

## Cambridgeshire and Peterborough Clinical Commissioning Group



Data supplement: Cardiovascular disease in Cambridgeshire and Peterborough CCG July 2015

## Introduction

This is one in a series of Data Supplements providing intelligence to inform future health and social care planning for the population registered with Cambridgeshire and Peterborough Clinical Commissioning Group (C&P CCG) GP practices produced in support of *Cambridgeshire JSNA: Long Term Conditions Across the Lifecourse (2015*).

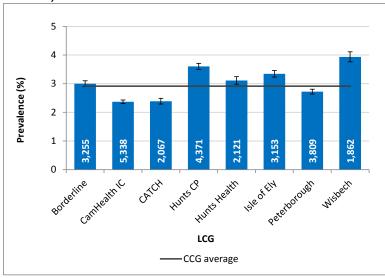
## **Background**

Cardiovascular disease (CVD) is an overarching term that describes a family of diseases sharing a common set of risk factors resulting from atherosclerosis (furring or stiffening of the walls of arteries), particularly coronary heart disease, stroke and peripheral arterial disease. It also covers other conditions such as vascular dementia, chronic kidney disease, cardiac arrhythmia (irregular heartbeat), sudden cardiac death and heart failure, because they share common risk factors or have a significant impact on CVD mortality or morbidity.<sup>1</sup>

## What is the prevalence and who is at risk?

In 2011 in England in, 13.9% of men and 13.4% of women reported a diagnosis of a cardiovascular condition. The prevalence of any CVD condition increases with age, rising from 3.3% of men and 4.8% of women aged 16 to 24 to 53.8% and 31.1% respectively aged 85 and over. The increase with age is much steeper in men than in women.  $^2$ 

## Coronary Heart Disease

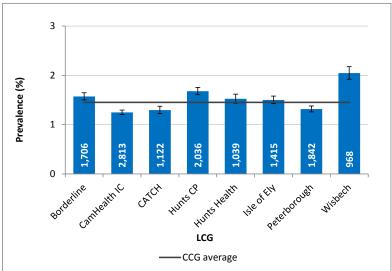


Number on the register stated at the base of each bar Error bars represent 95% confidence intervals Source: Quality and Outcomes Framework (QOF) 2013/14 Around 26,000 people are recorded on disease registers for coronary heart disease (CHD) in general practices across Cambridgeshire and Peterborough CCG.

The prevalence of CHD is lower in C&P CCG as a whole compared with the England average (2.9% vs 3.3%). However, prevalence is higher than the CCG and national averages in Hunts Care Partners LCG and Wisbech LCG and higher than the CCG average in Isle of Ely LCG. In CATCH, CamHealth and Peterborough LCGs, prevalence is significantly lower than the CCG and national averages.

It is important to note, however, that these prevalence data are not agestandardised and so areas with a higher proportion of older people will be expected to have higher prevalence of CHD.

# Stroke



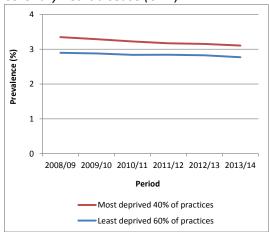
Number on the register stated at the base of each bar Error bars represent 95% confidence intervals Source: Quality and Outcomes Framework (QOF) 2013/14 Around 13,000 people are recorded on disease registers for stroke/transient ischaemic attack (TIA) in general practices across Cambridgeshire and Peterborough CCG.

The prevalence of stroke is lower in C&P CCG as a whole compared with the England average (1.5% vs 1.7%). However, in Wisbech LCG, prevalence is higher than both the CCG and the national average and in Borderline and Hunts Care Partners LCG, prevalence is higher than the CCG average. In CamHealth, CATCH and Peterborough LCGs, prevalence is lower than the CCG and national averages.

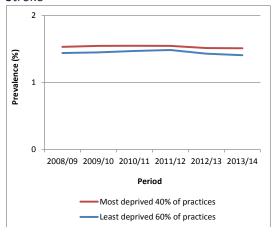
It is important to note, however, that these prevalence data are not age-standardised and so areas with a higher proportion of older people will be expected to have higher prevalence of stroke/TIA.

The prevalence of CVD conditions is higher in the most deprived neighbourhoods and lower in the least deprived areas.

## Coronary heart disease (CHD)



Stroke



Source: Quality & Outcomes Framework (QOF) 2013/14

The prevalence of CHD has fallen slightly across the CCG since 2008/09. However, rates remain higher in the most deprived 40% of GP practices in the CCG compared with the least deprived 60%.

The prevalence of CHD is 12% higher in the most deprived 40% of GP practices in the CCG compared with elsewhere.

45% of people on CHD registers in the CCG are registered with the most deprived 40% of practices.

