### **Nottingham City Joint Strategic Needs Assessment**

# **Executive Summary 2014**

### Introduction

Joint Strategic Needs Assessments (JSNAs) are local assessments of current and future health and social care needs. Following the assent of the Health and Social Care Act 2012 local authorities and Clinical Commissioning Groups (CCGs) have an equal and explicit duty to prepare the JSNA through the Health and Wellbeing Board.

The aim of the JSNA is to improve the health and wellbeing of the local community and reduce inequalities for all ages through ensuring commissioned services reflect need. It is used to help to determine what actions local authorities, the NHS and other partners need to take to meet health and social care needs and to address the wider determinants that impact on health and wellbeing.

## The Nottingham City approach

The Health and Wellbeing Board Commissioning Executive Group has taken on responsibility for the JSNA on behalf of the Health and Wellbeing Board, replacing the previous JSNA steering group. Key decisions are made by this group regarding the development and maintenance of our JSNA and this is implemented by a dedicated coordinator and a larger group of people across the local authority and Clinical Commissioning Group, involved in producing the content. Our JSNA is <u>published online</u> on our local shared intelligence website 'Nottingham Insight' and is designed to be user friendly, publicly accessible and interactive.

Figure 1: Homepage of Nottingham's web-based Joint Strategic Needs Assessment



### http://www.nottinghaminsight.org.uk/insight/jsna/jsna-home.aspx

We use a standard template for our chapters which is based on the healthcare needs assessment model, and provide training and support materials to ensure quality and consistency across the JSNA. We have a rolling update programme in Nottingham City and aim for all chapters to be updated within a 3 year cycle. Please reference 'Nottingham City JSNA' if making use of any of our content.

### The chapters in the JSNA are divided into the following 5 sections

- 1. Demographics and social and environmental context
- 2. Life expectancy
- 3. Behavioural factors

Alcohol, problem drug use in adults, substance misuse in children and young people (alcohol and drugs), diet and nutrition, obesity, physical activity, smoking

4. Children, Young People and Families

Carers, child poverty, children in care, dental health, disabilities and learning difficulties, domestic violence, immunisations and vaccinations, maternities and pregnancy, mental health, priority families, safeguarding of adults & children, sexual health, teenage pregnancy, unintentional injury

### 5. Adults

Adult oral health, asylum seekers, refugee and migrant workers, cancer, cardiovascular disease, carers, chronic obstructive pulmonary disease (COPD), dementia, diabetes, domestic violence, end of life, falls and bone health, homelessness, housing, immunisations and vaccinations, learning disabilities, mental health, complex older people, physical and sensory impairment, stroke.

To support the work of public health in local authorities, Public Health England have developed an online resource for public health data (<a href="http://www.phoutcomes.info/">http://www.phoutcomes.info/</a>). The Public Health Outcomes Framework presents detailed indicators across the wider determinants of health, many of which have been included in this summary. The Health Profile of Nottingham provides a picture of the health of the people of Nottingham and is published annually <a href="http://www.apho.org.uk/default.aspx?QN=HP\_FINDSEARCH2012">http://www.apho.org.uk/default.aspx?QN=HP\_FINDSEARCH2012</a>.

## The State of Nottingham's Health

#### Where are we now?

#### Demography

The latest estimate of the City's resident population is 308,700, having risen by 5,000 since 2011. It is estimated that this may rise to around 309,100 by 2016 and 321,300 by 2021. International migration (recently from Eastern Europe) and an increase in student numbers are the main reasons for the population growth since 2001, together with the excess of births over deaths.

Over one quarter (28%) of the population are aged 18 to 29. Full-time university students make up about 1 in 8 of the population (figure 2). Almost 15% of the Nottingham population is aged 20-24 years, more than double the national average. In the short to medium term,

the City is unlikely to follow the national trend of increasing numbers of people over retirement age, although the number aged 85+ is projected to increase. The number of births has risen considerably in recent years although the latest figures show a small decline. The 2011 Census shows 35% of the population are from BME groups (compared to 20% for England); an increase from 19% in 2001. The City gains young adults due to migration, both international and within Britain, whilst losing all other age groups - this includes losing families with children as they move to the surrounding districts. There is a high turnover of population. Data on turnover from the 2011 Census is not yet available, but we know that 17% of people changed address in the year before the 2001 Census (excluding students living in halls of residence).

