

# Swindon's Joint Strategic Needs Assessment

## Long Term Conditions (LTCs)



### Key Points:

- Although with a subject such as LTCs (in which definitions are broad and various), it is not possible to give definitive and precise answers, we believe that this Profile provides useful and credible working estimates for use by the local Health and Care community.
- In total, 32.2% of all people and 69.3% of people aged 65 years or more in Swindon UA may have one or more LTCs.
- LTCs are numerically most common in middle-aged people, because there is a large number of middle-aged people in Swindon.
- However, the actual prevalence rates, (the likelihood of having one or more LTCs), are greater in older people, and the LTCs are likely to be more severe for them.
- For many conditions, it is usual, rather than exceptional, to have additional LTCs.
- Although affluence only modestly works against the development of LTCs, affluent people may cope considerably better than more deprived people, may have fewer co-morbidities and they seem to feel less limited by their health problems.
- There is a stronger link with deprivation in people aged 65 years or more, who have three or more Long Term Conditions.
- Intelligence from further work including a literature search, horizon scanning, use of the Mosaic segmentation tool and risk stratification data should be employed, along with the information in this JSNA to design targeted interventions in Swindon with the dual aims of improving health and reducing cost.

### What is Joint Strategic Needs Assessment (JSNA)?

JSNA helps us to understand:

- What we know about the current health of local people
- How their needs are being met
- What we think their future needs are likely to be
- How their needs can best be met

The JSNA process involves many different partners and is overseen by Swindon's Health and Well-Being Board. Understanding Swindon's changing population, the factors that affect health and well-being, the town's assets and the implications for future services are vital in setting priorities and planning future services. This JSNA Bulletin examines the topic of Long Term Conditions (LTCs).

## Introduction

Improvements in medical treatment and success in public health interventions have resulted in people having longer lives, often with some form of long-term morbidity (illness) or disability. In England, the Department of Health estimates that over a quarter of the population have a Long Term Condition (LTC).

An increasing number of these people have more than one LTC and so can be said to have a co-morbidity (or co-morbidities). Such people are often described as being in a state of Multi-Morbidity (MM). The on-going management of LTCs and Multi-Morbidity is now a central task of the NHS and care services.

In this profile for Swindon UA, we have drawn upon existing data sources (such as the 2011 Census and QOF registers) to estimate the “LTC prevalence pool” in Swindon UA. We have also applied the Symphony Model to the Swindon population to estimate the magnitude of groups of LTC patients and impute their activity in our local health and care system.

The Symphony Model is a record-linkage project, which has used “real life” health and social care data from Somerset to identify patterns of activity in a population. We have also used the model to investigate other issues relating to LTCs within Swindon, such as Multi-Morbidity, costs and the effects of deprivation.

The population of Swindon UA was 217,160 people at mid-2015. Even if our current expectations of rapid growth have to be revised in the near future, Swindon’s population is predominantly middle-aged and these people will inevitably move into Older Age.

Although Swindon is less deprived than the average Local Authority, many different grades of affluence and poverty are present within it. About 15.4% of the Swindon UA population belong to a Black or Minority Ethnic Group (BME group).



## Using Socio-Demographic and Epidemiological Measures to estimate the “LTC Prevalence Pool”

Disability data from a national survey suggest a prevalence of 18% (in the adult population only), while measures from the 2011 Census for Swindon UA indicate slightly lower proportions, 15.4% (“Long Term Health Problem with limitations”) and 16.6% (“Less than Good Health”) (in people of all ages). For both these census measures older people and less affluent people tended to report higher levels of impairment.

People from ethnic minorities in Swindon reported relatively low levels of impairment, probably because these groups are younger, on average, than non-BME groups.

