

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)*.

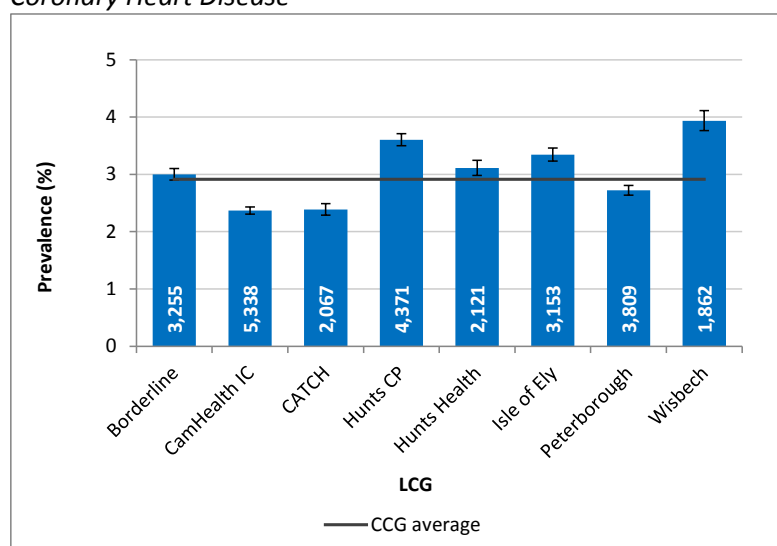
Background

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.¹

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



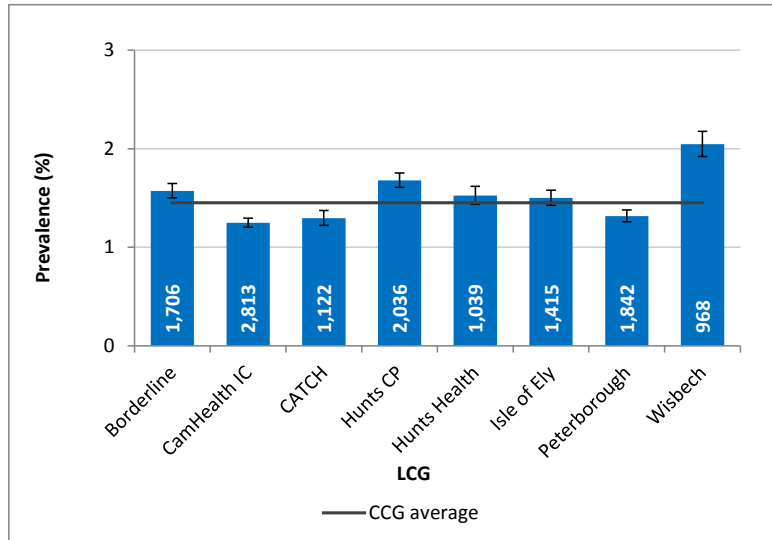
Number on the register stated at the base of each bar
Error bars represent 95% confidence intervals
Source: Quality and Outcomes Framework (QOF) 2013/14

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 age-standardised 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

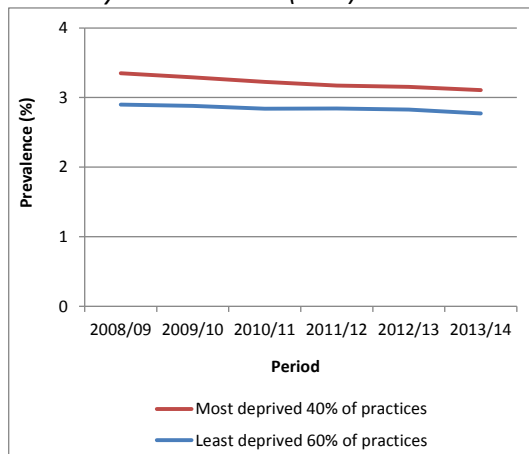
Around 13,000 people are recorded on disease registers for stroke/transient ischaemic attack (TIA) in general practices across Cambridgeshire and Peterborough CCG.

