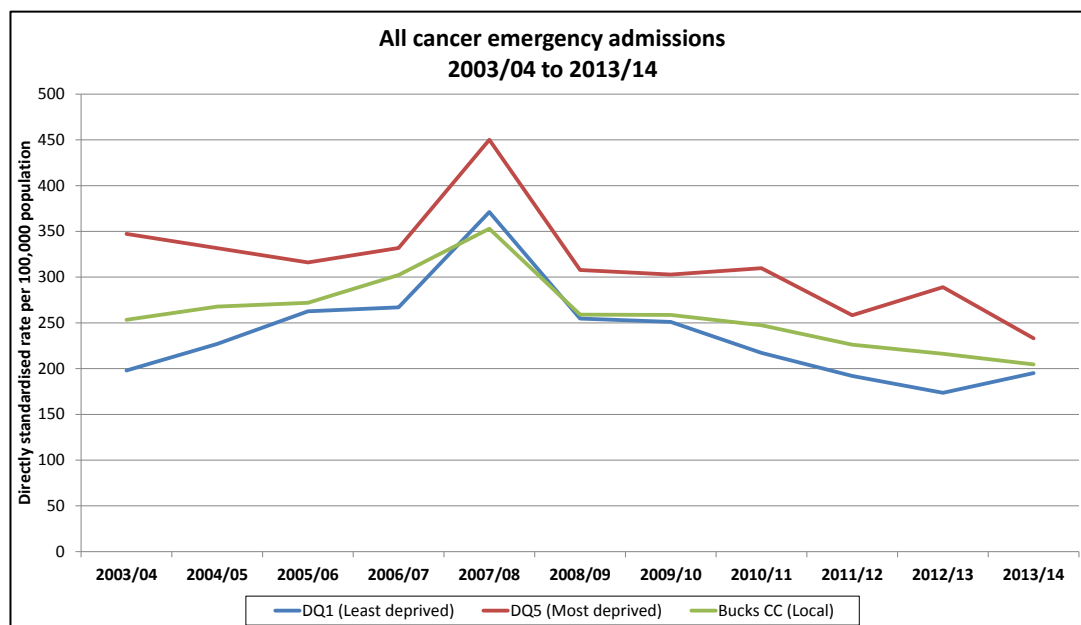
**Figure 40: Trends in emergency hospital admission rates due to respiratory diseases in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14**



Source: Secondary Uses Services, Admitted patient care dataset

- i. **Emergency hospital admissions due to cancer** – In 2013/14 there were 984 emergency hospital admissions due to cancer in Buckinghamshire, at a rate of 204 per 100,000 people. The rate in the most deprived areas of Buckinghamshire (233 per 100,000 people) was higher (not significantly) than the rate in the least deprived areas (195 per 100,000 people). Between 2003/04 and 2013/14, the overall emergency hospital admission rate due to cancer in Buckinghamshire reduced by 19%, with a greater reduction (33%) seen in the most deprived areas compared to the least deprived areas (1.5%). This has led to a narrowing of the gap of by 27% over the ten year period [Fig 41].

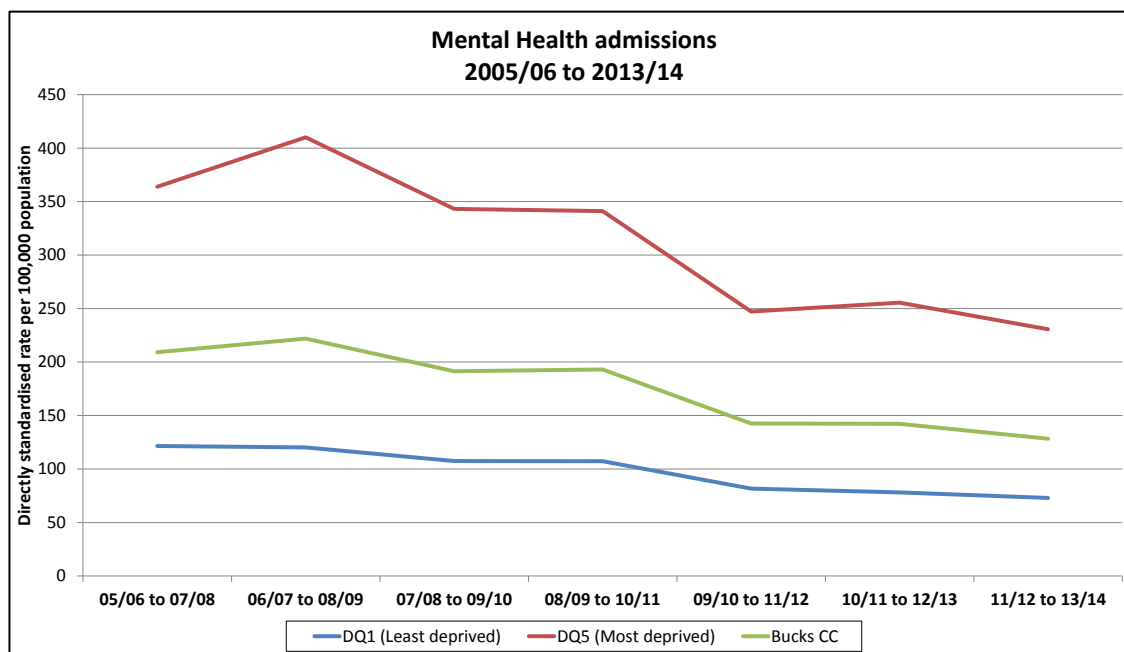
**Figure 41: Trends in emergency hospital admission rates due to cancer in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14**



Source: Secondary Uses Services, Admitted patient care dataset

- j. **Hospital admissions related to mental health** – In 2011-2014 there were 1,887 hospital admissions for all mental health conditions at a rate of 128 per 100,000 people in Buckinghamshire. The most recent benchmarking data shows that Buckinghamshire had the fourth lowest mental health admissions rate in the country (2009/10 to 2011/12 data). The admissions rate for the most deprived areas of Buckinghamshire (231 per 100,000 people) was three times higher than the rate in the least deprived areas (73 per 100,000 people). Between 2003/04 and 2013/14, the rate for Buckinghamshire reduced by 66%, with a reduction in the most deprived areas of 67% and in the least deprived areas of 71%. The gap between the most and least deprived areas has narrowed over the past 10 years [Fig 42].

**Figure 42: Trends in hospital admission rates due to mental health in population of all ages in Buckinghamshire by deprivation quintile, 2005/06 to 2013/14**

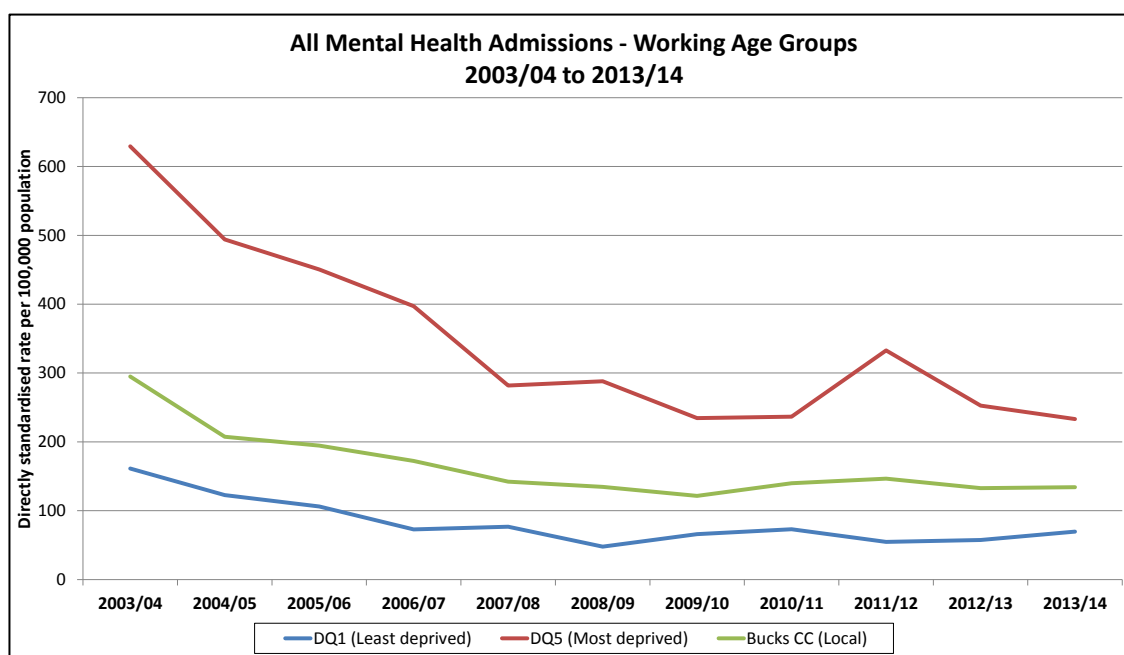


Source: Secondary Uses Services, Admitted patient care dataset

**Working age** – In 2013/14 there were 419 hospital admissions due to mental health conditions in population classed as working age population (16 to 59 years of age for women and 16 to 64 years of age for men) in Buckinghamshire, at a rate of 134 per 100,000 people. The rate in the most deprived areas of Buckinghamshire (233 per 100,000 people) was significantly higher than the rate in the least deprived areas (70 per 100,000 people). Between 2003/04 and 2013/14, the overall hospital admission rate due to mental health conditions in working age adults in Buckinghamshire reduced by 54%, with a greater reduction of 63% in the most deprived areas and 57% in the least deprived areas. The gap between the most and least deprived areas has narrowed by 4% [Fig 43].



