



Data supplement: Cardiovascular disease in Cambridgeshire

July 2015

Introduction

This is one in a series of Data Supplements providing intelligence to inform future health and social care planning for the resident population of Cambridgeshire produced in support of *Cambridgeshire JSNA: Long Term Conditions Across the Lifecourse (2015*).

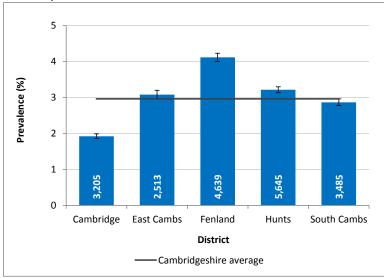
Background

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.¹

What is the prevalence and who is at risk?

In 2011 in England, 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

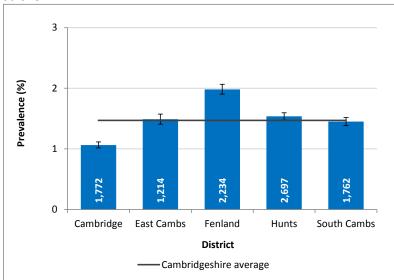
Coronary Heart Disease



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 19,500 people are recorded on disease registers for coronary heart disease (CHD) in general practices across Cambridgeshire. The prevalence of CHD is lower in Cambridgeshire as a whole compared with the England average (3.0% vs. 3.3%). However, prevalence is higher than both the county and national averages in Fenland and higher than the county average in Huntingdonshire. In Cambridge City, prevalence is significantly lower than the county 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 a higher prevalence of CHD.

Stroke



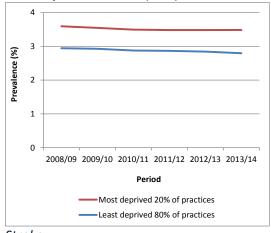
Number on the register stated at the base of each bar Error bars represent 95% confidence intervals Source: Quality and Outcomes Framework (QOF) 2013/14 Around 9,700 people are recorded on disease registers for stroke/transient ischaemic attack (TIA) in general practices across Cambridgeshire.

The prevalence of stroke is lower in Cambridgeshire as a whole compared with the England average (1.5% vs 1.7%). However, in Fenland, prevalence is higher than both the county and the national average. In Cambridge City, prevalence is significantly lower than the county 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 a 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)

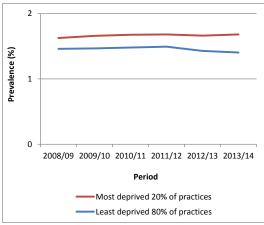


The prevalence of CHD has fallen slightly across Cambridgeshire since 2008/09. However, rates remain higher in the most deprived 20% of GP practices in the county compared with the least deprived 80%.

The prevalence of CHD is 25% higher in the most deprived 20% of GP practices compared with elsewhere in Cambridgeshire.

29% of people on CHD registers in the county are registered with the most deprived 20% of practices.

Stroke



The prevalence of stroke/TIA has remained relatively stable across the county since 2008/09. Rates are higher in the most deprived 20% of GP practices in the county compared with the least deprived 80%.

The prevalence of stroke is 20% higher in the most deprived 20% of GP practices in Cambridgeshire compared with elsewhere and the gap between the two has widened slightly.

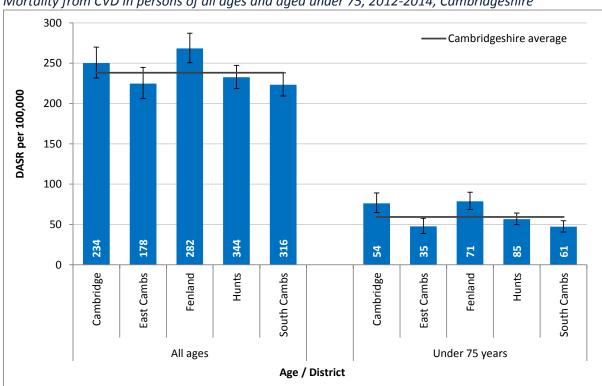
28% of people on stroke/TIA registers in the county are registered with the most deprived 20% of practices.

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

In addition to CHD and stroke, general practices also maintain registers of people with other CVD conditions. Around 85,000 people are recorded as having hypertension, 12.9% of the population. This is slightly lower than the England average of 13.7%. Around 10,500 people are recorded as having atrial fibrillation (an irregular heartbeat), 1.6% of the population, the same as the national average. Just over 4,000 people are recorded as having a history of heart failure, 0.6%, lower than the national average. Nearly 3,500 people are recorded with peripheral artery disease (PAD), 0.5%, lower than the national average.