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)

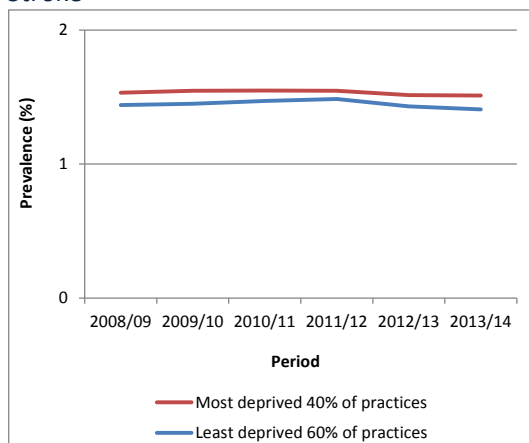


The prevalence of CHD has fallen slightly across the CCG since 2008/09. However, rates remain higher in the most deprived 40% of GP practices in the CCG compared with the least deprived 60%.

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.

Stroke



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.

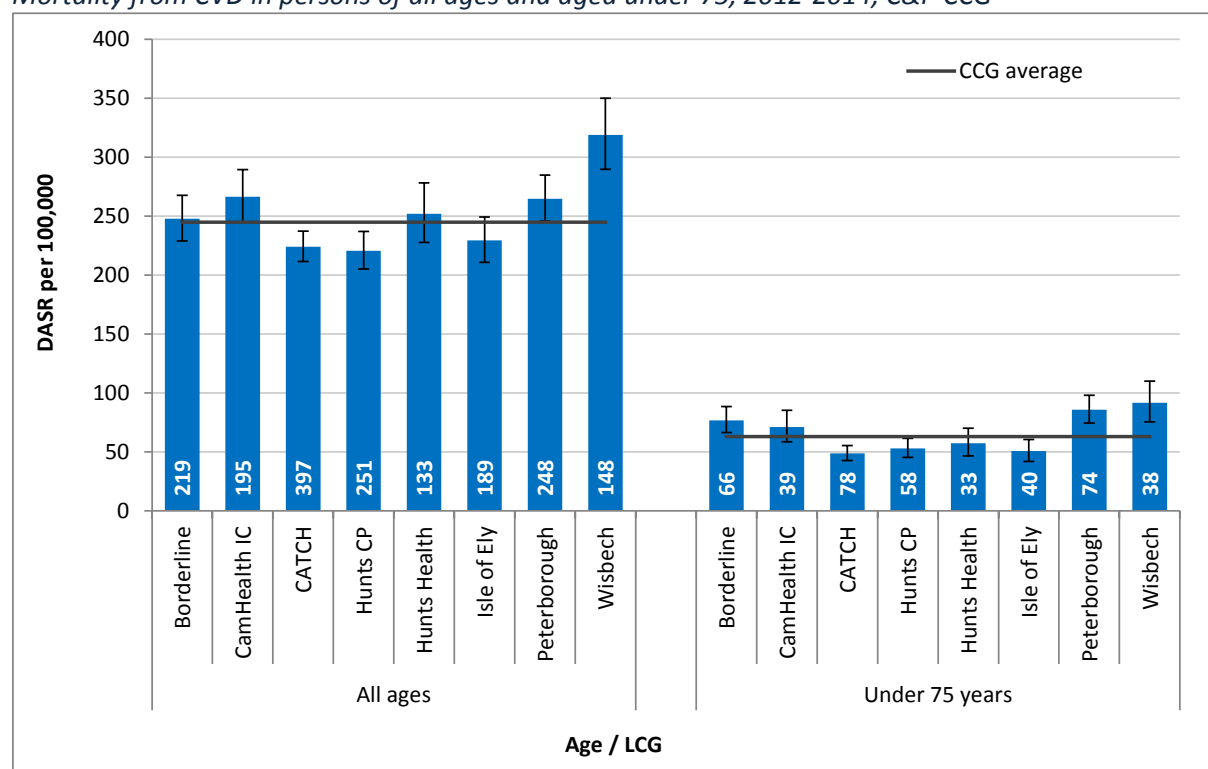
Source: Quality & Outcomes Framework (QOF) 2013/14

In addition to CHD and stroke, general practices also maintain registers of people with other CVD conditions. Around 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