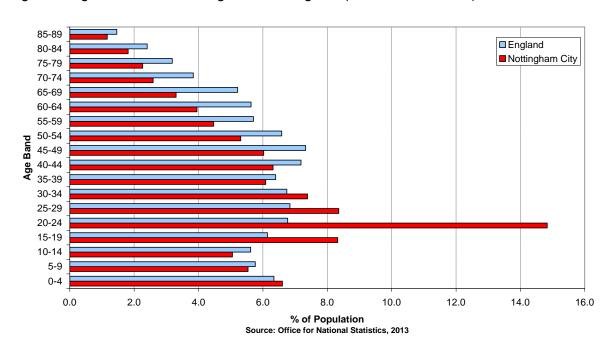


Figure 2: Age structure of Nottingham and England (Source: ONS 2013)

### Deprivation, socio-economic status and wider determinants of health

Research shows that many health and wellbeing outcomes are linked to socio economic factors and the 'wider determinants of health' hence it is important to understand the socio economic context of the City when trying to understand and improve health and health inequalities. This context is represented in Figure 3. The Index of Multiple of Deprivation (most recently published in 2010) gives a good summary measure of a range of wider determinants and allows comparison of the City with England and other areas, and also identification of inequalities within the City. A detailed report for Nottingham City is available here.

There are high levels of deprivation in Nottingham City: we are the 20<sup>th</sup> most deprived district in England out of 326 (Index of Multiple Deprivation 2010, ranked on average score measure). There are also particularly deprived areas within the City: 45 of the 176 City Lower Super Output Areas (LSOAs) feature amongst the 10% most deprived in the country; 91 LSOAs feature in the 20% most deprived. The lowest ranking (most deprived) LSOA in the City is in Aspley, which ranks 97<sup>th</sup> nationally out of 32,482 and is the only City LSOA ranking in the most deprived 100 LSOAs in the country.

Figure 3: The wider determinants of health. Source: Barton and Green, 2006



# Life expectancy

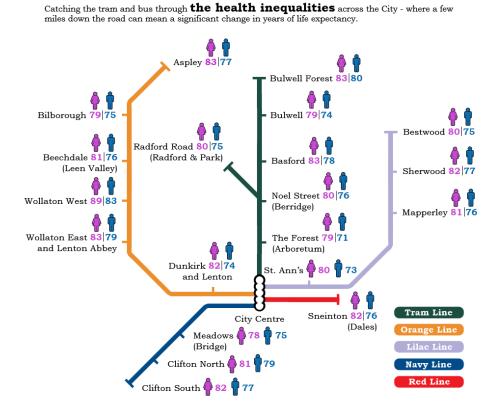
Life expectancy is increasing both nationally and in Nottingham in both men and women. Life expectancy for men has increased by 3.9 years in the last 10 years and by 2.9 years for women. The latest figures (2010-2012) show that life expectancy in men is 2.3 years lower than England overall and although the width of the gap fluctuates from year to year, the overall trend since 2001 is to narrow the gap (figure 4). A similar picture is seen in women, the overall trend is a reduction in the gap from over 2 years to 1.5 years since 2001-2003.

Figure 4: The gap in life expectancy between England and Nottingham for males and females; Source: Public Health Outcomes Framework; 2014



However, at ward level, there is an 11.8 year gap in life expectancy between Wollaton West and Arboretum for men, and a 10.2 year gap between Wollaton West and Bridge for women (See figure 5). Premature death (defined as deaths under 75 years) is an important driver of low levels of life expectancy. Nationally, four big causes of premature death have been identified; these 'big killers' are cancer, circulatory disease<sup>1</sup>, respiratory disease and liver disease and are responsible for over three quarters of premature deaths<sup>2</sup>.

Figure 5: Ward level life expectancy at birth figures, 2008-2012. Source: PHE Local Health



The figures against each 'stop' show average life expectancy at birth for males and females in Nottingham living in that city ward area.

For females the average across the city is 81.5 compared with the English national average of 82.8. For males the average across the city is 76.9 compared with the English national average of 78.9.