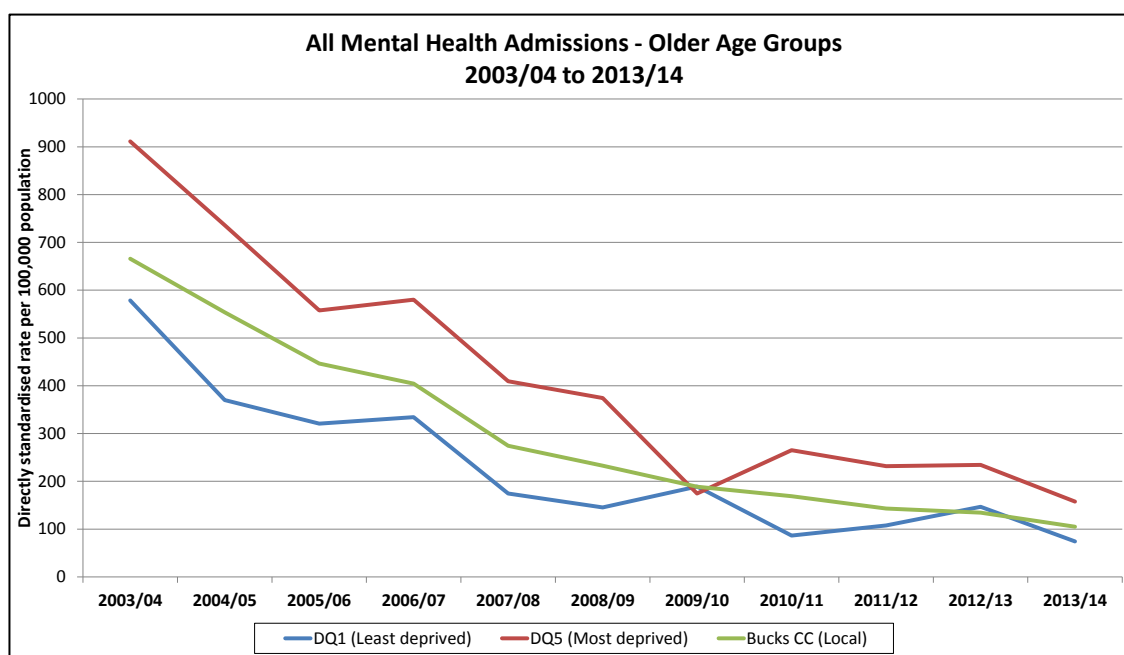
**Figure 43: Trends in hospital admission rates due to mental health in working age adults (16-59 for women and 16-64 for men) in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14**



Source: Secondary Uses Services, Admitted patient care dataset

**Older People** – In 2013/14 there were 117 hospital admissions due to mental health conditions in older population (60+ for women and 65+ for men) in Buckinghamshire, at a rate of 105 per 100,000 people. The rate in the most deprived areas of Buckinghamshire (157 per 100,000 people) was higher (not significantly) than the rate in the least deprived areas (74 per 100,000 people). Between 2003/04 and 2013/14, the overall hospital admission rate due to mental health conditions in working age adults in Buckinghamshire has reduced by 84%, with a reduction of 87% in the least deprived areas and 83% in the most deprived areas. This has led to a widening of the gap between the most and least deprived areas of 16% [Fig 44].

**Figure 44: Trends in hospital admission rates due to mental health in older adults (60+ for women and 65+ for men) in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14**

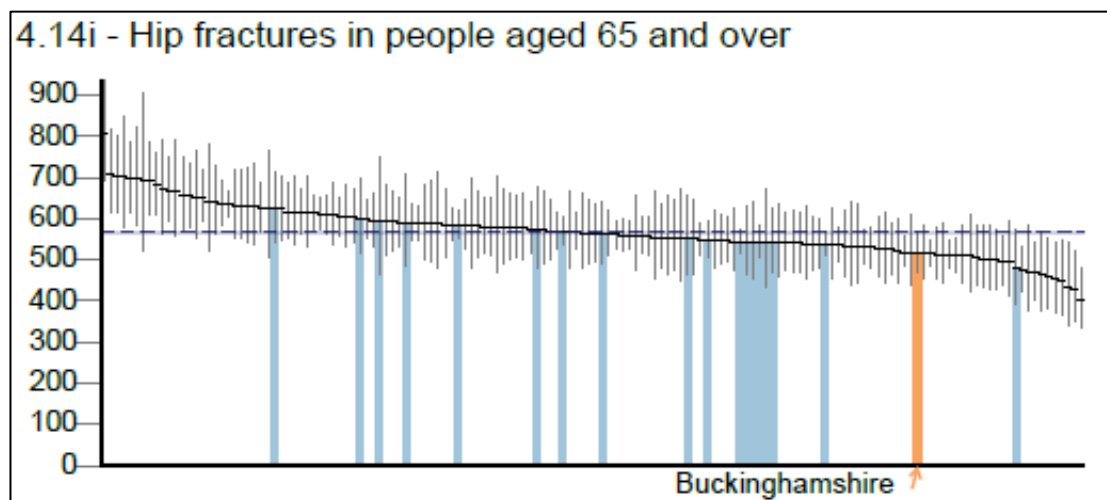


Source: Secondary Uses Services, Admitted patient care dataset

- k. **Emergency hospital admissions due to hip fractures in people aged 65 and over** - Hip fractures often have profound impact on the individual. Deaths after hip fracture are a risk, with around a third of those who have a hip fracture dying after a year; a similar proportion lose their independence and have to move to long term care. In 2012/13, there were 488 emergency hospital admissions as a result of hip fracture in persons aged 65 and over in Buckinghamshire at a rate of 518.5 per 100,000 people lower (not significantly) than the national average (568.1 per 100,000) [Fig 45]. The rate was 26<sup>th</sup> lowest in the country in 2012/13.

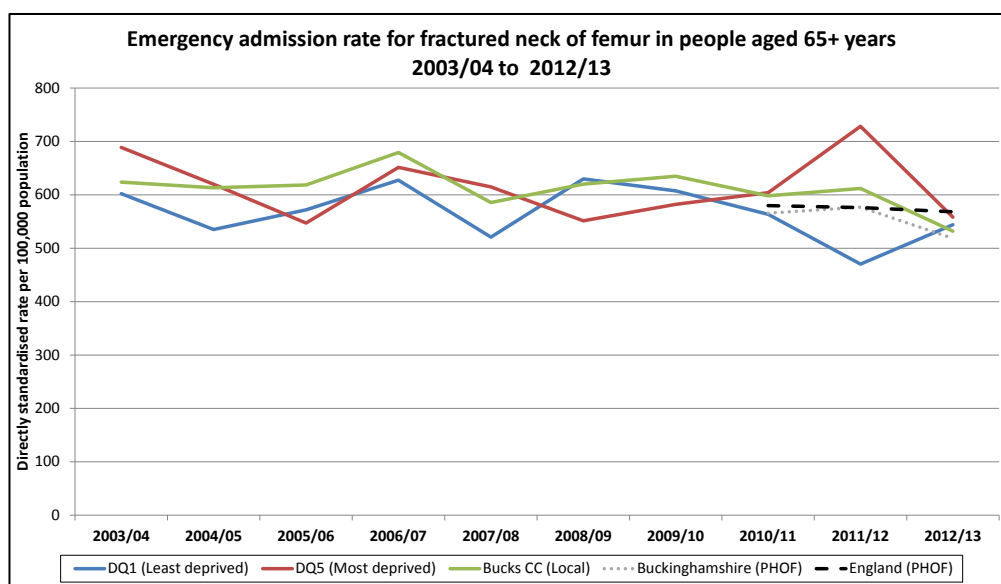
There was no identifiable link between hip fractures and deprivation. The trend data shows that there is no significant change in emergency hospital admissions due to hip fractures in the 65 and over population over past 10 years [Fig 46].

**Figure 45: Hip fractures in people aged 65 and over in Buckinghamshire compared to other local authorities in England, 2012/13**



Source: Public Health Outcomes Framework, 2014

**Figure 46: Trend in emergency hospital admission rate due to hip fractures in persons aged 65 and over in Buckinghamshire by deprivation quintile, 2003/04 to 2012/13**



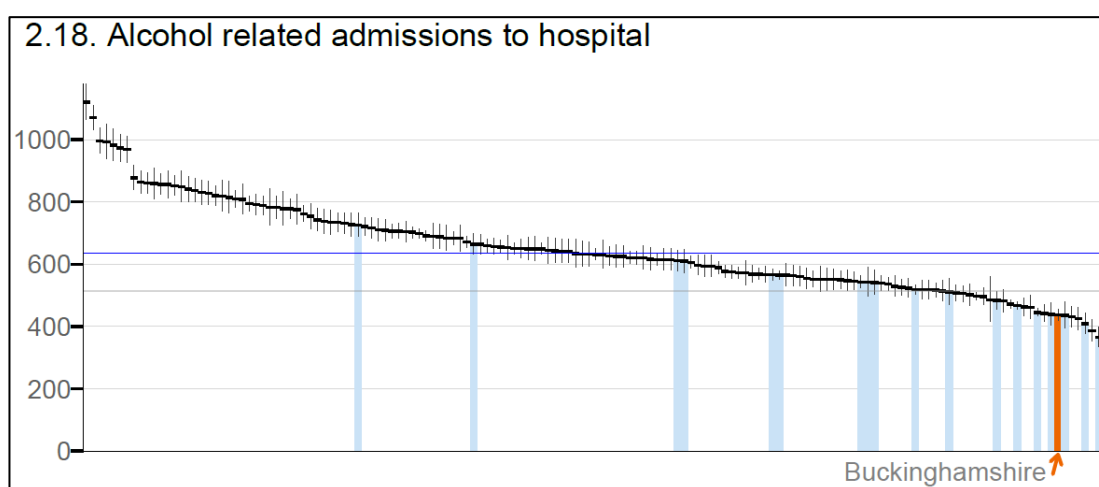
Source: Secondary Uses Services, Admitted patient care dataset

- I. **Hospital admissions due to alcohol** – Around one in five people in Buckinghamshire drink at levels described as ‘increasing risk drinking’ of alcohol-related harm. Conditions such as alcoholic liver disease, where alcohol is the sole cause, are known as *alcohol-specific* or *wholly alcohol-attributable* conditions and their alcohol-attributable fraction is 1.0 (100%). For other conditions, where alcohol has a proven

relationship to causative factors, an estimate of the contribution alcohol makes, is calculated, which are classified as alcohol-related hospital admissions. For example, it is estimated that alcohol plays a causative role in 25-33% of cardiac arrhythmias. These are the *partially alcohol-attributable conditions* and the alcohol-attributable fractions would be 0.25-0.33. Fractions differ slightly for men and women. Some *external cause codes* also have an alcohol-attributable fraction (for example, 27% of assaults are estimated to be alcohol-related and therefore the alcohol-attributable fraction is 0.27).

Hospital admissions data allows trends analysis and understanding causes of admissions to hospital of patients due to alcohol-related harm. Around 1 in 5 cases admitted as a result of alcohol-related harm have an alcohol specific condition, such as liver cirrhosis, gastritis, alcoholic polyneuropathy/myopathy/cardiomyopathy, mental and behavioural disorders due to alcohol, ethanol/methanol poisoning or toxic effects of alcohol and degenerative disorders of nervous system due to alcohol. In 2012/13 Buckinghamshire had the 7<sup>th</sup> lowest alcohol-related hospital admissions rate (437 per 100,000) in the country, which is significantly lower than the England average (637 per 100,000) [Fig 47].