The prevalence of stroke/TIA has remained relatively stable across the CCG since 2008/09. Rates are slightly higher in the most deprived 40% of GP practices in the CCG compared with the least deprived 60%.

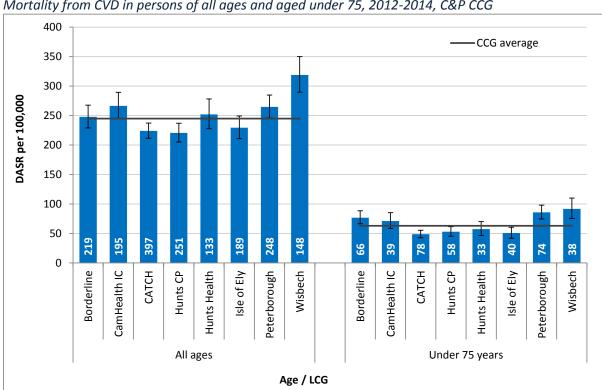
The prevalence of stroke is 7% higher in the most deprived 40% of GP practices in the CCG compared with elsewhere.

44% of people on stroke/TIA registers in the CCG are registered with the most deprived 40% of practices.

In addition to CHD and stroke, general practices also maintain registers of people with other CVD conditions. Around 114,000 people are recorded as having hypertension, 12.8% of the population. This is slightly lower than the England average of 13.7%. Around 13,000 people are recorded as having atrial fibrillation (an irregular heartbeat), 1.5% of the population, the same as the national average. Around 5,500 people are recorded as having a history of heart failure, 0.6%, lower than the national average. Just over 5,000 people are recorded with peripheral artery disease (PAD), 0.6%, lower than the national average.

## How many deaths are related to CVD?

Around 1,800 deaths occur due to cardiovascular disease in Cambridgeshire and Peterborough CCG each year, 51% in females and 24% in people aged less than 75 years. All age mortality is significantly higher than the CCG average in Wisbech LCG. Under 75 mortality is significantly higher than the CCG average in Peterborough and Wisbech LCGs.

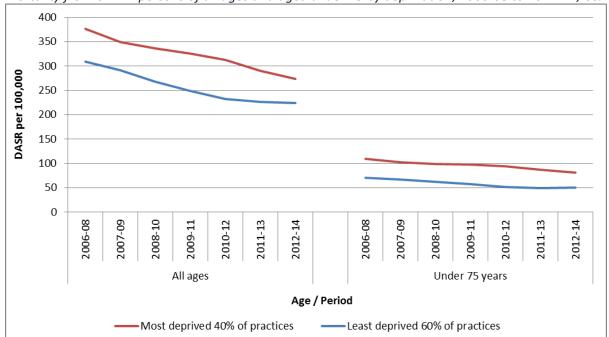


Mortality from CVD in persons of all ages and aged under 75, 2012-2014, C&P CCG

Average number of deaths per year stated at the base of each bar. Error bars represent 95% confidence intervals. DASR - directly age-standardised rate. CVD defined by ICD10: I00-I99.

Sources: Health and Social Care Information Centre Primary Care Mortality Database and Office for National Statistics mid-year population estimates

There is a social gradient in CVD mortality, with more deprived areas experiencing higher death rates than less deprived areas. Rates of cardiovascular disease mortality have fallen in people of all ages, and in those aged under 75 years. However, rates remain higher in the most deprived 40% of practices in the CCG compared with the remaining 60%. Rates of premature mortality (in under 75s) are 62% higher in the most deprived 40% of practices compared with elsewhere. 52% of under 75 deaths occur in people registered with the 40% most deprived practices.



Mortality from CVD in persons of all ages and aged under 75 by deprivation, 2006-08 to 2012-14, C&P CCG

Sources: Health and Social Care Information Centre Primary Care Mortality Database and Office for National Statistics mid-year population estimates. CVD defined by ICD10: I00-I99

#### Cause of death

45% of cardiovascular deaths in Cambridgeshire (2012-14) are due to coronary heart disease and 24% due to stroke. Other major causes are aortic aneurysm, atrial fibrillation, and heart failure and hypertensive diseases.