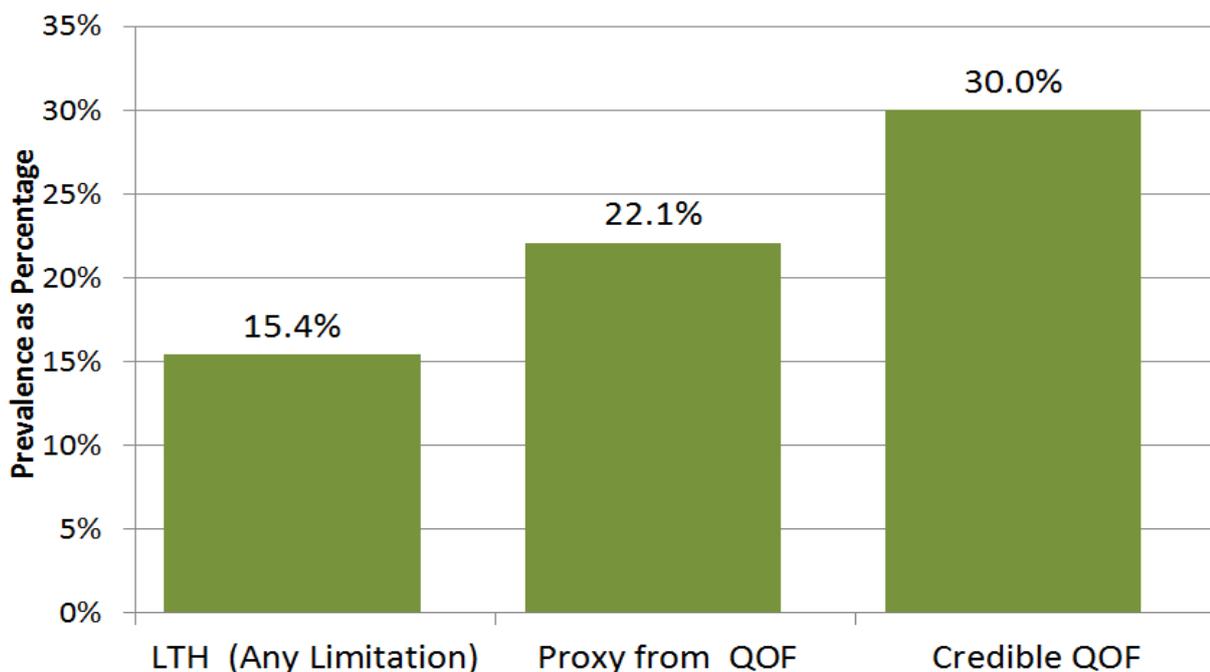
The QOF (Quality Outcome Framework) registers maintained by primary care doctors, record the number of people with specific chronic diseases, and so form a valuable source of information for investigating LTCs in Swindon. Unlike survey measures, QOF figures are medically verified, but they count diseases, (such as Coronary Heart Disease (CHD) and Cancer) and not people.

A pragmatic solution to the issue of counting individual people can be found by using a QOF indicator (relating to helping people stop smoking) which combines a basket of conditions, (including asthma, Coronary Heart Diseases, diabetes, high blood pressure, kidney diseases, stroke, lung disease), but counts each patient only once. This robust measure extracted from QOF, (which we have named “Proxy from QOF”) records a prevalence of 22.2%.

