Joint Strategic Needs Assessment

People are prepared for and supported in old age Long Term Conditions: Cardiovascular Disease (CVD)

Last updated May 2014

Summary

- The Isle of Wight has a statistically higher (worse) rate (4.1%) of Chronic Heart Disease (CHD) than the England average of 3.4%.
- For hypertension (high blood pressure) the Isle of Wight has a statistically significantly higher (worse) rate 16.7% than the England average (13.6%).
- For Stroke the Isle of Wight has a statistically significantly higher (worse) rate 3.1% than the England average 2.54%.
- The crude prevalence of CHD for the Isle of Wight has seen a downward (better) trend with a rate of 3.9% in 2012/13 statistically significantly lower (better) than for the period 2005/6 to 2008/9 (4.5% to 4.3%).
- On the Isle of Wight for the period 2010-12 the number of deaths from CHD for females (12 deaths per 100,000) was statistically significantly lower (better) than for males (42 deaths per 100,000). The significant difference between female and male mortality rates is also reflected in the England average females 15 deaths per 100,000 and 51 for males.

Background

Cardiovascular disease (CVD) is a term that describes a disease of the heart and circulation, generally due to reduced blood flow to the heart, brain or body caused by plaques or blood clots. CVD is increasingly common after the age of 60, but rare below the age of 30; plaques (plates) of fatty atheroma build up in the arteries during adult life. These can eventually cause narrowing of the arteries, or trigger a local thrombosis (blood clot) which completely blocks the blood flow (NICE, 2010).

The main types of CVD are: coronary heart disease (CHD), stroke and peripheral arterial disease (PAD). Globally CVD is the leading cause of death and is associated with the burden of preventable illnesses (NICE, 2010).

Hypertension is a major risk factor for ischaemic and haemorrhagic stroke, myocardial infarction, heart failure and premature death. Hypertension is one of the most important preventable causes of premature morbidity and mortality in the UK.

Factors that can raise the risk of developing hypertension include obesity, smoking, excessive alcohol consumption; high salt intake and a lack of exercise (NICE, 2010).

NHS Health Check

The NHS Health Check programme aims to help prevent heart disease, stroke, diabetes, kidney disease and certain types of dementia. Everyone between the ages of 40 and 74, who has not already been diagnosed with one of these conditions or have certain risk factors, will be invited (once every five years) to have a check to assess their risk of heart disease, stroke, kidney disease and diabetes over the next 10 years and will be given support and advice to help them reduce or manage that risk.

The level of population need

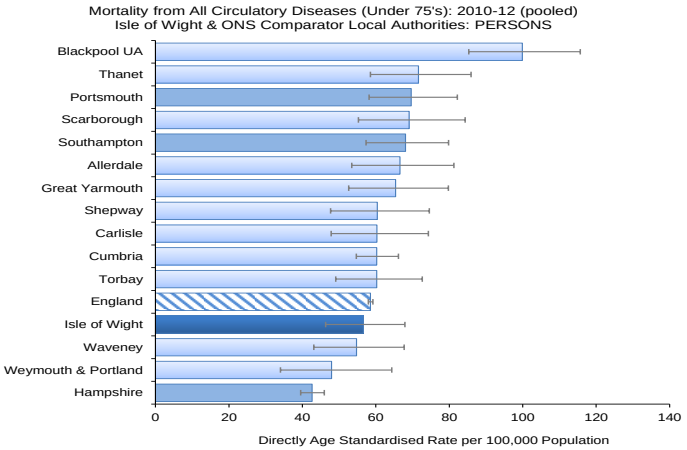
This factsheet examines the prevalence and mortality rates of CHD, stroke and hypertension on the Isle of Wight and its ONS comparator areas.

CVD – all circulatory disease

Figure 1 shows the directly age standardised rate (DSR) of mortality from CVD for those aged less than 75 years per 100,000 population. DSR is a technique used to better allow populations to be compared when the age profiles of the populations are different; as in the case of the Isle of Wight having a higher than average older population.