## Hospital admissions and episodes of care

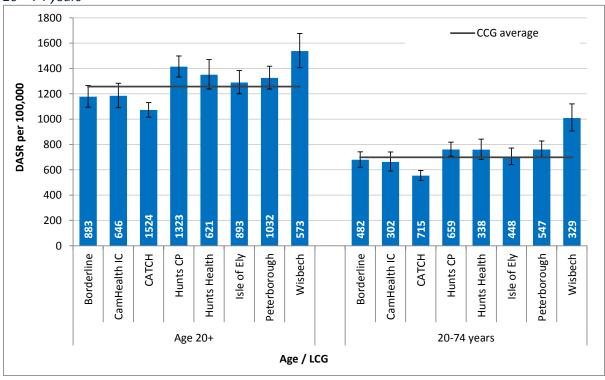
All people registered with C&P CCG GP Practices, 2013/14, aged 20 and above

- In 2013/14, 12,800 hospital episodes occurred due to cardiovascular disease in Cambridgeshire and Peterborough CCG in people aged 20 and above. In 2013/14 this resulted in over 60,900 bed days and a cost of £34 m.
- Emergency admissions account for 59% of total hospital episodes and 65% of total cost. Day
  cases account for 27% of episodes and 13% of the cost. Elective (planned) admissions
  account for 14% of admissions and 22% of the cost. Elective episodes include diagnostic
  procedures and operations, such as coronary artery revascularisation, heart valves and
  cardiac pacemakers.
- Around 7,500 emergency admissions occur due to cardiovascular disease in Cambridgeshire & Peterborough CCG each year. In 2013/14 this resulted in 54,900 emergency bed days and a total cost of £22m.
- 45% of emergency admissions were due to CHD and 24% due to stroke, with a further 14% due to other heart disease.
- 51% of emergency admissions occur in people aged under 75.

- In the under 75s, males account for 64% of emergency admissions whereas for all ages, 55% are male.
- 78% of emergency admissions are via A&E and a further 6% from GP or Consultant outpatient clinics.
- Whilst 80% of people who had been discharged returned to their 'usual place of residence', 3% were recorded as having been discharged into nursing or residential care and 9% to another hospital. This is likely to be an under-estimate of discharge into care homes due to coding issues in the data including when a care home is considered usual place of residence.

At all ages, the age-standardised emergency admission rate is significantly higher than the CCG average in Wisbech and Hunts Care Partners LCGs. In people aged under 75, the emergency admission rate is significantly higher than the CCG average in Wisbech LCG. In both age groups, CATCH has a significantly lower emergency admission rate than the CCG average.

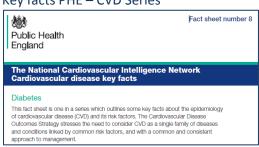
Emergency hospital admissions for cardiovascular disease, C&P CCG, 2013-14, people aged 20+ and 20-74 years



Number of emergency admissions per year stated at the base of each bar. Admissions to All Hospital Trusts. Error bars represent 95% confidence intervals. DASR - directly age-standardised rate. CVD conditions defined by primary diagnosis of ICD10: I00-I99. Sources: Inpatient Commissioning Dataset. FHS Registration System (Exeter) registered population.

#### **Further Resources**

## Key facts PHE - CVD Series

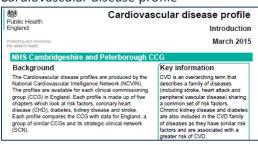


## http://www.yhpho.org.uk/default.aspx?RID=185796

Key Facts series produced by Public Health England (PHE) with headline epidemiological and comparator data.

Each factsheet summarises information about a cardiovascular disease (CVD) risk factor or disease area.

#### Cardiovascular disease profile



## http://www.yhpho.org.uk/default.aspx?RID=203617

Profiles for each clinical commissioning group (CCG) summarising data about cardiovascular prevalence, care processes and treatment targets, variation and complications.

## Cardiovascular disease outcomes strategy



https://www.gov.uk/government/publications/improving-cardiovascular-disease-outcomes-strategy

Provides advice to local authority and NHS commissioners and providers about actions to improve cardiovascular disease outcomes.

In addition, the PHE Knowledge and Information Gateway <a href="http://datagateway.phe.org.uk/">http://datagateway.phe.org.uk/</a> contains many more links on Cardiovascular Disease and other Long Term Conditions.

## Acknowledgement of source material

This supplement uses information from Public Health England (PHE), the Health and Social Care Information Centre (HSCIC) and other publications shown above. More detailed information is available from each of the Key Resources described above.

## Where to find the data

Cambridgeshire JSNA Cambridgeshire Insight and Atlases Peterborough JSNA http://www.cambridgeshireinsight.org.uk/jsna www.cambridgeshireinsight.org.uk/ www.peterborough.gov.uk/health and social care/joint strategic needs assesmen.aspx

## References

<sup>&</sup>lt;sup>1</sup> Department of Health. Cardiovascular disease outcomes strategy, 2013. Available from: https://www.gov.uk/government/publications/improving-cardiovascular-disease-outcomes-strategy

<sup>&</sup>lt;sup>2</sup> Oyebode O. Cardiovascular disease. In: Craig R, Mindell, J, editors. Health survey for England 2011: volume 1: health, social care and lifestyles. Available from: http://www.hscic.gov.uk/catalogue/PUB09300