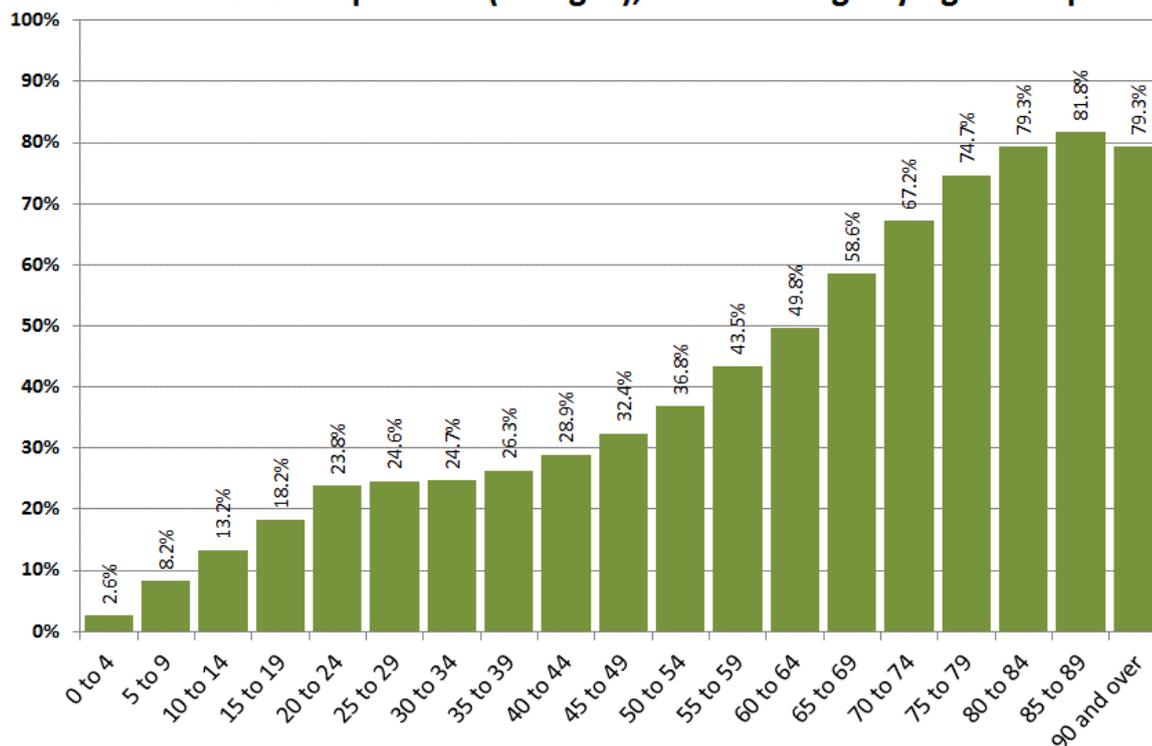
However, a number of important conditions do not feature in “Proxy from QOF”. Thus, a plausible approach which we have devised, called “Credible QOF” includes several additional common conditions (such as Cancer and depression). “Credible QOF” indicates that a percentage of about 30% for LTCs is probably more realistic.

The QOF percentages relate to the situation in the Swindon population at the end of March 2016 and can be taken as applicable to the whole population. A comparison of the census “Limitation” measure and QOF percentages can be seen in Figure 1.

**Figure 1. Approximated Prevalence of LTCs in Swindon UA using Census and QOF 2015/2016**



**Figure 2. Prevalence of LTCs in Swindon UA in Symphony Model for 2015 Population (All Ages), As Percentage by Age-Group**



### The “LTC Prevalence Pool” estimated from the Symphony Model

Outputs from the Symphony model suggest a LTC prevalence of 32.2% for Swindon, a value in line with the “Credible QOF” figure, which we have mentioned above. An LTC prevalence of 32.2% amounts to 69,820 persons in 2015. That is 32,518 males and 37,301 females.

According to the Symphony model, 21.0% of people in the population had only one condition, 7.2% had two conditions, while 3.9% had three or more conditions. Figure 2 shows how the prevalence rate of having at least one LTC rises with age in the Swindon population.