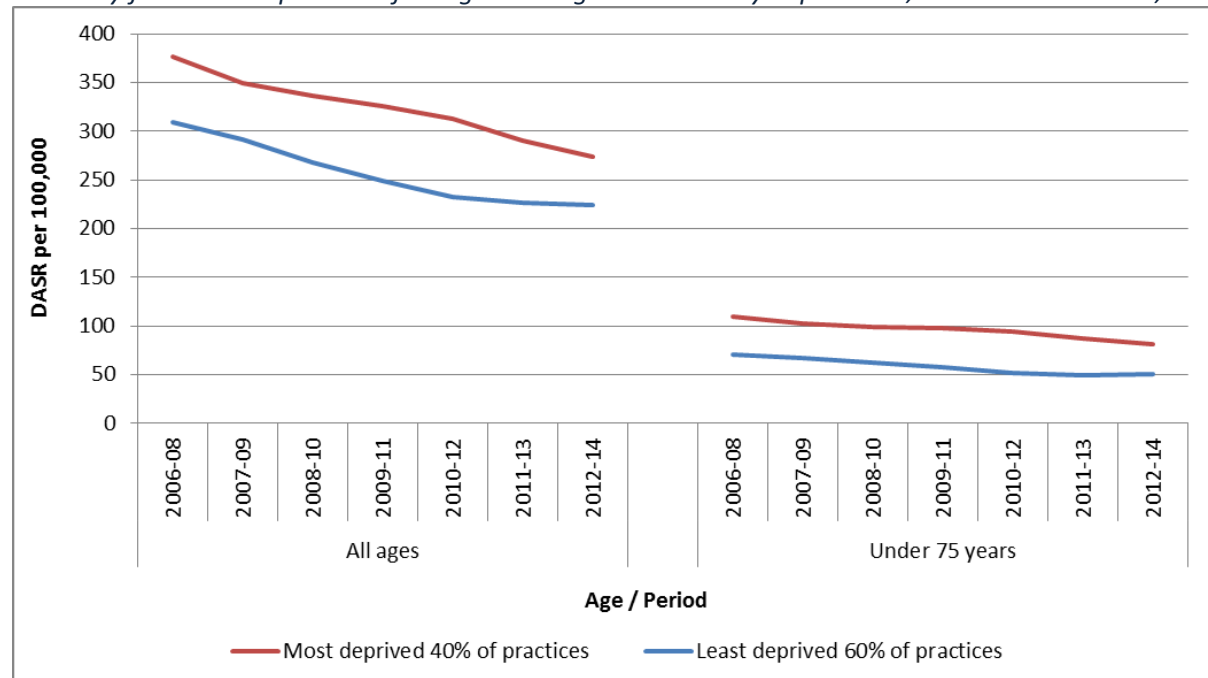


Average number of deaths per year stated at the base of each bar. Error bars represent 95% confidence intervals. DASR - directly age-standardised rate. CVD defined by ICD10: I00-I99.