Nottingham is lagging behind England in life expectancy due to high rates of premature mortality from the 4 'big killers' listed above. These are driven by key unhealthy lifestyle behaviours and other environmental factors which contribute to the wider social determinants of health; factors such as unemployment, social isolation, the built environment and pollution (figure 3).

### Behavioural factors

Smoking, harmful use of alcohol, physical inactivity and poor diet are key lifestyle factors which contribute to the four 'big killers'. These are heavily influenced by the wider determinants of health; for example in Nottingham smoking prevalence and child obesity is

<sup>&</sup>lt;sup>1</sup>Heart disease and Stroke

<sup>&</sup>lt;sup>2</sup>Living Well for Longer, Department of Health, 2013

higher in deprived areas (Nottingham City JSNA, 2012). In addition to changes in lifestyle behaviour, the health care system can also have a positive impact on premature mortality through early diagnosis, effective treatment and management of risk factors.

The key lifestyle factors impacting on life expectancy are improving more rapidly in England than they are in Nottingham and within the more affluent wards in Nottingham than in the more deprived areas. Nationally we know that people are smoking less than ever and eating healthier diets<sup>3</sup>. However, in many areas of Nottingham City smoking prevalence remains stubbornly high (Nottingham Citizen's Survey, 2012) and smoking is estimated to contribute 50% of the life expectancy gap between Nottingham and England<sup>4</sup>

# Children and young people

Levels of child poverty are high in Nottingham City with 34.4% of children living in poverty in the City compared to 21.1% nationally (2011).

The infant mortality rate in Nottingham has fallen from 6.0 to 4.7 per 1000 births and is no longer significantly higher than the England average (4.1 per 1000 birth; 2010-2012). However, Nottingham's prevalence of smoking in pregnancy (17.9%) is significantly higher than the England average (12.7%; 2012/13).

Educational attainment in Nottingham generally remains below national levels and the gap between Nottingham and national outcomes widens as pupils progress through their education. Primary school absence has fluctuated in line with rises and falls nationally but the gap between Nottingham and other areas has widened and Nottingham continues to have the highest rate of primary school absence in the country<sup>5</sup>

For the first time since recording began in 2006/07, Nottingham's children have improved to the extent that overall levels of excess weight (overweight or obese) are now comparable to the England average at reception and in Year 6<sup>6</sup>.

The level of teenage pregnancy is continuing to come down and the gap between the national and local rate is diminishing however, it remains considerably higher than the national average. In 2012, Nottingham's teenage conception rate was 37.7 per 1000 females aged 15 to 17 years compared to an England rate of 27.7 per 1000.

Although there has been a 10% reduction in first time entrants to the Youth Justice System compared to 2010/11, Nottingham continues to have one of the highest rates in the country.

Uptake of childhood vaccinations has improved slowly but Nottingham does not yet achieve target levels for many of the childhood vaccinations.

#### **Adults**

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<sup>&</sup>lt;sup>3</sup> Living Well for Longer, Department of Health, 2013

<sup>&</sup>lt;sup>4</sup> Health Lives, Healthy People: Our Strategy for Public Health in England, Department of Health, 2010

<sup>&</sup>lt;sup>5</sup> Pupil Absence in Schools, Department of Education, 2013 <a href="https://www.gov.uk/government/publications/pupil-absence-in-schools-in-england-including-pupil-characteristics">https://www.gov.uk/government/publications/pupil-absence-in-schools-in-england-including-pupil-characteristics</a>

<sup>&</sup>lt;sup>6</sup> Public Health Outcomes Framework, 2014; <a href="http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000042/pat/6/ati/102/page/0/par/E12000004/are/E06000018">http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000042/pat/6/ati/102/page/0/par/E12000004/are/E06000018</a>

In Nottingham City premature mortality rates for the 4 'big killers' are significantly worse than England, and worse than 75% of upper tier local authorities. For example, circulatory disease mortality in under 75s is 80.9 per 100,000 compared to 58.6 per 100,000 for England<sup>7</sup>. These diseases make up the majority of the life expectancy gap between Nottingham and England<sup>8</sup>. Accidents and suicide are also important contributors to the gap for males.