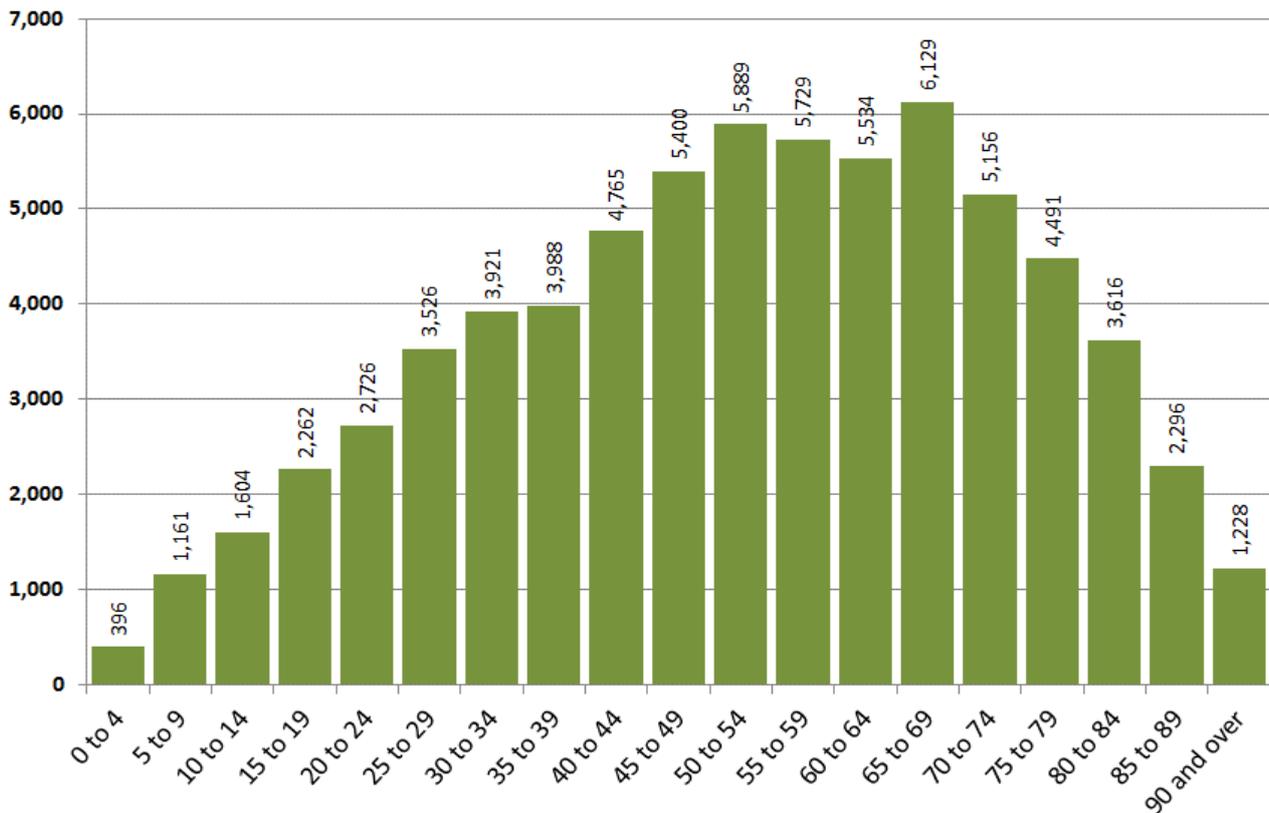
Nevertheless, the greatest numbers of cases (people with at least one LTC) in Swindon were to be found in middle-aged people, as depicted in Figure 3, because middle-aged people predominate in the Swindon population. These middle-aged people will have a noticeable impact on health and care services as they move into the ranks of older people in the coming years.

The Symphony model suggests a prevalence rate among people aged 65+ years of 69.3% in Swindon. This equates to 22,915 people.

Although the number of cases was not as great as among middle-aged people, people aged 65+ in the Symphony model were more likely to have co-morbidities. In approximate terms, just over one half of people aged 65+ years with any condition, were in a state of multi-morbidity, having co-morbidities alongside their main condition. In the 65+ age-group, 30.7% of people had one condition only, 21.2% had two conditions and 17.4% had three or more conditions.

Other evidence suggests that older people with LTCs are more likely to have more severe problems and are more likely to need increased support from health and care services.

**Figure 3. Numbers of People with LTCs in Swindon UA in Symphony Model for 2015 Population (Prevalent Cases by Age-Group)**



### LTCs and Deprivation in the Symphony Model

The Symphony Model divided the whole Swindon population into five groups and produced an analysis of the rate of LTCs, comparing these five groups.

The percentage of people with at least one LTC varied according to deprivation group, with the more deprived groups being more likely to have at least one condition.