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

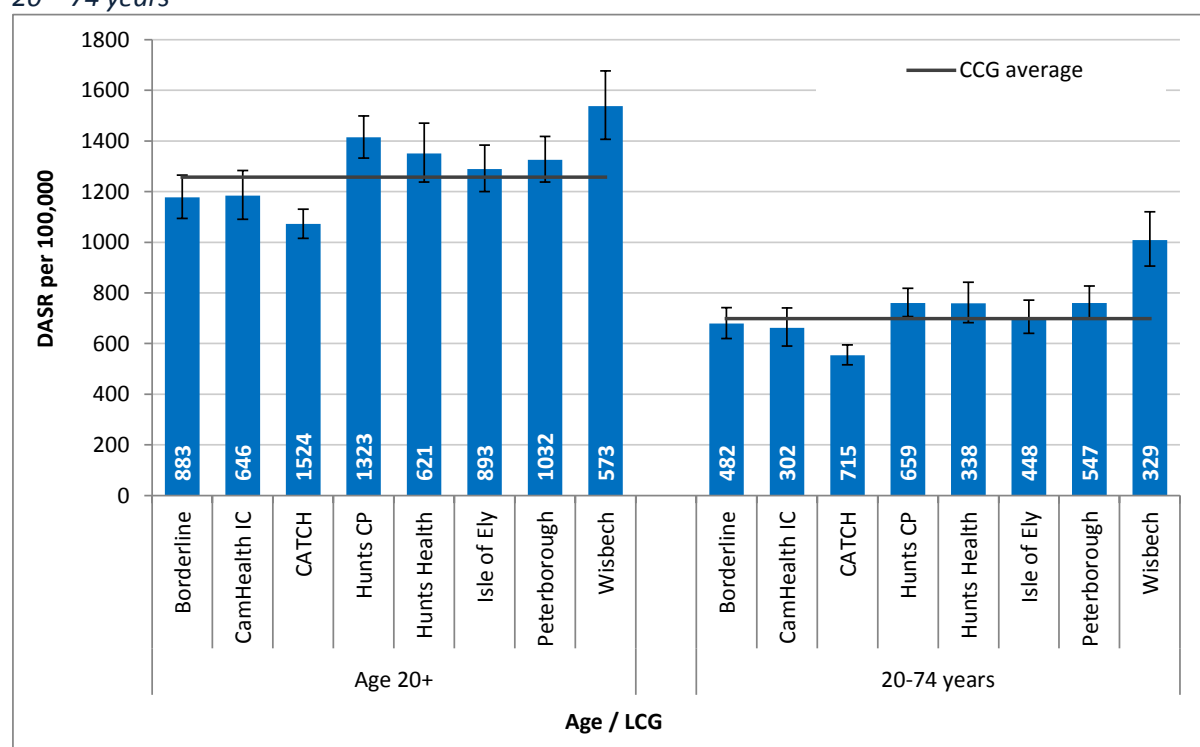
All people registered with C&P CCG GP Practices, 2013/14, aged 20 and above

- 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.

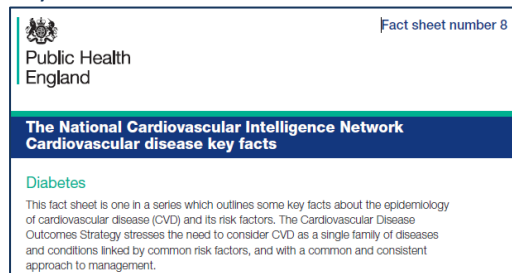
Emergency hospital admissions for cardiovascular disease, C&P CCG, 2013-14, people aged 20+ and 20 – 74 years



Number of emergency admissions per year stated at the base of each bar. Admissions to All Hospital Trusts. Error bars represent 95% confidence intervals. DSR - 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

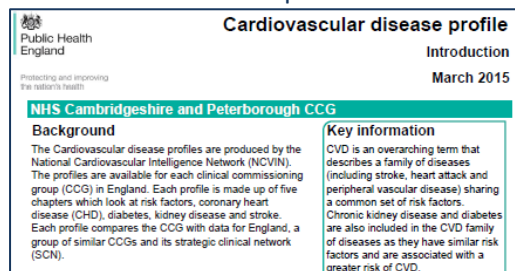


[http:// www.yhpho.org.uk/default.aspx?RID=185796](http://www.yhpho.org.uk/default.aspx?RID=185796)

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.

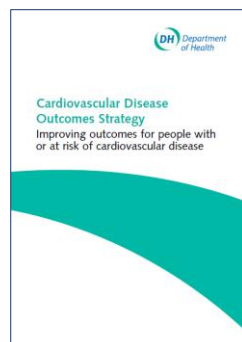
Cardiovascular disease profile



<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 <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
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

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>

Data supplement: Chronic Kidney 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

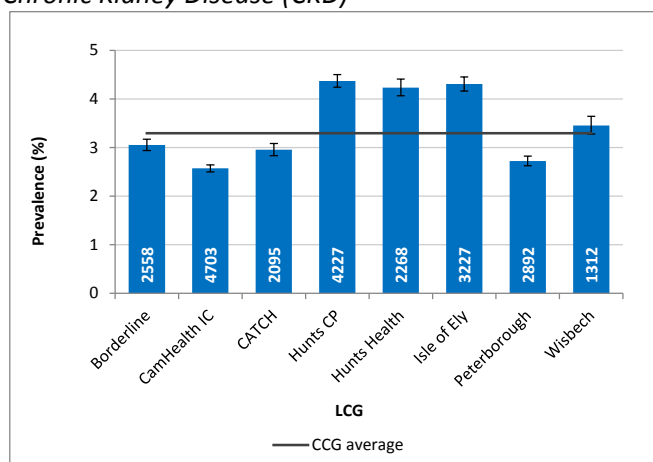
There is a wide spectrum of kidney disease, which can be rapid onset (acute) or longer term (chronic). Chronic Kidney Disease (CKD) is closely related to cardiovascular disease (CVD) and the two pathologies often co-exist.¹ CKD describes abnormal kidney function and/or structure. It is divided into five stages according to severity. Stages 3 to 5 are classified as moderate to severe CKD and stage 5 may require renal replacement therapy (RRT). It is common, frequently unrecognised and often exists together with other cardiometabolic conditions.²