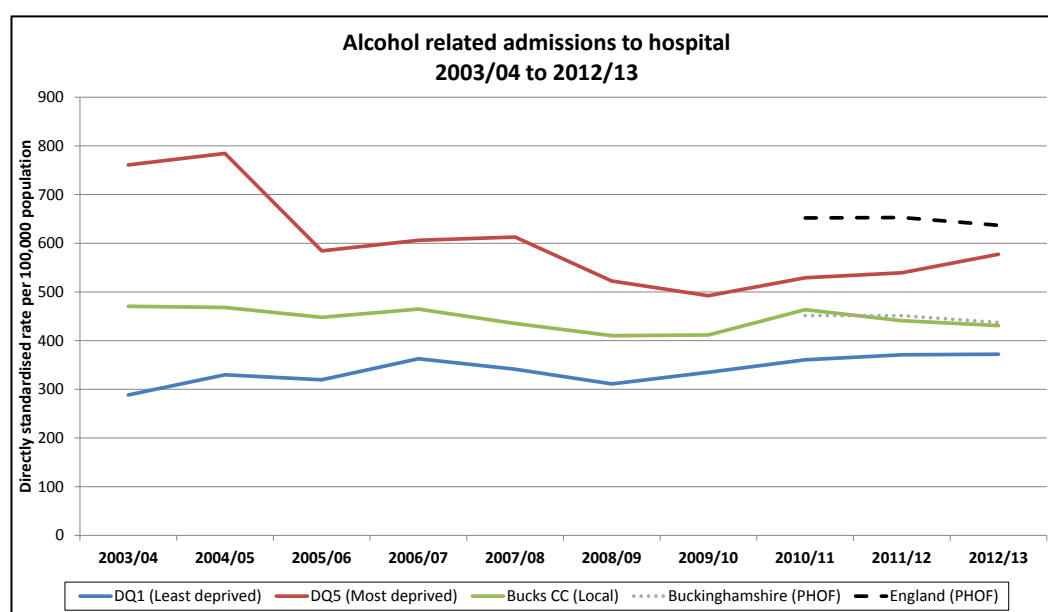
**Figure 47: Alcohol-related admissions to hospital to persons in Buckinghamshire compared to other local authorities in England, 2012/13**



Source: Public Health Outcomes Framework, 2014

The Public Health Outcomes Framework (PHOF) shows there were 2,138 alcohol-related hospital admissions in Buckinghamshire residents in 2012/13 (1,235 in males and 902 in females) at a rate of 437 per 100,000, which is significantly lower compared to the rate of 637 in England. The alcohol-related hospital admission rate in males was significantly higher compared to females in Buckinghamshire. The hospital admission rate due to alcohol-related conditions is higher in more deprived areas compared to least deprived areas in Buckinghamshire. Since 2003/04, the trend in rate of alcohol-related hospital admissions in Buckinghamshire has seen no significant change; the ten year trend shows a reduction in the most deprived population (DQ5), while the rate has risen in the least deprived population (DQ1) [Fig 48].

**Figure 48: Trends in hospital admission rate due to alcohol-related conditions in Buckinghamshire by deprivation quintile, 2003/04 to 2012/13**

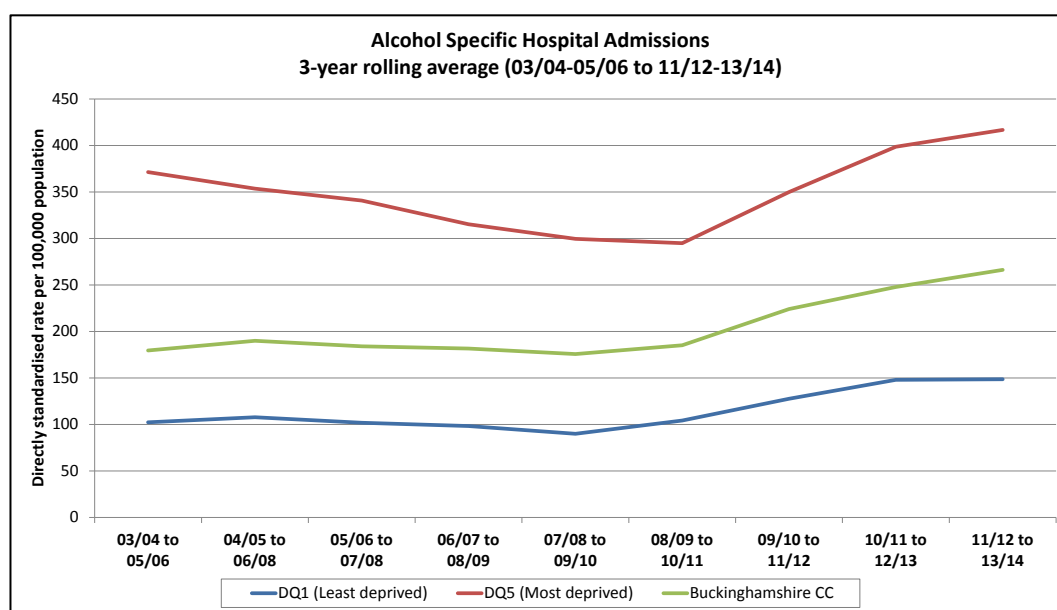


Source: Secondary Uses Services, Admitted patient care dataset

**Alcohol-specific hospital admissions** – Data published by the local alcohol profiles for England (LAPE) show the rate of alcohol-specific hospital admissions in England in 2012/13 was 507 per 100,000 population in males and 232 per 100,000 in females. The rates of alcohol-specific hospital rates in Buckinghamshire (published at District Council level) were significantly lower than the England average in 2012/13. Hospital admissions rates due to alcohol-specific causes in Buckinghamshire reduced

from 2003/04 to 2007/08, but then showed a rising trend from 2008/09 to 2014/15; to above 2003/04 levels [Fig 48]. There were 349 alcohol-specific admissions in Q2 of 2014/15 (provisional data) compared to 179 admissions in Q2 of 2008/09. The rate of alcohol-specific hospital admissions has increased from 36 per 100,000 in Q2 of 2008/09 to 68 per 100,000 in Q2 of 2014/15 (based on provisional data) [Fig 49].

**Figure 49: Trend in alcohol-specific hospital admission rate in Buckinghamshire by deprivation quintile, 2003/04 – 2013/14**

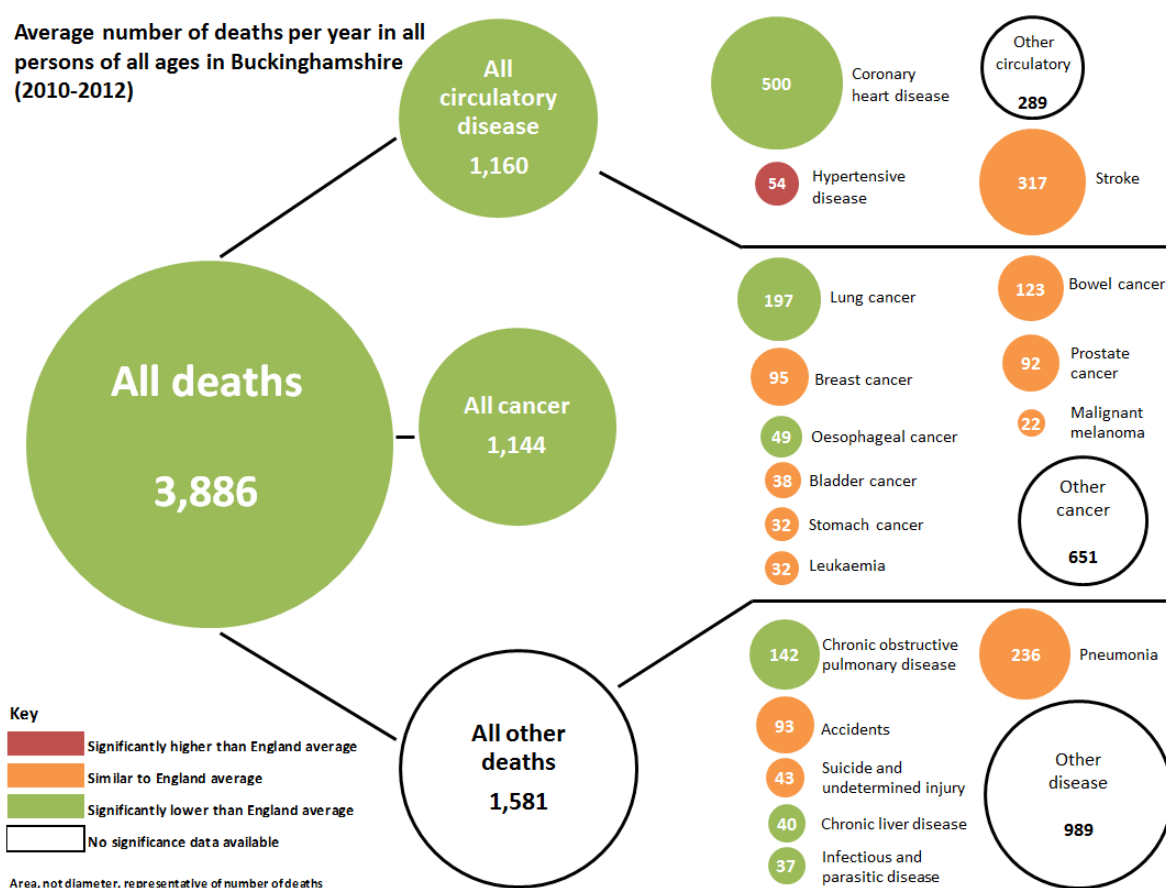


Source: Secondary Uses Services, Admitted patient care dataset

## 7. MORTALITY

- a. Mortality due to different causes** – The infographic [Fig 50] shows how many deaths occurred from specific cause of death. The circles include number of deaths in Buckinghamshire from 2010 to 2012 and the colour of the circle denotes whether the death rate is significantly higher or lower than the England average. Mortality due to hypertensive diseases is significantly higher than the England average. Mortality due to circulatory diseases, cancers, heart disease, lung cancer, COPD and liver disease is significantly lower in Buckinghamshire than the England average.

**Figure 50: Infographic showing number of deaths by cause in Buckinghamshire over 2010 – 2012 comparing mortality rate in Buckinghamshire with England average**



Source: Office for National Statistics (ONS) Public Health Mortality files.

