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Health and its determinants in Wales

Informing Public Health Wales strategic planning

Interim Report Executive Summary

INTERIM



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This document is to be used in conjunction with the Health and determinants in Wales information product, which has been produced to inform Public Health Wales strategic planning.

The information product consists of:

- Executive summary
- Report
- Technical guide

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The *Health and its determinants in Wales* report provides an overview of the health and well-being of the population of Wales. The detailed report outlines the main areas of health need and presents the complex picture of health in Wales. It demonstrates the gains made but it also highlights the significant challenges faced both now and in the future. The report is accompanied by this summary, highlighting the key messages from the report, and a technical guide, detailing the methodologies and the data sources used and their caveats.

1. Demography

Wales has an ageing population which is expected to result in an increasing number of age-related conditions.

- Wales, like the rest of the UK, has an ageing population. Relative to the rest of the UK, Wales has more older people and fewer people of working age as a proportion of the population.
- The total population of Wales is expected to increase to 3.3m by 2039 if current trends continue, with an expected increase in the population aged 65-84 years from 545,000 in 2015 to 703,000 in 2039 (29% increase) and an expected increase from 79,000 to 183,000 in the population aged 85+ years (130% increase).
- The majority of the population (63%) are working age adults (15-64 years); although this will remain the case there is expected to be a 5% relative decrease in this age group from 1.95m in 2015 to 1.86m in 2039.

2. Life expectancy

People are living longer and spending longer in good health, but they are also spending many years living with poor health.

- Today average life expectancy in Wales is 78 years for men and 82 years for women, but men and women are likely to spend on average 15 and 17 years respectively living in poor health which will impact on their quality of life and use of services.
- Although these figures are comparable to the rest of the UK, the gains in life expectancy and healthy life expectancy have been less than other UK nations. UK life expectancy is lower than that for Sweden (82 years) and Iceland (83 years).
- 85% of working age adults (16-64 years) report being in good health; and the proportion of older people reporting being in good health is increasing.

There remain intractable gaps in the experience of health between more and less deprived areas.

- There are stark differences in life expectancy and healthy life expectancy across Wales which have shown no sign of reducing over the past 10 years. Men and women in the most deprived areas of Wales on average spend approximately 19 and 18 years less in good health respectively, and die on average 9 and 7 years earlier respectively, than those living in the least deprived areas.

3. Burden of disease

Cancer and cardiovascular disease are the main causes of years of life lost (YLL) and disability-adjusted life years (DALYs) in Wales; musculoskeletal disorders and mental and substance use disorders are the main causes of years lived with disability (YLD).

- Cancers and cardiovascular disease together contribute 61% of YLL and 36% of DALYs.
- Cancer is now the leading cause of the burden of disease and Wales has a comparatively high cancer DALY rate compared to most UK nations. It accounts for an estimated 167,000 DALYs a year (19%) and has shown little decrease since 1990.
- Cardiovascular disease is associated with an estimated 147,000 DALYs a year (17%); however, over the last 15 years there has been a dramatic fall in the burden of disease due to cardiovascular disease (a fall of 44%) and it is no longer the leading cause of DALYs. In addition to cardiovascular disease, gains have been made in DALYs caused by external causes and neonatal disorders.
- The greatest rise in DALYs has been associated with mental and substance use disorders, increasing by 21% from 64,300 to 78,100 per year between 1990 and 2015. Mental and substance use disorders are also the second highest contributor to YLD and the burden of disease, as well as the prevalence of mental ill health, has been rising.

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- Musculoskeletal disorders and mental and substance use disorders together account for 40% of the total YLD. Neurological conditions, including dementia, also rank highly in terms of the various measures of disease burden in Wales.
- Over the past 15 years the number of DALYs lost due to liver disease, which is associated with several lifestyle factors, has more than doubled; although it contributes <10% of the DALYs associated with either cardiovascular disease or cancer.
- Communicable diseases contribute 4% of DALYs to the burden of disease. Influenza is responsible for one of the highest burdens of disease of all infections with 4% of the Welsh population reporting influenza-like illness symptoms at the height of the flu season and accounting for 3,000 DALYs. Hepatitis C and *Clostridium difficile* join influenza as important causes of DALYs for communicable diseases in Wales.
- Particular conditions contribute differently to the burden of disease for younger age groups. Neonatal disorders have the biggest contribution in the infant period; infections are the biggest contributor in those below the age of five and chronic respiratory conditions in later childhood. Injuries account for half of YLL in young adults.
- Nine percent of adults aged 16-24 years, and 24% of adults aged 45-54 years, report having two or more long term conditions; this rises to 60% in adults aged 75+ years.
- By 2035 the proportion of adults (18+ years) living with a limiting long term condition may increase by 22%, with greatest increases in stroke (33%), and heart condition (31%) and neurological conditions including dementia (72%).

4. Health behaviours

Smoking is the risk factor which has contributed most to the current burden of disease in Wales and if current trends persist the Welsh Government target prevalence of 16% by 2020 will be missed.