What is the prevalence and who is at risk?

The estimated prevalence of CKD stages 3 to 5 varies by age and gender (based on patients with CKD amongst those tested for kidney function in the Health Survey for England, 2011). In the 16 to 24 age group the prevalence is less than 1%; this increases to more than 29% in males and 35% in females for the 75 and over age group. The prevalence of CKD is higher in women compared to men in most population based studies. The overall prevalence of CKD stages 3 to 5 in people aged 16 and over was 7% in women and 6% in men.³

There are known coding issues with CKD prevalence noted in QOF for 2013/14. Within the national dataset, a coding issue led to under-reporting of this condition at the extraction stage. This will not be corrected in QOF until the 2014-15 data are extracted. These data are provided for reference only and we would recommend against using these figures in any other publication without this disclaimer or basing any decisions on these figures.

Chronic Kidney Disease (CKD)



Number on the register stated at the base of each bar
Error bars represent 95% confidence intervals
Source: Quality & Outcomes Framework (QOF) 2013/14

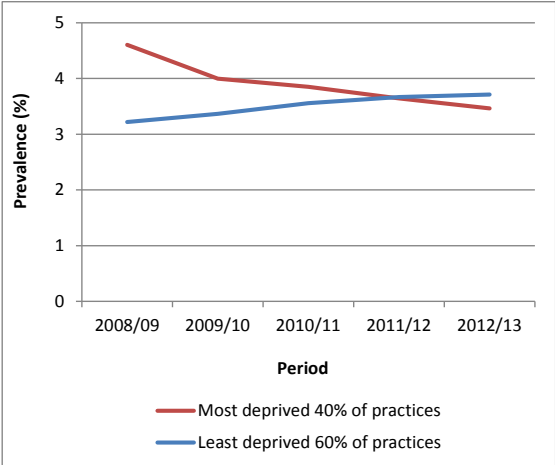
Based on 2013/14 QOF data, around 23,300 people are recorded on disease registers for CKD in practices across C&P CCG. The figure in 2012/13 QOF was 24,792.

The prevalence of CKD is lower in C&P CCG as a whole compared with the England average (3.3% vs 4.0%). However, in Hunts Care Partners, Hunts Health and Isle of Ely LCGs prevalence is higher than the CCG and national averages. In Borderline, Peterborough, CamHealth and CATCH, 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 a higher prevalence of CKD.

National sources state that there is a higher incidence and prevalence of CKD in more deprived populations in developed countries.⁴ However, in the local QOF data presented below, a reverse pattern is observed. CKD is known to be under-diagnosed and modelled estimates for CKD suggest prevalence to be 5.9% in the CCG.⁵ It is possible that there is more under-diagnosis in the most deprived areas. There is no suggestion from national sources that there is a true fall in prevalence of CKD.

Chronic kidney disease (CKD)



The prevalence of recorded CKD has increased slightly since 2008/09 in the least deprived 60% of practices in the CCG but has fallen in the most deprived 40%. Data shown to 2012/13 due to the QOF coding issue referred to in the previous section.

The prevalence of CKD is now lower in the most deprived 40% of practices compared with elsewhere. The prevalence of CKD is 7% higher in the least deprived 60% of practices in the CCG compared with elsewhere.