Nevertheless, this variation was moderate, rather than striking. In all, 35.7% of people in the most deprived group (Group 1) had at least one condition, 32.4% of people in Group 3 had at least one condition, whilst in the least deprived group (Group 5) the proportion was 30.1%. Thus Group 1 was about 19% higher than Group 5, but this was a difference of six percentage points.

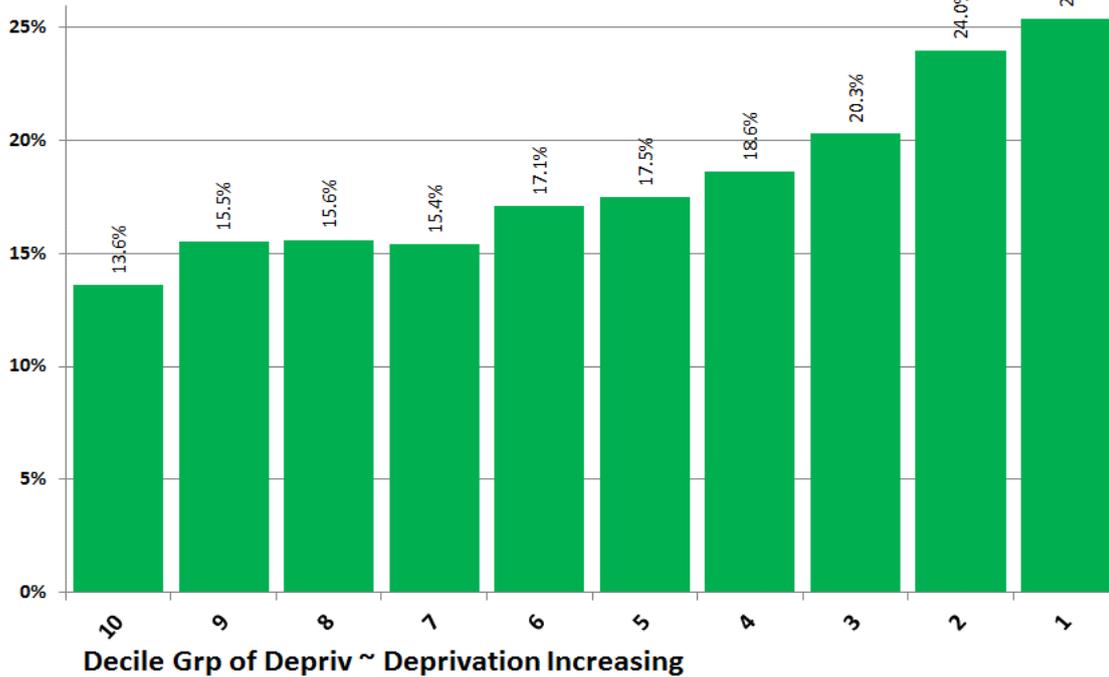
### Three or more LTCs, Age and Deprivation in the Symphony Model

There was a steeper gradient according to deprivation for people aged 65+ years with three or more LTCs, however (see Figure 4). In total, 17.4% of people aged 65+ had three or more conditions, 5,757 people in all. The rate of having three or more conditions became more frequent as deprivation increased.

Working with ten groups graded according to deprivation, Symphony suggested that the least deprived group (Group 10) had a rate of 13.6%, while the most deprived group (Group 1) had a rate of 25.4%, a difference of about 12 percentage points.

The most common conditions, as proportions of people aged 65+ years with three or more conditions, were: hypertension (high blood pressure) 83.2% (4,788 persons), CHD, 43.0%, (2,474 persons), diabetes 40.7%, (2,345 persons), cancer 37.1% (2,137 persons) and stroke 29.0% (1,672 persons).

**Figure 4. Prevalence of People aged 65+ with Three or more LTCs in Swindon UA as Percentages, (by Decile Group of Deprivation) in Symphony Model 2015**



### Multi-Morbidity estimated from the Symphony Model

About one third of those people with any condition had more than one condition and so were in a state of Multi-Morbidity. The presence of co-morbidities appears to be common, and physical co-morbidities often exist alongside mental ill-health conditions, such as depression and dementia.