The Isle of Wight rate is not statistically significantly different from the England average or the majority of its Office of National Statistics (ONS) comparator areas, but it has a statistically significantly better rate of 57 deaths per 100,000 than Blackpool which has a rate of 100 per 100,000.

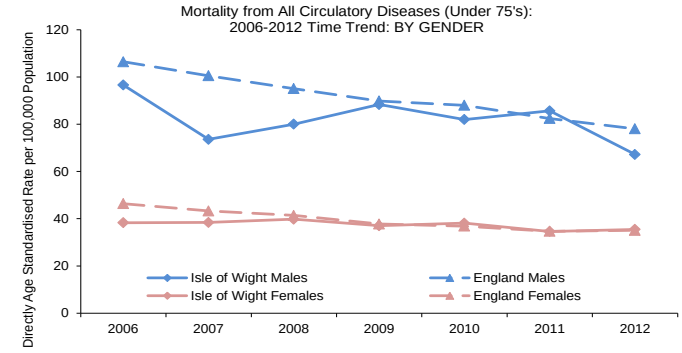
Figure 1:



Sources: ONS Annual Death Extract & ONS Mid Year Population Estimates

Figure 2 shows the DSR of mortality from CVD in males and females aged under 75 per 100,000 population from 2006 to 2012. The Isle of Wight has a general downward trend (better) in line with the England average, but the Isle of Wight trend is not statistically significantly different from 2006 (121 deaths per 100,000) to 2012 (107 deaths per 100,000).

Figure 2:



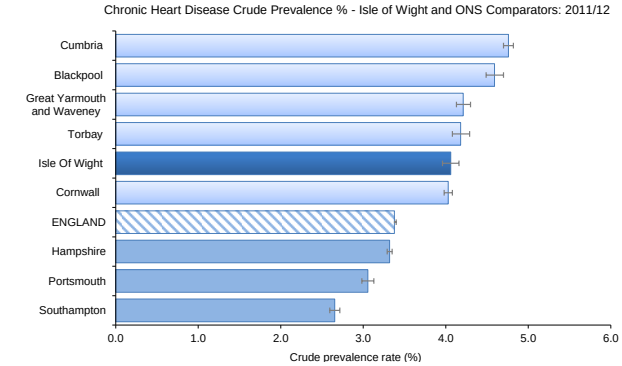
Sources: ONS Annual Death Extract & ONS Mid Year Population Estimates

Chronic Heart Disease (CHD)

Figure 3 shows the crude prevalence of the percentage of people on the CHD register in 2011/12, the Isle of Wight has a statistically higher (worse) rate (4.1%) of CHD than the England average of 3.4% but lower (better) than two of its ONS comparator areas.

NB This is a crude rate and does not take into account the higher than England average older population of the Isle of Wight.

Figure 3:



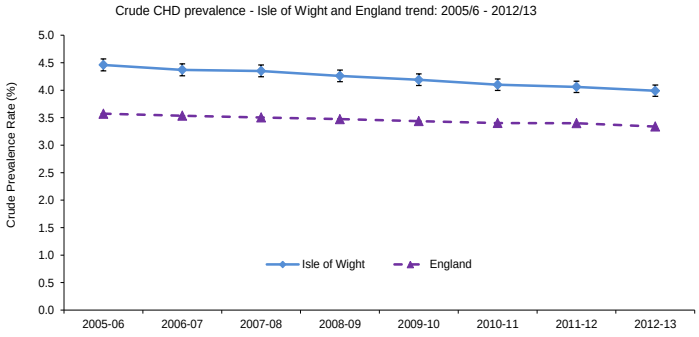
Sources:Quality and Outcomes Framework accessed via NHS Information Centre Copyright © 2012,
Notes: These are crude rates and therefore do not take any account of the underlying age/sex distribution of the population

Using modelled estimates produced by the Eastern Region Public Health Observatory (ERPHO) for 2011/12, it is estimated that 8222 people on the Isle of Wight have CHD with 2499 (nearly 2%) of the population undiagnosed.