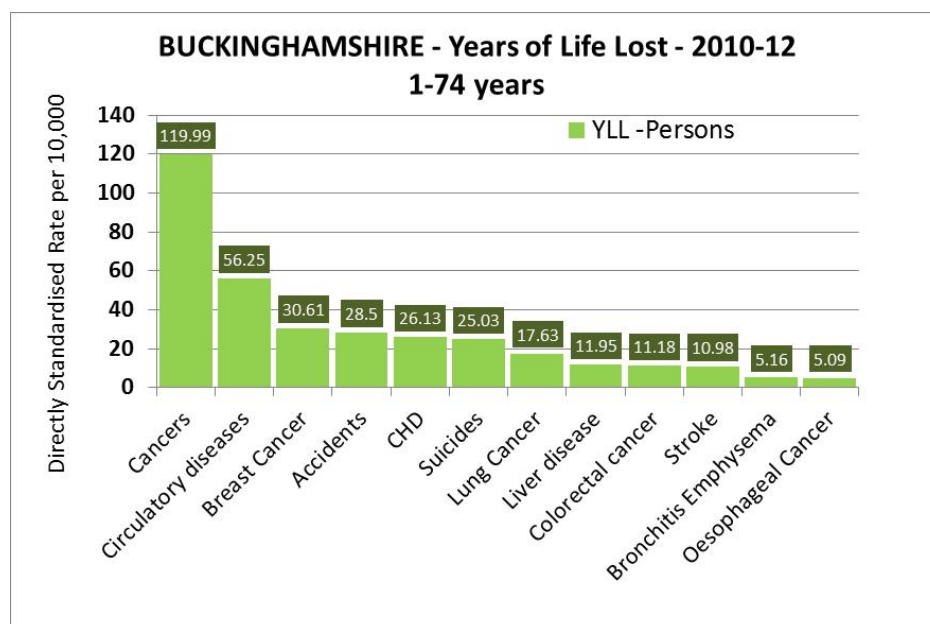
- b. Premature mortality (<75) trends** – There were 3,571 deaths in people under the age of 75 in Buckinghamshire from all causes over the three years from 2010 to 2012,

accounting for 1 in 3 deaths in the Buckinghamshire population. The premature death rate for the county was 281 per 100,000 people over this period. This was the tenth lowest premature death rate in the country, statistically significantly lower than the national average of 349 per 100,000. More recent local analysis for 2011-13 shows that 30.0% of deaths in Buckinghamshire are among those aged under 75. There is an important gender difference, with more than one in three male deaths (36.7%) being among those aged under 75, compared with less than one in four female deaths (23.8%). Importantly, almost one in five men (18.2%) in Buckinghamshire die before they reach the age of 65.

- c. **Years of Life Lost (YLL)** - Years of life lost (YLL) is a measure of premature mortality and is defined as the years of life lost due to premature deaths. Its primary purpose is to compare the relative importance of different causes of premature death within a particular population. It can therefore be used by health planners to define priorities for the prevention of such deaths. It can also be used to compare the premature mortality in different populations for a particular cause of death. Years of life lost take into account the age at which death occurs between 1 and 74 years of age, giving greater weight to deaths at a younger age and lower weight to deaths at older age. Infant deaths are omitted as they are mostly a result of causes specific to this age group and have different aetiologies to deaths later in life. The main causes of years of life lost prematurely in the 1 to 75 year old population in Buckinghamshire are cancer, circulatory diseases, accidents and suicides [Fig 51].



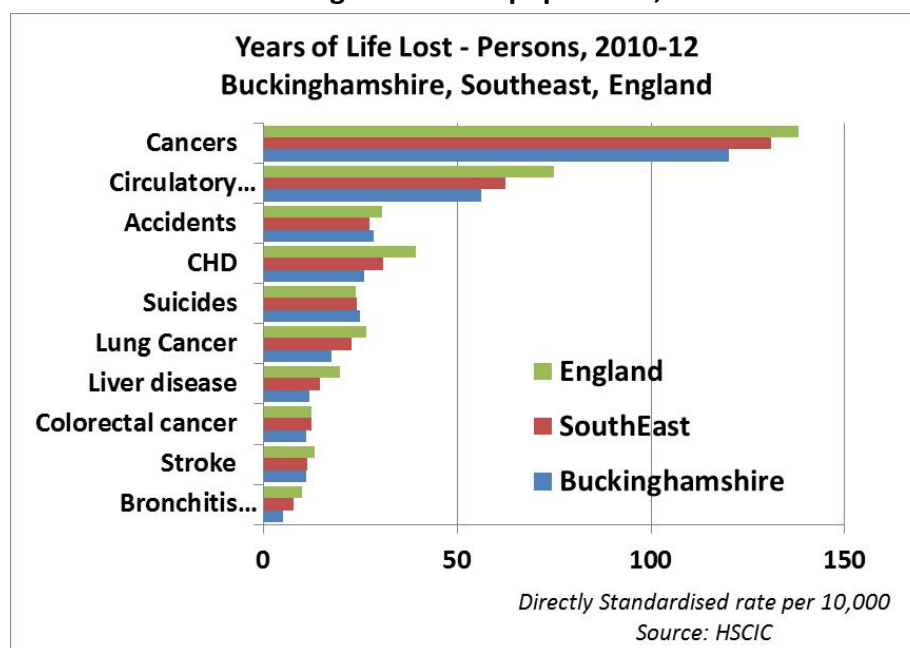
**Figure 51: Year of life lost due to main causes of mortality in Buckinghamshire (Directly standardised rate per 10,000 European standard population, 2010-12)**



Source: Health and Social Care Information Centre

Buckinghamshire has higher years of life lost due to accidents compared to the South East average. Years of life lost due to suicides are also higher in Buckinghamshire than the South East and England [Fig 52].

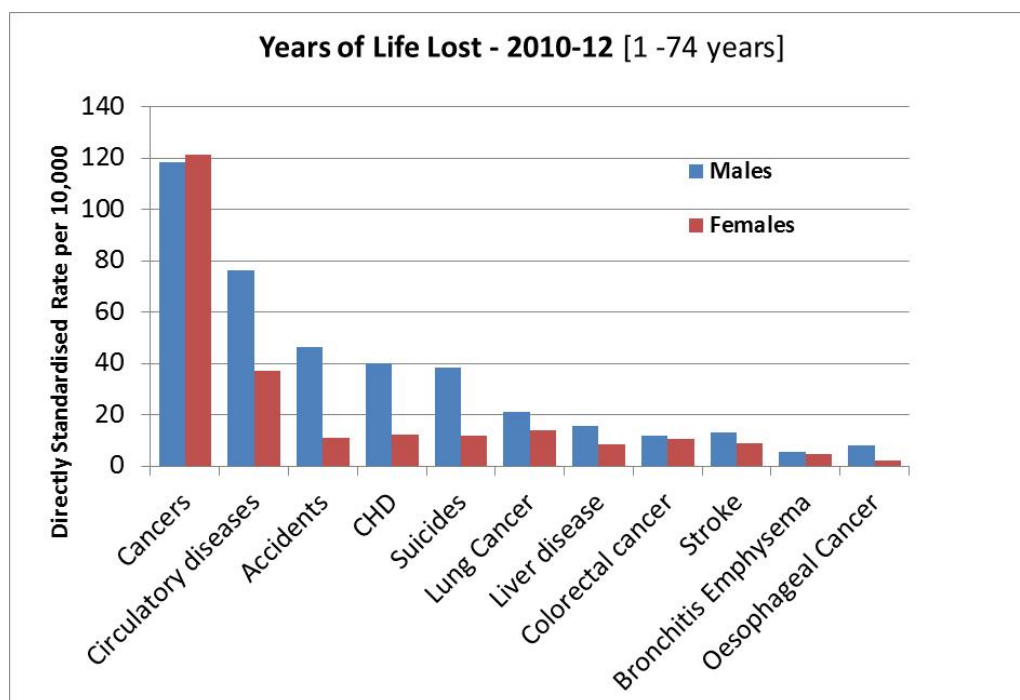
**Figure 52: Years of life lost due to main diseases in Buckinghamshire compared with South East and England in 1-75 population, 2010-12**



Source: Health and Social Care Information Centre

Comparison between males and females in Buckinghamshire shows a higher proportion of years of life lost in males due to circulatory diseases, accidents, heart disease, suicides and lung cancer compared to females; while for females breast cancer is one of the major contributors after circulatory diseases [Fig 53].

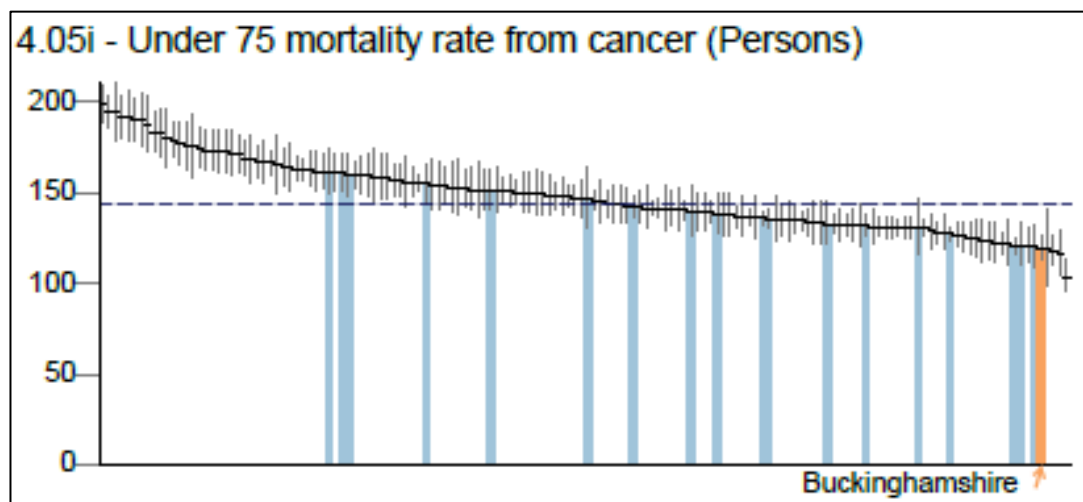
**Figure 53: Years of life lost in Buckinghamshire by gender, 2010-12**