In the instances of stroke and Chronic Obstructive Pulmonary Disease (COPD), for example, multi-morbidity could be described as the norm, with over 80% of people with these conditions having at least one other health condition.

Figure 5 shows the multi-morbidity structure for people with diabetes in Swindon. About half of people with diabetes also had high blood pressure (hypertension) and about one-sixth of people with diabetes also had Coronary Heart Disease. There were smaller proportions with asthma, cancer, and low thyroid functioning.

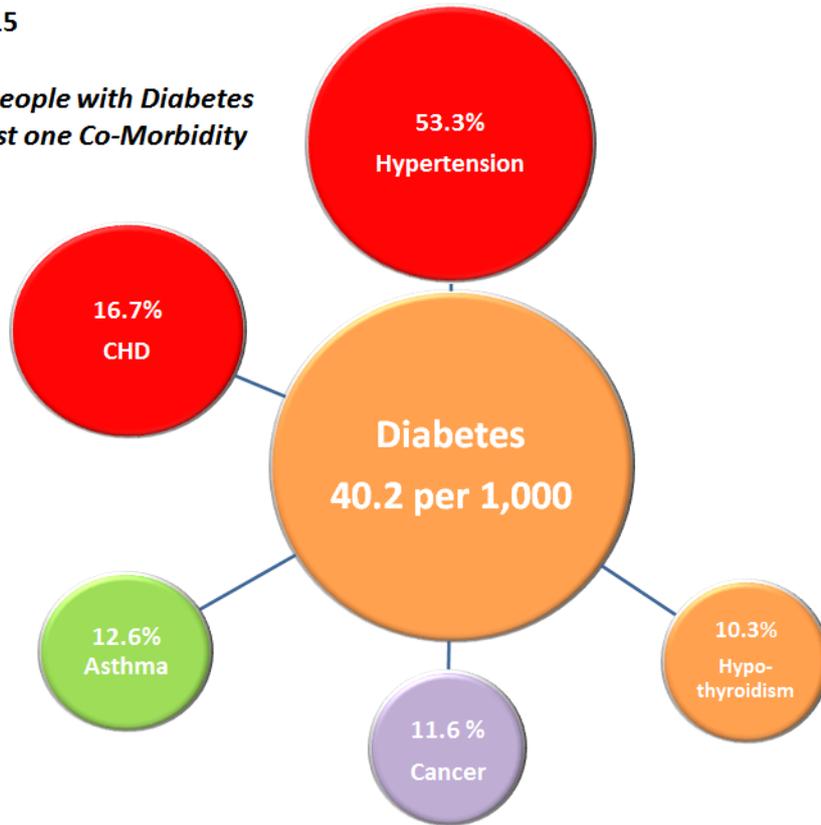
The multi-morbidity structure of depression is depicted in Figure 6. About a half of people with depression had at least one other condition and this was usually a physical LTC. Asthma and high blood pressure were the most common co-morbidities.

Among the mental health conditions, dementia seemed to adhere to a more physical health configuration, with 81.3% of people having at least one co-morbidity. Dementia was co-morbid with four of the most common chronic diseases, namely diabetes (15.7%), cancer (16.4%), Coronary Heart Disease (23.4%) and hypertension (52.0%).