Figure 4 shows the crude CHD prevalence for the Isle of Wight and England trend from 2005/6 to 2012/13. The trend for England has remained fairly constant with no statistically significant difference over the period.

The crude prevalence of CHD for the Isle of Wight has seen a downward (better) trend with a rate of 3.9% in 2012/13 statistically significantly lower (better) than for the period 2005/6 to 2008/9 (4.5% - 4.3%).

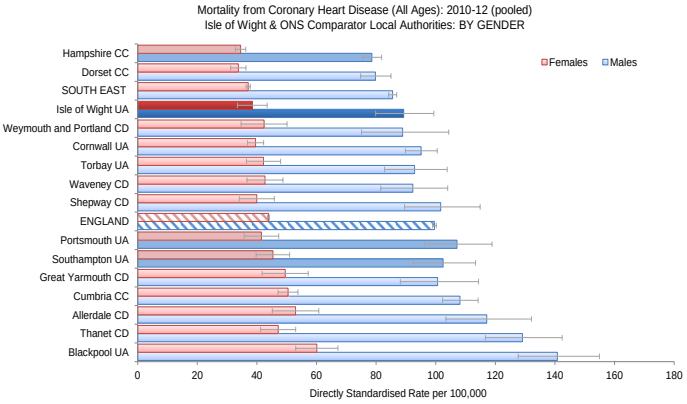
Figure 4:



Sources: Quality and Outcomes Framework
Notes: These are crude rates and therefore do not take any account of the underlying age/sex distribution of the population. Localities are defined according to GP practices.

Figure 5 shows mortality from CHD for the Isle of Wight and its ONS comparator area for the period 2010-2012 (pooled). The Isle of Wight is not statistically significantly different (61 deaths per 100,000) compared to the England average (69 per 100,000) but has statistically significantly lower (better) mortality from CHD than four of its ONS comparator area for males and three for females.

Figure 5:



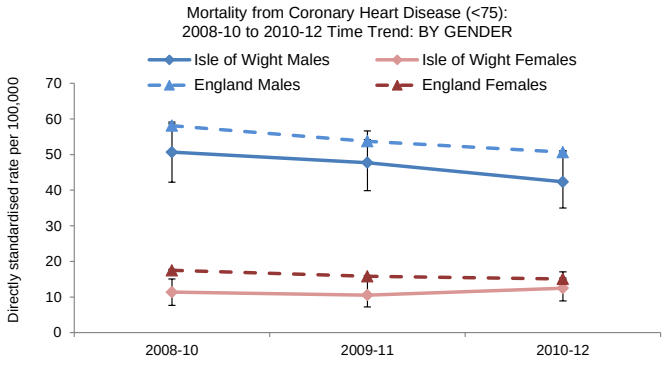
Source: HSCIC indicator portal & ONS population estimates

Figure 6 shows mortality rates from CHD from 2008-10 to 2010-12 for all ages, males and females. In general the number of deaths from CHD for females is statistically significantly lower (better) than for males.

On the Isle of Wight for the period 2010-12 the number of deaths from CHD for females (12 deaths per 100,000) was statistically significantly lower (better) than for males (42 deaths per 100,000). The significant difference between female and male mortality rates is also reflected in the England average of 15 deaths per 100,000 for females and 51 for males.

The trend in mortality rates for CHD from 2008-10 to 2010-12, deaths for males on the Isle of Wight reflects the England average trend with a gradual decline in the number of deaths from CHD. This trend is statistically significant for the England average but is not statistically significant for the Isle of Wight.