Source: Health and Social Care Information Centre

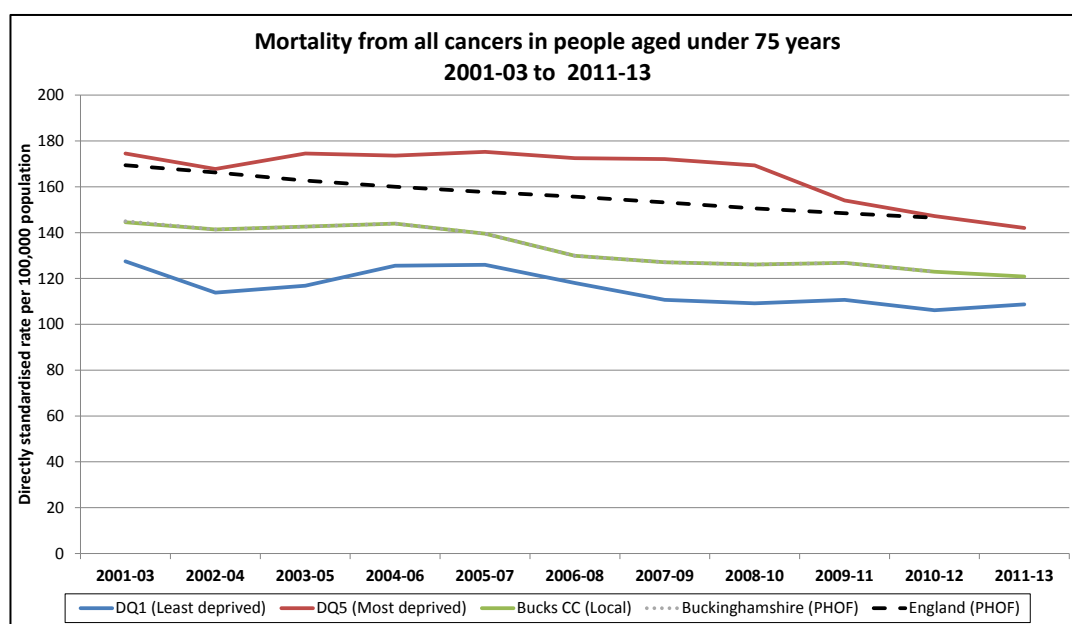
- d. Premature mortality from cancer** – 1,551 people in Buckinghamshire died from cancer before the age of 75 between 2010 and 2012. For the period 2010 to 2012, the death rate from cancer in the county (123.0 per 100,000 people) was statistically significantly lower than the national average (146.5 per 100,000). The rate in Buckinghamshire was the fifth lowest in the country [Fig 54]. The death rate fell by 14.9% between 2001-03 and 2010-12 for the county [Fig 55]. The death rate in the most deprived areas of the county was more than a third higher (39%) than in the least deprived areas in 2010-12. The death rate was higher for men than women in Buckinghamshire in 2010-12 (133.6 per 100,000 for men; 113.3 per 100,000 for women), but was third lowest in the country for men.

**Figure 54: Mortality rate due to cancer in people aged under 75 years in Buckinghamshire compared to other local authorities in England, 2011-2013**



Source: Health and Social Care Information Centre

**Figure 55: Trend in mortality rates due to cancer in people aged under 75 years in Buckinghamshire by deprivation quintile, 2001/03 to 2011/13**

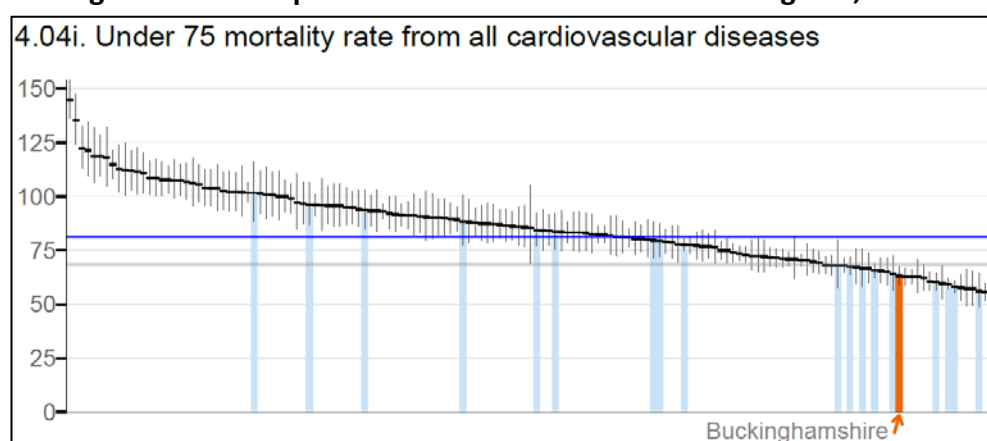


Source: Office for National Statistics (ONS) Public Health Mortality files.

- e. Premature mortality (Deaths in <75 year population) from cardiovascular diseases –** Cardiovascular disease is the biggest killer in Buckinghamshire for people of all ages, closely followed by cancer. The reverse applies for those aged under 75, with appreciably more deaths caused by cancer compared with cardiovascular disease. 798

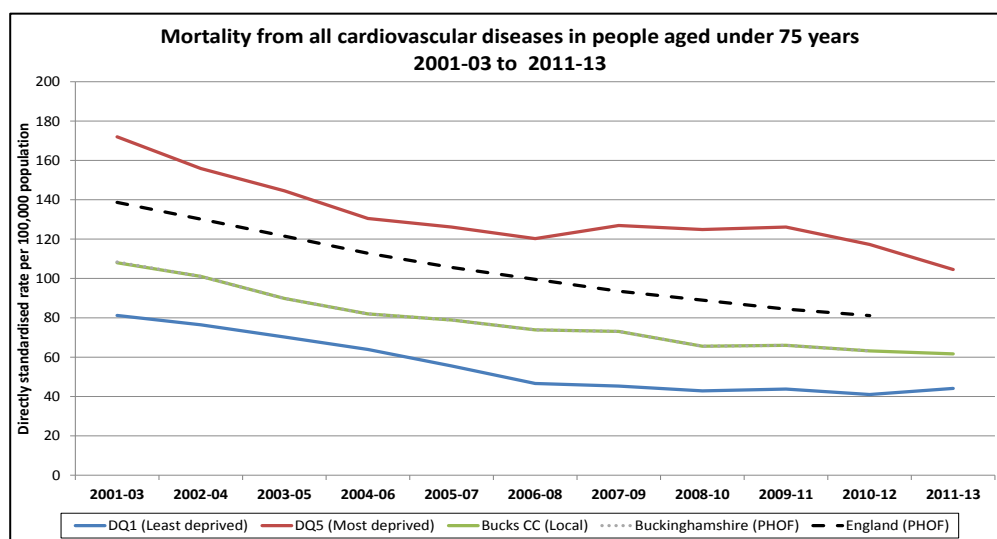
people in Buckinghamshire died from cardiovascular disease before the age of 75 between 2010 and 2012. The death rate from cardiovascular disease in the county was statistically significantly lower than the national average in 2010-12 (63.2 per 100,000 people, compared to 81.1 per 100,000 nationally), and was the 15th lowest in the country [Fig 56]. The death rate was higher for men than women in Buckinghamshire in 2010-12 (86.7 per 100,000 for men; 40.9 per 100,000 for women). The death rate in the most deprived areas of the county was more than two and a half times higher than the rate in the least deprived areas in 2010-12 [Fig 57]. The death rate fell by 41.5% between 2001-03 and 2010-12 for the county, and has continued to fall in the most deprived areas after a period of levelling off.

**Figure 56: Mortality rate due to cardio-vascular diseases in people aged under 75 years in Buckinghamshire compared to other local authorities in England, 2011-2013**



Source: Health and Social Care Information Centre

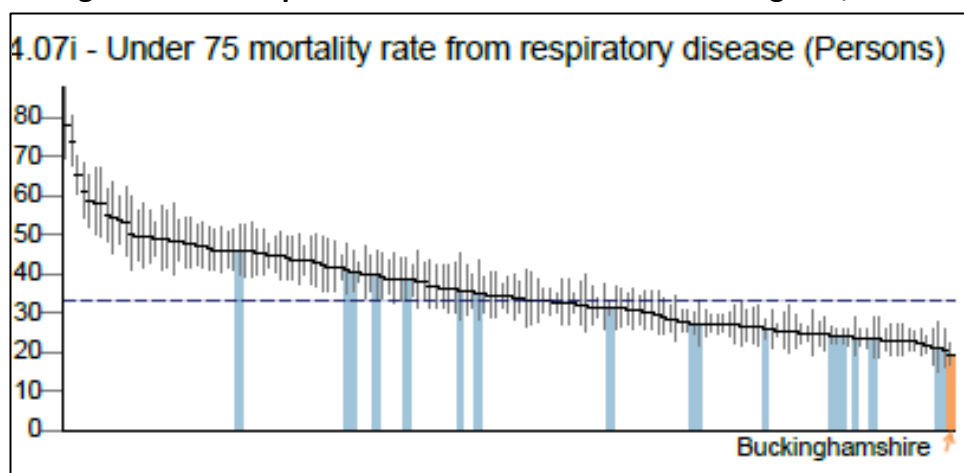
**Figure 57: Trend in mortality rates due to cardiovascular disease in people aged under 75 years in Buckinghamshire by deprivation quintile, 2001/03 to 2011/13**



Source: Office for National Statistics (ONS) Public Health Mortality files.

- f. **Premature deaths from respiratory diseases** – 287 people in Buckinghamshire died from respiratory disease before the age of 75 between 2010 and 2012. The death rate from respiratory disease in the county was statistically significantly lower compared to the national average in 2010-12 (23.4 per 100,000 people, compared to 33.5 per 100,000 nationally), the 13th lowest in the country [Fig 58]. The death rate was higher for men than women in Buckinghamshire in 2010-12 (25.4 per 100,000 for men; 21.5 per 100,000 for women).

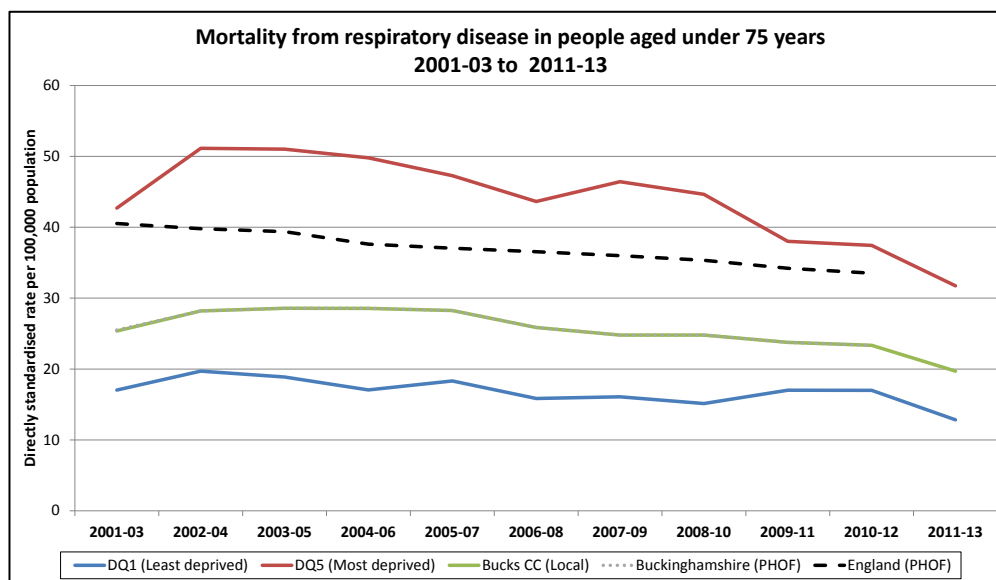
**Figure 58: Mortality rate due to respiratory diseases in people aged under 75 years in Buckinghamshire compared to other local authorities in England, 2011-2013**



Source: Public Health Outcomes Framework, 2014

The death rate in the most deprived areas of the county was more than double the rate in the least deprived areas in 2010-12, although the number of deaths was relatively small. The death rate fell by 8.4% between 2001-03 and 2010-12 for the county [Fig 59].