- Smoking is the risk factor which has contributed most to YLL in Wales. Between 2008-09 and 2013-14 the smoking prevalence declined (4%) and if this trend persists, it is projected that the prevalence of smoking in Wales will be 18% percent by 2020 and 15% by 2025.
- There are stark contrasts between risk experiences in deprived and less deprived areas, with smoking rates in the most deprived areas (29%) over double those of the least deprived areas (12%). However, over time the size of this gap has reduced from an additional 22% of the population smoking in the most deprived areas compared to the least deprived areas in 2008 to an additional 18% of the population in 2015.

Other health behaviours and their physiological consequences, such as high BMI, blood pressure and cholesterol, are significant burden of disease risk factors. Overweight and obesity contribute most to years lived with a disability in Wales.

- Drug and alcohol use only accounted for 50,000 DALYs in 2015. However, there has been an increase in the burden of disease (DALYs) due to alcohol (by a quarter) and drug use (over double) since 1990; these particularly affect those aged 15-49. This is despite a declining trend in the proportion of individuals reporting that they drink above the recommended guidelines (4% decline).
- Physical inactivity, diet, and environmental factors are also significant burden of disease risk factors. Past trends are mixed with physical activity rates increasing (1%) but fruit and vegetable consumption declining (4%).
- Inequality gaps appear to be widening for fruit and vegetable consumption with those in the most deprived areas consuming less fruit and vegetables than those in the least deprived areas. There are also indications that an inequality gap is also starting to emerge in terms of physical activity. For alcohol consumption, those in the most deprived areas are less likely to be drinking above the daily guidelines for alcohol than those in the least deprived areas; however, harm from alcohol appears to disproportionately affect those in the most deprived areas.
- The continuation of current trends would result in three quarters of the population in Wales not eating the recommended levels of fruit and vegetables by 2025 and two thirds of the adult population in Wales being overweight or obese.

5. Healthy start

More children in Wales report unhealthy lifestyle behaviours, and being overweight or obese, than in other UK nations.

- Wales, along with the rest of the UK, has a higher infant mortality rate (3.7 per 1,000 live births) than the international comparators; Iceland, for example, has an infant mortality rate of 2.1 per 1,000 live births.
- In 2016, 15% of children had not received all of their recommended vaccinations by their fourth birthday, meaning that they were not fully protected from vaccine preventable disease by the time they started school.
- More children in Wales are overweight or obese, and report unhealthy lifestyle behaviours including smoking, drinking alcohol and low levels of physical activity than in other UK nations or selected international comparators.
- There are clear inequalities in child health with children in most deprived areas half as likely to be breast fed and twice as likely to be of low birth weight and have decayed, missing or filled teeth (DMFT) than children from the least deprived areas.

6. Living conditions

Levels of several important wider determinants of health, such as poverty, poor housing and poor education vary considerably across the country.

- Overall a quarter of children in Wales live in poverty, but in some areas this rises to over 55%.
- Adults living in most deprived areas are less able to afford everyday goods and services and less likely to experience a sense of community.
- A quarter of social rented households with dependent children resident are overcrowded.
- Wales has lower mean Programme for International Student Assessment (PISA) score for nearly all disciplines compared to the other UK nations and selected international comparisons.
- Across Wales there has been a 3% rise in 19-24 year olds not in education employment or training between 2008 and 2014 to 20%. A young person leaving school in the most deprived area is less than half as likely to leave with skills and qualifications (level 2) as those from the least deprived area (32% as against 72%).

7. Projections

Population health and health care needs for future generations in Wales is likely to be influenced by a number of rising health concerns.

- Increases in the older population of Wales will result in increasing numbers of age related conditions, with 60% of those over 75 years currently reporting 2 or more illnesses. By 2035 the proportion of all adults (18+ years) living with a limiting long term condition may increase by 22%, and the levels in older adults will be significantly higher; greatest increases across all adults are likely to be in stroke, and heart condition and neurological conditions including dementia.
- The prevalence of mental ill health has been rising in Wales and this is accompanied by a rise to prominence as a burden of disease both in terms of the DALYs and YLD associated with mental and substance use disorders.
- The impact of liver disease on health in Wales is likely to increase in the future if the rising trend of associated DALYs continues. Over the past 15 years the number of DALYs lost due to liver disease, which is associated with several lifestyle factors, has more than doubled.
- The impact of health inequalities might increase in the future if the current trends towards widening gaps for alcohol consumption and fruit and vegetable consumption continue uninterrupted. There are indications that an inequality gap is also starting to emerge in terms of physical activity, although the gap for smoking appears to be declining.

8. Emerging threats

Population health and health care needs for future generations in Wales may also be influenced by emerging wider environmental and global issues and threats

- Environmental risks, especially climate change, will be an important driver of health globally in the future. Extreme weather events and the emergence of new diseases may have a significant impact on population health.
- Other trends, such as rising income and wealth disparity, and an ageing population, could also potentially have a major influence on global developments.