Figure 6:

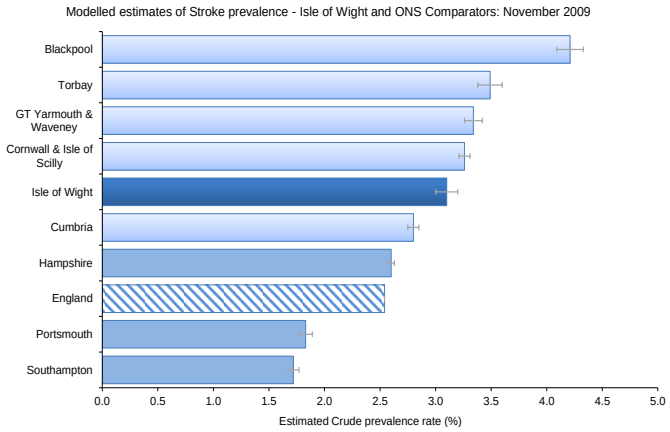


Sources: HSCIC & ONS Revised Mid Year Population Estimates

Stroke/Cerebrovascular Accident (CVA)

Figure 7 shows modelled estimates of crude stroke prevalence rates. The Isle of Wight has a statistically significantly higher (worse) rate 3.1% than the England average of 2.54% and one of its ONS comparator areas, Cumbria which has a rate of 2.8%. However it has statistically significantly lower (better) rates than four of its ONS comparator areas.

Figure 7:



Sources: Eastern Region Public Health Observatory

Notes: The Eastern Region Public Health Observatory (ERPHO) has produced practice level prevalence estimates through modelling. The models require practice level inputs of population, ethnicity, smoking and deprivation. For practices with populations that significantly differ from a 'typical' population (e.g. large BME population that has very different smoking pattern to England average) the assumptions of the model may not apply and discrepancies may occur.

Figure 8 shows the mortality rate from stroke per 100,000 this rate has been age standardised, from 2008-10 to 2010-12. There has been no statistically significant change in the mortality rate from stroke on the Isle of Wight. The England average over the same time period has shown a statistically significant improvement in mortality rates for both males and females.

Figure 8:

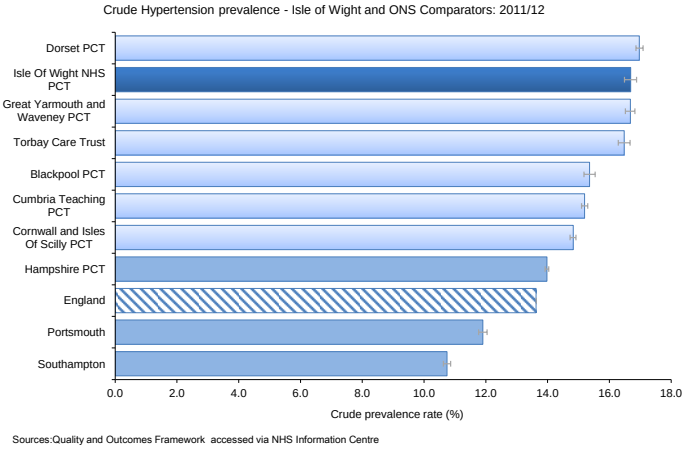
Sources: HSCIC & ONS Mid Year Population Estimates

Hypertension

Figure 9 shows the crude hypertension prevalence for the Isle of Wight and its ONS comparator areas. The Isle of Wight has a statistically significantly higher (worse) rate 16.7% than the England average (13.6%) and three of its ONS comparator areas.

Notes: These are crude rates and therefore do not take any account of the underlying age/sex distribution of the population.

Figure 9:



Modelled estimates created in 2009 by ERPHO for the Isle of Wight show that 43043 people are living with hypertension against the recorded numbers of 23520; this means that 19523 people 13.8% of the total population of the Isle of Wight, potentially are living with undiagnosed hypertension. For England the estimated percentage of undiagnosed hypertension is 9.6%.

References

NICE. (2010, June). *Prevention of Cardiovascular Disease.* Accessed May 9, 2014, from nice.org.uk: http://www.nice.org.uk/nicemedia/live/13024/49273/49273.pdf

Useful websites

CVD prevention
http://www.patient.co.uk/health/preventing-cardiovascular-diseases#nav-4

Health Checks
www.nhs.uk/Conditions/nhs-health-check/Pages/NHS-Health-Check.aspx