**Figure 59: Trend in mortality rates due to respiratory diseases in people aged under 75 years in Buckinghamshire by deprivation quintile, 2001/03 to 2011/13**



Source: Office for National Statistics (ONS) Public Health Mortality files.

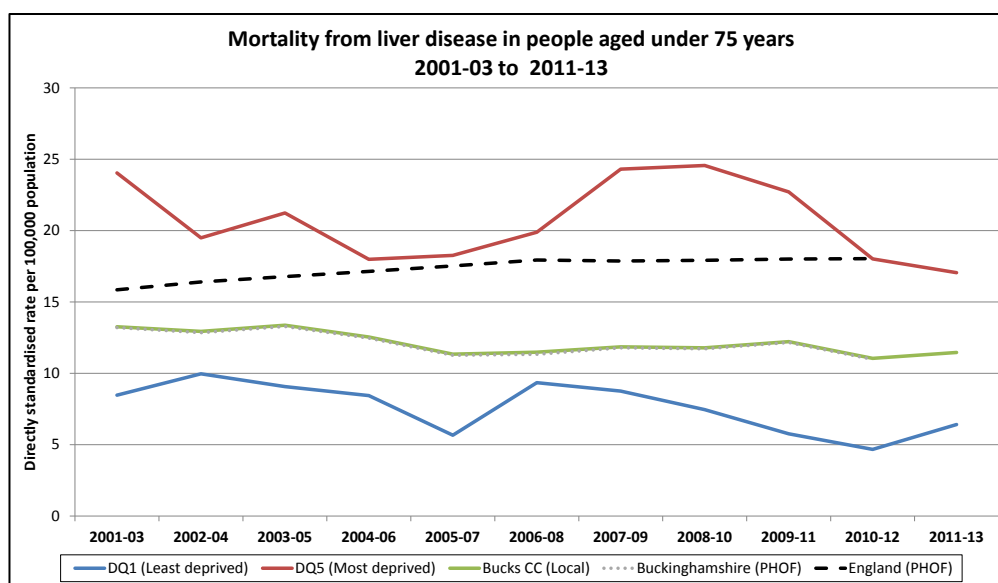
- g. **Premature deaths from liver disease** – 145 people in Buckinghamshire died from liver disease before the age of 75 between 2010 and 2012. The death rate from liver disease in the county was statistically significantly lower than the national average in 2010-12 (11.0 per 100,000 people, compared to 18.0 per 100,000 nationally) [Fig 60]. This was the third lowest in the country. The death rate in the most deprived areas of the county was more than three and a half times higher than the rate in the least deprived areas in 2010-12, although the number of deaths was relatively small (38 deaths in the most deprived areas and 14 in the least deprived areas) [Fig 61]. The death rate fell by 16.7% between 2001-03 and 2010-12 for the county. The death rate was higher for men than women in Buckinghamshire in 2010-12 (15.3 per 100,000 for men; 6.9 per 100,000 for women).

**Figure 60: Mortality rate due to liver diseases in people aged under 75 years in Buckinghamshire compared to other local authorities in England, 2011-2013**



Source: Public Health Outcomes Framework, 2014

**Figure 61: Trend in mortality rates due to liver diseases in people aged under 75 years in Buckinghamshire by deprivation quintile, 2001/03 to 2011/13**



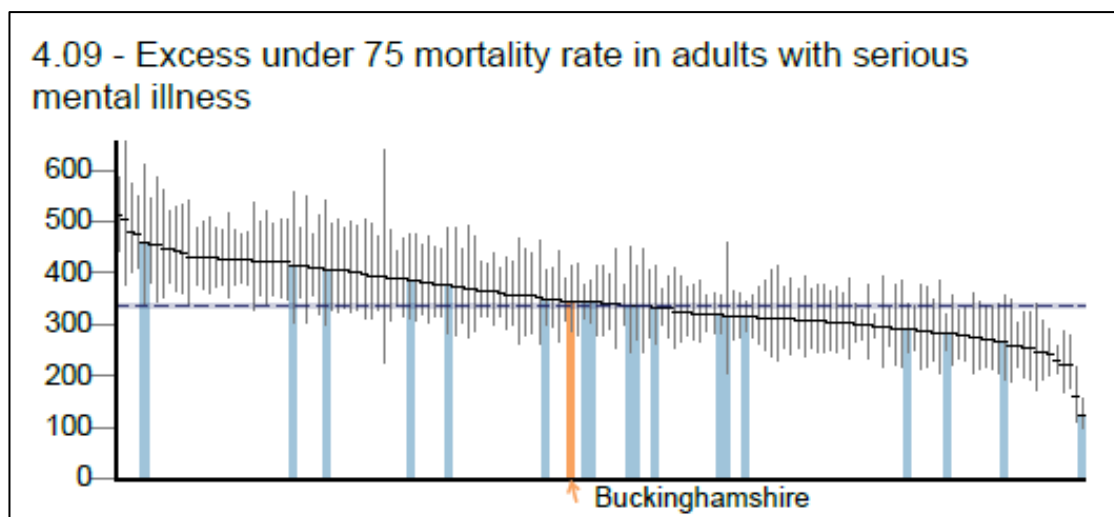
Source: Office for National Statistics (ONS) Public Health Mortality files.

- h. **Excess mortality in people with severe mental illness** – People with serious mental illness have a lower life expectancy compared to the general population, and are more likely to die from preventable physical health problems. The excess mortality rate for adults<sup>1</sup> with serious mental illness in Buckinghamshire was 345 per 100,000 in

<sup>1</sup> The ratio of the directly age standardised mortality rate for people aged 18 to 74 in contact with Secondary Mental Health Services to the directly age-standardised mortality rate for the general population of the same age expressed as a percentage.

2011/12, which was not statistically significantly different from the national average of 337 per 100,000. Buckinghamshire had the 71<sup>st</sup> highest rate in the country (mortality rates across the country ranged from 124.7 to 510.4) [Fig 62].

**Figure 62: Excess under 75 mortality rate in adults with serious mental illness in Buckinghamshire compared to other local authorities in England, 2011/12**

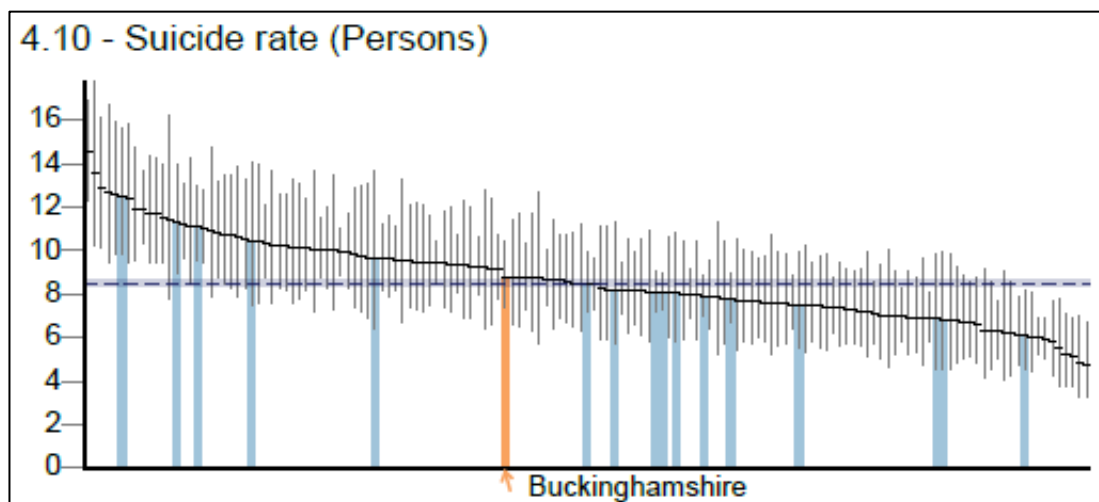


Source: Public Health Outcomes Framework, 2014

- i. **Suicide mortality** – There were a total of 129 suicides (95 in men and 34 in women) over 2010-12 period in Buckinghamshire and the suicide rate in Buckinghamshire at 8.8 per 100,000 people, was similar to England rate of 8.5 per 100,000 people [Fig 63]. The suicide rate in the most deprived areas of the county was higher than the rate in the least deprived areas, but was not statistically significantly different. The suicide rate for the county has been broadly unchanged since 2001-03. The suicide rate was more than two and a half times higher for men than women in Buckinghamshire in 2010-12 (13.3 per 100,000 for men; 4.8 per 100,000 for women). Fig 64 shows trends in mortality due to suicides by deprivation quintile over the past 10 years with a narrowing of the gap between the most and least deprived populations.

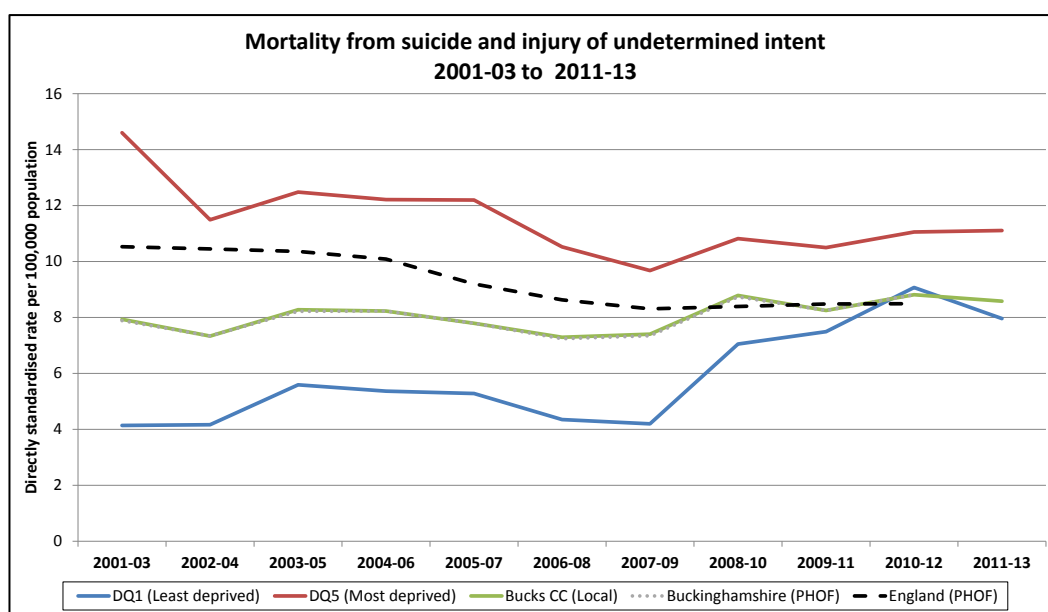


**Figure 63: Mortality rate due to suicides in people of all ages in Buckinghamshire compared to other local authorities in England, 2010-2012**