How many deaths are related to CVD?

Around 1,350 deaths occur due to cardiovascular disease in Cambridgeshire each year, 23% in people aged under 75. All age and under 75 mortality is significantly higher than the county average in Fenland. Under 75 mortality is also significantly higher than the county average in Cambridge. All age and under 75 mortality is significantly lower in Cambridgeshire compared with the England average (2011-13 data).

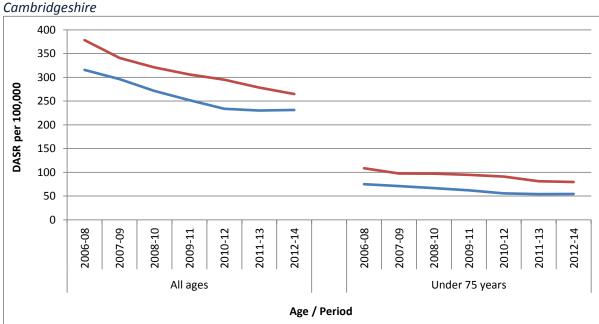


Mortality from CVD in persons of all ages and aged under 75, 2012-2014, Cambridgeshire

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 20% of wards in the county compared with the remaining 80%. Rates of premature mortality (in under 75s) are 47% higher in the most deprived 20% of wards compared with elsewhere. 27% of under 75 deaths occur in people resident in the 20% most deprived wards.



Mortality from CVD in persons of all ages and aged under 75 by deprivation, 2006-08 to 2012-2014, Cambridgeshire

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

----Least deprived 80% of wards

Cause of death

43% 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

People resident in Cambridgeshire (based on LSOA), 2013/14, aged 20 and above

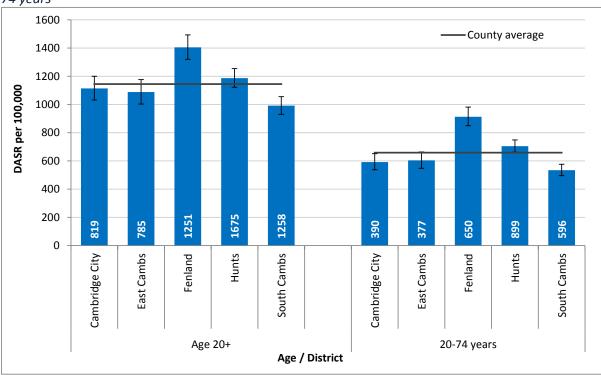
Most deprived 20% of wards

- In 2013/14, 10,000 hospital episodes occurred due to cardiovascular disease for people resident in Cambridgeshire. In 2013/14 this resulted in over 47,500 bed days and a cost of £26.7 m.
- Emergency admissions account for 58% of total and 64% of total cost. Day cases account for 28% of admissions 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 5,800 emergency admissions occur due to cardiovascular disease in Cambridgeshire residents each year. In 2013/14 this resulted in 42,700 emergency bed days and a total cost of £17.2m.
- 45% of emergency admissions were due to CHD and 24% due to stroke, with a further 14% due to other heart disease.
- 50% of emergency admissions occur in people aged under 75.

- In the under 75s, males account for 64% of emergency admissions whereas for all ages, 56% are male.
- 76% of emergency admissions are via A&E and a further 7% from GP or Consultant outpatient clinics.
- Whilst 71% 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 both all ages and in people aged under 75, the age-standardised emergency admission rate is significantly higher than the county average in Fenland.

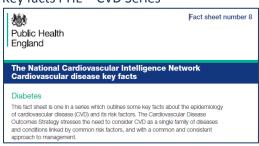
Emergency hospital admissions for cardiovascular disease, Cambridgeshire, 2013-14, people aged 20+ and 20 – 74 years



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. CCC RP&T 2012 based forecasts for resident population 2013/2014 (ave)

Further Resources

Key facts PHE - CVD Series

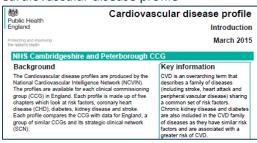


http://www.yhpho.org.uk/default.aspx?RID=185796

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. Local Authority profile at: http://www.sepho.org.uk/NationalCVD/docs/12_CVD%20 Profile.pdf

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 http://datagateway.phe.org.uk/ 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

http://www.cambridgeshireinsight.org.uk/jsna www.cambridgeshireinsight.org.uk/

References

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

² 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