**Figure 5. Period Prevalence of Diabetes with its five most common Co-Morbidities in Swindon 2015**

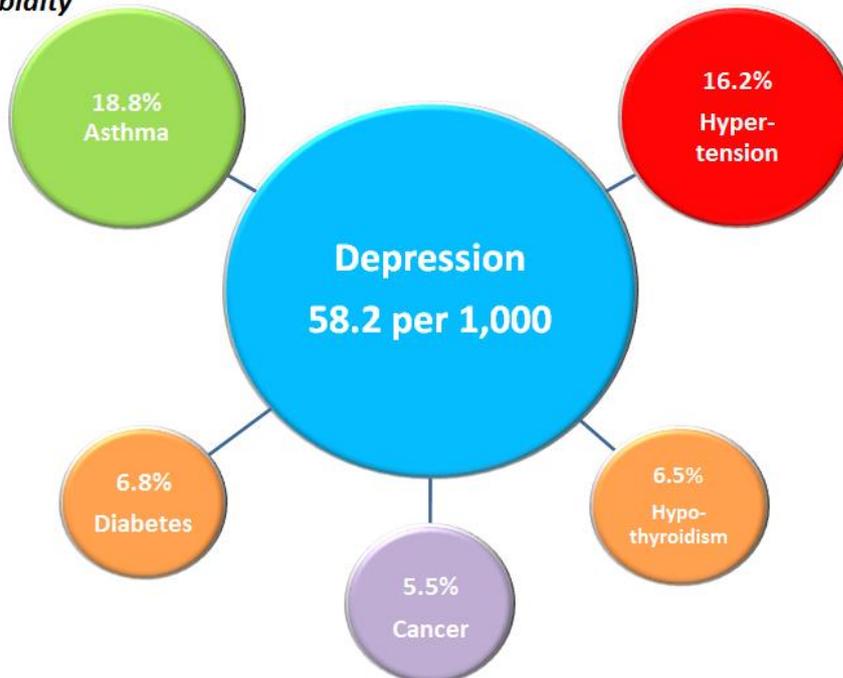
*75.9% of people with Diabetes had at least one Co-Morbidity*



Source: Imputed through Symphony Matrix Model 2015.

**Figure 6. Period Prevalence of Depression with its five most common Co-Morbidities in Swindon 2015**

*47.0% of people with Depression had at least one Co-Morbidity*



Source: Imputed through Symphony Matrix Model 2015.

## Lifestyle Factors and LTCs

A central component of a strategy to prevent LTCs will be the improvement of lifestyle across the population. The overall smoking prevalence in adults in Swindon in 2015 was 18.7%, an encouraging reduction from 21.5% in 2012. National surveys indicate that smoking is becoming a less frequent occurrence in people in old age, with only about 12% of those aged 65 to 69 years in England and 3% aged 90 years or more in England maintaining the habit.

With regard to conspicuous harm resulting directly from alcohol misuse, in the years 2014 to 2015, 1,358 people in Swindon were admitted to hospital with this type of problem, an indication of the way misuse of alcohol can dramatically affect a person's health.

With respect to overweight or obesity, Swindon faces a considerable challenge, having a comparatively high percentage of people with excess weight. In the period 2012 to 2014, 69.5% of adults in Swindon had excess weight, that is, they were categorised as being either overweight or were in the more extreme category of being obese. This was significantly higher than the figure for England as a whole which was 64.6%.

## Key Recommendations

### Key recommendations are as follows:

- Accept the LTC Profile and the "Ageing Well JSNA Report" as providing complementary pictures of LTCs, health resilience and coping in Swindon
- Accept the main prevalence estimates of LTCs for Swindon in this Profile, (derived from the Symphony Model)
- Conduct a literature review to find evidence of which interventions have been shown to be effective in different parts of the population, with regard to preventing and coping with LTCs, including telehealth and also the role of carers

- Conduct further statistical work on LTCs, particularly with a view to understanding groups identified in the literature as likely to be at high risk of requiring state-funded social care; such groups to include people with three or more LTCS, aged 65 years or more and living in deprived areas
- Target interventions in the population as appropriate. Further intelligence work to support this and use of MOSAIC geo-demographic segmentation to show which channels of communication should work best with different segments of the population
- Improve and support the health of people with LTCs through "joined-up" and "accountable care"
- Co-operate with partners to maintain a health-promoting physical environment, including housing, for people with LTCs

## Where to find more information

This Bulletin is an abbreviated version of the JSNA LTC Profile 2017. The full Profile can be found on Swindon's JSNA website: [swindonjsna.co.uk](http://swindonjsna.co.uk)

The website contains a range of other documents about health and well-being in Swindon.

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