Source: Public Health Outcomes Framework, 2014

**Figure 64: Trend in mortality rates due to suicides and injury of undetermined intent in all age population in Buckinghamshire by deprivation quintile, 2001/03 to 2011/13**



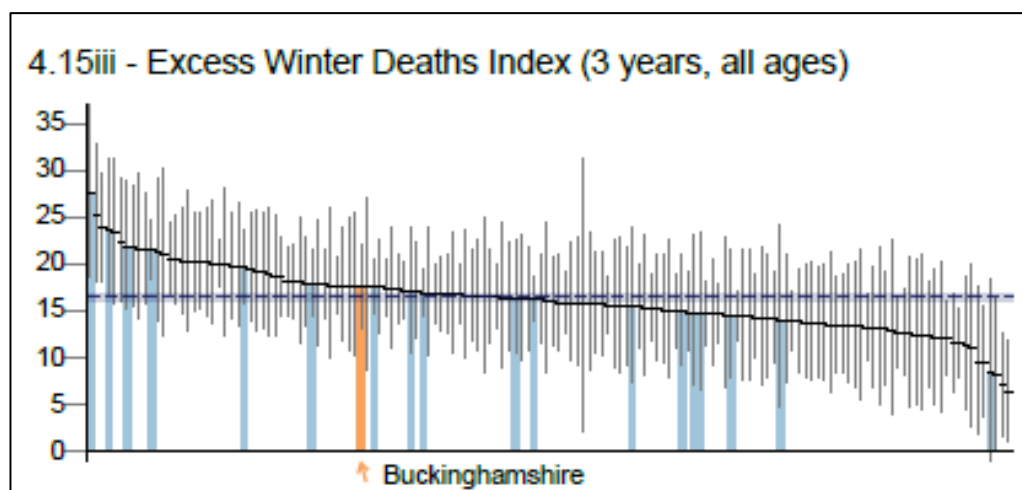
Source: Office for National Statistics (ONS) Public Health Mortality files.

- j. **Accidents related mortality** – In 2010-12, the mortality rate from accidents in Buckinghamshire was 9.2 per 100,000 compared to the England rate of 10.8 per 100,000. From 2010 to 2012, the accident rate in Buckinghamshire has risen by 24%. The rate was significantly higher in males compared to females.

- k. Falls mortality** – In 2010-12, there were 76 deaths attributed to accidental falls in Buckinghamshire. The mortality rate from accidental falls in Buckinghamshire was 5.6 per 100,000 (76 deaths over the three years) significantly lower compared to England rate of 7.4 per 100,000. The rate was higher (not significantly) in males (7 per 100,000) compared to 4.6 per 100,000 in females. Buckinghamshire ranks 59<sup>th</sup> lowest out of 150 local authorities with the highest rate of falls mortality (25 per 100,000) recorded in Manchester Metropolitan District Council and the lowest rate in the London Borough of Barking and Dagenham (1.7 per 100,000).
- l. Excess winter deaths** – Deaths during winter increase more in England compared to other countries with colder climates, suggesting that many of these deaths could be preventable. Every year there are 183 excess winter deaths on average in Buckinghamshire. The majority of excess winter deaths are among those aged 85 years and over. The excess winter deaths index calculates the additional deaths in winter compared with those in non-winter months. Excess winter mortality is measured as the ratio of extra deaths from all causes that occur in the winter months compared with the expected number of non-winter deaths. The higher the index value the greater the number of excess winter deaths in the population. The excess winter deaths index for Buckinghamshire for the period 2009-2012 for all ages was 17.6, higher, but not significantly, than the national average of 16.5. Buckinghamshire ranks 45<sup>th</sup> highest in the country [Fig 65]. The index for people aged 85 years of age and over for the same period was 29.5. This was higher (not significantly) than the national average for this age group (22.6), and was 15<sup>th</sup> highest in the country. There is variation in the excess winter deaths index at district council level in Buckinghamshire, with Aylesbury Vale having the highest index at 26.2, followed by Chiltern at 20.9, Wycombe at 18.6 and South Buckinghamshire at 14.6 (2008-11). Excess winter deaths related to respiratory diseases are worse in Aylesbury Vale DC compared to other district councils in Buckinghamshire and excess winter deaths due to circulatory diseases is worse in Chiltern compared to other district councils in Buckinghamshire. Excess winter deaths have risen since 2005, but then declined since 2008. There is no

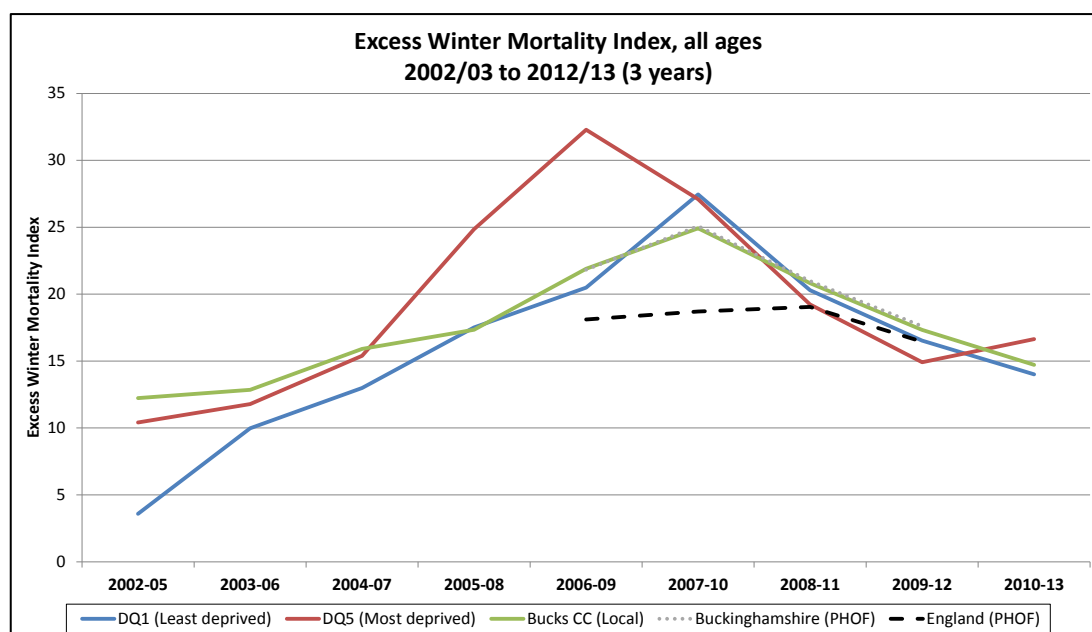
difference observed in the excess winter deaths in the most and least deprived population quintiles [Fig 66].

**Figure 65: Excess winter deaths index in population of all ages in Buckinghamshire compared to other local authorities in England, 2009-2012 - three year average**



Source: Public Health Outcomes Framework, 2014

**Figure 66: Trend in excess winter mortality rates in all age population in Buckinghamshire by deprivation quintile, 2002/03 to 2012/13 (three year average)**



Source: Office for National Statistics (ONS) Public Health Mortality files

## TABLE OF FIGURES

Figure 1: Buckinghamshire County population pyramid – Census 2011. ....	7
Figure 2: Deprivation map of Buckinghamshire presenting local context of deprivation at lower layer super output area (LL-SOA) (IMD, 2010). ....	9
Figure 3: Unemployment rate (percentage) in Buckinghamshire at District Council level compared to England and South East average, 2012/13. ....	11
Figure 4: Trend in unemployment rate (percentage) in Buckinghamshire at District Council level compared to England and South East average, 2005/06 to 2011/12.....	12
Figure 5: Workplace health – Percentage of working days lost due to sickness absence in the previous working week in Buckinghamshire compared to other local authorities in England, 2010-12.....	13
Figure 6: Rate of population killed or seriously injured in Buckinghamshire compared to other local authorities in England, 2010-12.....	13
Figure 7: Hospital admission rate due to violent crime (including sexual violence) in Buckinghamshire compared to other local authorities in England, 2010-12.....	14
Figure 8: Life expectancy at birth (Male) in Buckinghamshire compared to all local authorities in England, 2010-12. ....	15
Figure 9: Life expectancy at birth (Female) in Buckinghamshire compared to all local authorities in England, 2010-12. ....	15
Figure 10: Male life expectancy at birth by deprivation quintiles in Buckinghamshire compared to Buckinghamshire average, 2009-13. ....	16
Figure 11: Female life expectancy at birth by deprivation quintiles in Buckinghamshire compared to Buckinghamshire average, 2009-13. ....	17
Figure 12: Slope index of inequality in life expectancy at birth for males in Buckinghamshire based on local deprivation deciles: the range in years of life expectancy across the social gradient, from most to least deprived; compared with other local authorities in England, 2010-2012. ....	18
Figure 13: Slope index of inequality in life expectancy at birth for females in Buckinghamshire based on local deprivation deciles: the range in years of life expectancy across the social gradient, from most to least deprived; compared with other local authorities in England, 2010-12.....	18
Figure 14: Male life expectancy at birth for top 10 wards with higher or lower LE compared to the Buckinghamshire average, 2009-13. ....	189
Figure 15: Female life expectancy at birth for top 10 wards with higher or lower LE compared to the Buckinghamshire average, 2009-13. ....	19
Figure 16: Life expectancy and healthy life expectancy in males and females in Buckinghamshire, 2010-2012.....	20
Figure 17: Prevalence of smoking among persons aged 18 years and over in Buckinghamshire compared to other local authorities in England, 2013. ....	21
Figure 18: Percentage of physically inactive adults in Buckinghamshire compared to other local authorities in England, 2013.....	22
Figure 19: Percentage of adults classified as overweight or obese in Buckinghamshire compared to other local authorities in England, 2012.....	23
Figure 20: Successful completion of drug treatment – Percentage of opiate users that left drug treatment successfully who do not re-present to treatment within 6 months in Buckinghamshire compared to other local authorities in England, 2013.....	24