As well as increased likelihood of premature mortality, healthy life expectancy is also a problem in Nottingham City. Healthy life expectancy is a measure of how well we live, at all stages of the life course. It can be measured as either the number of years people spent in good or very good health or alternatively, as the number of years spent in the absence of disability or other long term limiting illness. The most recent available data<sup>9</sup> shows healthy life expectancy for England of 63.2 years for men and 64.2 years for women, compared to 58.2 in Nottingham City for men and 59.9 for women. As well as living shorter lives than the England average, Nottingham residents can expect to live fewer years in good health.

There are significant numbers of vulnerable adults<sup>10</sup> in the City which impacts on the need for health and social care services. This group includes those with long term conditions, carers, the vulnerably housed, as well as those with physical and/or sensory impairments or learning disabilities. Morbidity from mental health conditions is high and the number of vulnerable adults is increasing. For instance, we know homelessness is increasing, as well as the incidence of learning disability (as well as increased life expectancy of those with learning disabilities). The number of carers has increased significantly between the 2001 and 2011 census, with 27,000 citizens now providing unpaid care compared to 24,000 in 2001. The health and wellbeing of carers is important as this group provide an essential informal support system to local health and social care services and are also more likely to have increased health needs of their own.

Although Nottingham City has a relatively young population, the high levels of unhealthy lifestyle behaviours and long term conditions mean that adults living in the City are living with higher levels of ill-health than elsewhere. For example emergency admissions to hospital for lung disease are among the highest in England<sup>11</sup> and levels of preventable sight loss due to diabetes are twice the national average. This has a direct impact on health services and likelihood of being admitted to a care home.

### Where are we going?

Nottingham's focus on improving lifestyle risk factors for disease continues to have encouraging results with improving life expectancy and reduced death rates but the City still lags behind England and struggles to close the gap. Risk factors for the main killer diseases such as smoking remain high and trends for alcohol related disease continue to rise. Almost

<sup>&</sup>lt;sup>7</sup>HSCIC Indicator Portal, 2010-2012 Mortality data.

<sup>&</sup>lt;sup>8</sup> Health Lives, Healthy People: Our Strategy for Public Health in England, Department of Health, 2010

<sup>&</sup>lt;sup>9</sup> Public Health Outcomes Framework, 2014 <a href="http://www.phoutcomes.info/public-health-outcomes-">http://www.phoutcomes.info/public-health-outcomes-</a> framework#gid/1000049/pat/6/ati/102/page/0/par/E12000004/are/E06000018

According to the definition used in the Nottingham City Vulnerable Adults Plan.

<sup>&</sup>lt;sup>11</sup>Local Health, Public Health England,

<sup>2014</sup>http://www.localhealth.org.uk/#v=map9;i=t3.em\_adm\_copd;l=en\_

two thirds of adults are overweight or obese and this trend is still increasing albeit at a slower rate in the last decade. Obese children are at high risk of becoming obese adults<sup>12</sup> with all the associated risks of poor health. Nottingham City has comparable rates of child and adult obesity to England. When taken together, these factors are likely to have a detrimental effect on our life expectancy gap.

The number of people with mental health problems is likely to increase in the current economic climate. Increasing financial hardship and unemployment may also impact on smoking prevalence and obesity levels. In terms of the wider determinants impacting on health, Nottingham compares poorly with England on measures of poverty, education and training, youth justice, violent crime, noise, outdoor space, fuel poverty and social isolation<sup>13</sup>.

The city will also face challenges in its provision of health and social care. The number of residents aged 85 and above is projected to increase, with a knock on effect for carers, many of whom will be disabled themselves. Local data suggest that the number of people with learning disability could increase by over 70% by 2020. Medical advances which have increased survival rates of premature babies and life expectancy of older people are expected to lead to growing numbers of people with long term and complex disabilities and needs.

The Nottingham JSNA will continue to provide accurate, relevant and up to date information to support the commissioning process to meet these challenges across the health and social care community.

<sup>&</sup>lt;sup>12</sup>Dietz WH., Childhood weight affects adult morbidity and mortality. Journal of Nutrition, 1998:128 (2 Suppl):411S-414S

<sup>&</sup>lt;sup>13</sup> Public Health Outcomes Framework, 2014 <a href="http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000041/pat/6/ati/102/page/0/par/E12000004/are/E06000018">http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000041/pat/6/ati/102/page/0/par/E12000004/are/E06000018</a>