Figure 21: Trend in percentage of opiate users that left drug treatment successfully who do not re-present to treatment within 6 months in Buckinghamshire compared to South East and England, 2010 to 2013.....	24
Figure 22: Successful completion of drug treatment – Percentage of non-opiate users that left drug treatment successfully who do not re-present to treatment within 6 months in Buckinghamshire compared to other local authorities in England, 2013.....	25
Figure 23: Trend in percentage of non-opiate users that left drug treatment successfully who do not re-present to treatment within 6 months in Buckinghamshire compared to South East and England, 2010 to 2013.....	25
Figure 24: Self-reported wellbeing – Percentage of people with a low happiness score in Buckinghamshire compared to other local authorities in England, 2012/13 .....	26
Figure 25: Emergency hospital admission rate for injuries due to falls in people aged 65+ in Buckinghamshire, compared to other local authorities in England, 2012/13 .....	27
Figure 26: Percentage prevalence of QOF recorded cases of diabetes in primary care on GP registers in Buckinghamshire compared to other local authorities in England, 2012/13.....	29
Figure 27: Trend in percentage prevalence of detected diabetes recorded in primary care on GP registers in Buckinghamshire by deprivation quintile compared to England and Aylesbury Vale Clinical Commissioning Group (CCG) and Chiltern CCG average - 2007/08 to 2013/14. ....	30
Figure 28: Percentage of eligible adults aged 65 and over who received the flu vaccine in Buckinghamshire compared to other local authorities in England, 2012/13. Performance is compared to the 75% target denoted by the red line. ....	33
Figure 29: Chlamydia diagnoses rate in 15-24 year olds in Buckinghamshire compared to other local authorities in England, 2012. ....	35
Figure 30: Percentage of people completing treatment for TB in 12 months in Buckinghamshire compared to other local authorities in England, 2012. Performance is compared using 85% target which is established nationally and internationally by the WHO.....	36
Figure 31: Percentage of adults aged 15+ newly diagnosed with HIV with a CD4 count <350 cells per mm <sup>3</sup> in Buckinghamshire compared to other local authorities England, 2010-12. Performance of 50%+ is considered worse; 25-50% as average and <25% as good. ....	37
Figure 32: Trends in emergency hospital admission rates from all causes in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14 .....	39
Figure 33: Trends in emergency hospital admission rates from all causes excluding those to Mental health trusts in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14.....	39
Figure 34: Trends in emergency hospital admission rates due to circulatory diseases in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14.....	40
Figure 35: Trends in hospital admission rates due to coronary heart disease (CHD) in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14.....	41
Figure 36: Hospital admission rates for elective angioplasty at any hospital provider at primary care locality level in Buckinghamshire CCGs – Aylesbury Vale CCG, Chiltern CCG - 2013/14 .....	42
Figure 37: Trends in hospital admission rates due to stroke in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14.....	43
Figure 38: Trends in hospital admission rates due to heart failure in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14 .....	44
Figure 39: Trends in emergency hospital admission rates due to diabetes in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14 .....	45

Figure 40: Trends in emergency hospital admission rates due to respiratory diseases in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14.....	46
Figure 41: Trends in emergency hospital admission rates due to cancer in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14 .....	47
Figure 42: Trends in hospital admission rates due to mental health in population of all ages in Buckinghamshire by deprivation quintile, 2005/06 to 2013/14.....	48
Figure 43: Trends in hospital admission rates due to mental health in working age adults (16-59 for women and 16-64 for men) in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14.....	49
Figure 44: Trends in hospital admission rates due to mental health in older adults (60+ for women and 65+ for men) in Buckinghamshire by deprivation quintile, 2003/04 to 2013/14 .....	50
Figure 45: Hip fractures in people aged 65 and over in Buckinghamshire compared to other local authorities in England, 2012/13.....	51
Figure 46: Trend in emergency hospital admission rate due to hip fractures in in persons aged 65 and over in Buckinghamshire by deprivation quintile, 2003/04 to 2012/13.....	51
Figure 47: Alcohol-related admissions to hospital to persons in Buckinghamshire compared to other local authorities in England, 2012/13.....	52
Figure 48: Trends in hospital admission rate due to alcohol-related conditions in Buckinghamshire by deprivation quintile, 2003/04 to 2012/13.....	53
Figure 49: Trend in alcohol-specific hospital admission rate in Buckinghamshire by deprivation quintile, 2003/04 – 2013/14 Source: Secondary Uses Services, Admitted patient care dataset .....	54
Figure 50: Infographic showing number of deaths by cause in Buckinghamshire over 2010 – 2012 comparing mortality rate in Buckinghamshire with England average. ....	55
Figure 51: Year of life lost due to main causes of mortality in Buckinghamshire (Directly standardised rate per 10,000 European standard population, 2010-12) .....	57
Figure 52: Years of life lost due to main diseases in Buckinghamshire compared with South East and England in 1-75 population, 2010-12 .....	57
Figure 53: Years of life lost in Buckinghamshire by gender, 2010-12.....	58
Figure 54: Mortality rate due to cancer in people aged under 75 years in Buckinghamshire compared to other local authorities in England, 2011-2013 .....	59
Figure 55: Trend in mortality rates due to cancer in people aged under 75 years in Buckinghamshire by deprivation quintile, 2001/03 to 2011/13.....	59
Figure 56: Mortality rate due to cardio-vascular diseases in people aged under 75 years in Buckinghamshire compared to other local authorities in England, 2011-2013 .....	60
Figure 57: Trend in mortality rates due to cardiovascular disease in people aged under 75 years in Buckinghamshire by deprivation quintile, 2001/03 to 2011/13.....	61
Figure 58: Mortality rate due to respiratory diseases in people aged under 75 years in Buckinghamshire compared to other local authorities in England, 2011-2013 Source: Public Health Outcomes Framework, 2014.....	61
Figure 59: Trend in mortality rates due to respiratory diseases in people aged under 75 years in Buckinghamshire by deprivation quintile, 2001/03 to 2011/13.....	62
Figure 60: Mortality rate due to liver diseases in people aged under 75 years in Buckinghamshire compared to other local authorities in England, 2011-2013 .....	63
Figure 61: Trend in mortality rates due to liver diseases in people aged under 75 years in Buckinghamshire by deprivation quintile, 2001/03 to 2011/13.....	63

<b>Figure 62: Excess under 75 mortality rate in adults with serious mental illness in Buckinghamshire compared to other local authorities in England, 2011/12 .....</b>	<b>64</b>
<b>Figure 63: Mortality rate due to suicides in people of all ages in Buckinghamshire compared to other local authorities in England, 2010-2012 .....</b>	<b>65</b>
<b>Figure 64: Trend in mortality rates due to suicides and injury of undetermined intent in all age population in Buckinghamshire by deprivation quintile, 2001/03 to 2011/13 .....</b>	<b>65</b>
<b>Figure 65: Excess winter deaths index in population of all ages in Buckinghamshire compared to other local authorities in England, 2009-2012 - three year average.....</b>	<b>67</b>
<b>Figure 66: Trend in excess winter mortality rates in all age population in Buckinghamshire by deprivation quintile, 2002/03 to 2012/13 (three year average) .....</b>	<b>67</b>

## GLOSSARY

<b>Confidence interval</b>	<i>A confidence interval (CI) is a range of values (lower and upper limit) that are used to quantify the degree of uncertainty in the estimate of a particular indicator.</i> Confidence Interval gives an indication of the level of uncertainty of the calculation. It is simply a range within which the true value is likely to fall, based on the data used in the analysis. A 95% confidence interval tells us that we can be 95% certain that the true rate lies somewhere between the lower and upper limits of the confidence interval.
<b>Statistical Significance</b>	Statistical significance (also mentioned just as ‘significant’) means that a difference that is observed is unlikely to be due to chance alone.
<b>Crude rate</b>	These are calculated by dividing the total number of events (e.g. cases, deaths etc.) in a given time period by the total number of persons in the population
<b>DASR</b>	Directly Age-Standardised Rate (DASR) rate. DASR for an area is the number of events, usually expressed per 100,000, that would occur in that area if it had the same age structure as the standard population (e.g. European population) and the local age-specific rates of the area applied. This is useful for comparing populations with different age structures.
<b>Diagnosis rate</b>	The proportion of the people diagnosed to have the condition among all tested for this condition during a certain period. This is calculated by dividing the number of cases diagnosed (numerator) by the number of people tested or screened (denominator).
<b>Alcohol-specific admissions</b>	Alcohol-specific admissions are hospital admissions caused <i>wholly</i> by the use of alcohol (e.g. admissions due to alcoholic liver disease or alcohol poisoning).
<b>Alcohol related admissions</b>	Alcohol-related admissions are hospital admissions caused either <i>wholly</i> (i.e. alcohol-specific) or <i>partly</i> by the use of alcohol (e.g. admissions from hypertension). Alcohol-related admissions include alcohol specific admissions.



## ABBREVIATIONS

APC	Admitted Patient Care (dataset)
A&E	Accident and Emergency
AVCCG	Aylesbury Vale Clinical Commissioning Group
BCC	Buckinghamshire County Council
BME	Black and Minority Ethnic
BMI	Body Mass Index
CCG	Clinical Commissioning Group
CCCG	Chiltern Clinical Commissioning Group
CMO	Chief Medical Officer
CTAD	Chlamydia Testing Activity Dataset
CYP	Children and Young People
DH	Department of Health
DQ	Deprivation Quintile (DQ1 = Least deprived. DQ5 = Most deprived)
HSCIC	Health and Social Care Information Centre
IMR	Infant Mortality Rate
LRTI	Lower Respiratory Tract Infections
MDS	Minimum Dataset
NHS	National Health Services
NOMIS	Official Labour Market Statistics
ONS	Office for National Statistics
PHE	Public Health England
PHOF	Public Health Outcomes Framework
SATOD	Smoking at the time of delivery
STI	Sexually Transmitted Infections
SUS	Secondary Uses Services

## DATA SOURCES

No.	Data/Information Source	Governing Organisation
1.	Annual District Birth and Death (Mortality) Extracts	Office for National Statistics
2.	Chief Medical Officer's Report 2012	NHS Right Care
3.	CENSUS	Office for National Statistics
4.	Education and skills statistics	Department for Education
5.	ImmForm – Immunisation data	NHS England
6.	Indicators Portal	Health and Social Care Information Centre
7.	Integrated Performance Measures	Department of Health
8.	Neighbourhood statistics	Office for National Statistics
9.	Public Health Outcomes Framework	Public Health England
10.	Primary Care Web Tool	NHS England
11.	Qualities and Outcomes Framework	Health and Social Care Information Centre
12.	Secondary Uses Services – Admitted Patient Care dataset	South Central Commissioning Support Unit

**Note:** Data has been accessed from several reliable sources including the Health and Social Care Information Centre, Public Health England and local datasets on hospital admissions and mortality obtained from Office for National Statistics and the Central-Southern Commissioning Support Unit. For further queries about the data / information included in this report, please send an email to the Buckinghamshire Public Health Department at [amore@buckscc.gov.uk](mailto:amore@buckscc.gov.uk)