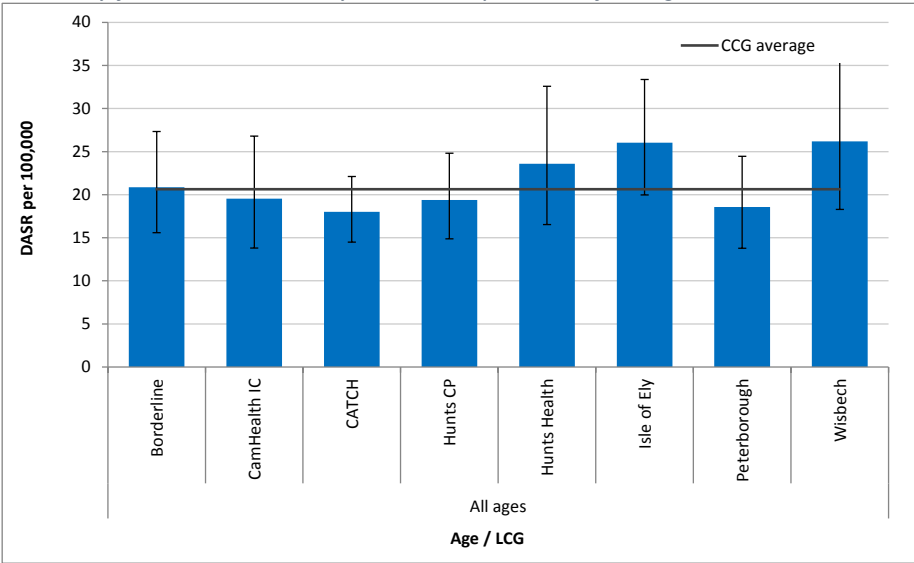
Source: Quality & Outcomes Framework (QOF) 2013/14

How many deaths are related to chronic kidney disease?

Routine mortality statistics of death related to chronic kidney disease are an under-estimate of the total number of deaths as it is not routinely recorded as the underlying cause of death, rather as a contributing factor. People with CKD are roughly 20 times more likely to die of CVD than to progress to end stage renal disease (ESRD).⁶

Between 2011 and 2013 there were 435 deaths (an average of around 145 deaths annually) in C&P CCG where either the underlying (primary) cause or a contributory cause of death was CKD (ICD10: N18). 18% of deaths occur in people aged under 75 and 47% of CKD deaths are in women. Comparable figures for England are not currently available. Mortality rates are similar to the CCG average across all LCGs.

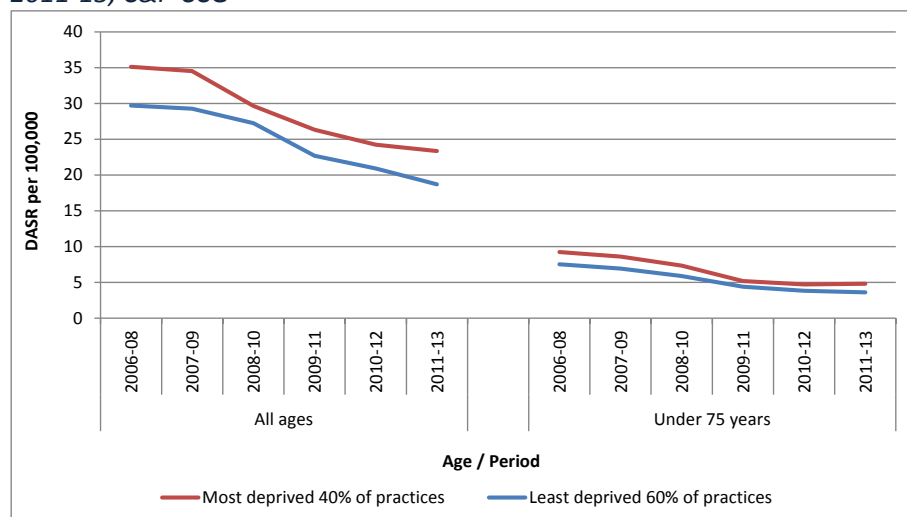
Mortality from chronic kidney disease in persons of all ages, 2011-2013, C&P CCG



Error bars represent 95% confidence intervals. DASH - directly age-standardised rate. CKD defined by ICD10: N18.

Rates of CKD mortality in people of all ages and people aged under 75 have fallen in both the most deprived 40% of practices and the least deprived 60%. Rates remain higher in the most deprived 40%, compared with the least deprived 60%.

Mortality from chronic kidney disease in persons of all ages and aged under 75 by deprivation, 2006-08 to 2011-13, C&P CCG



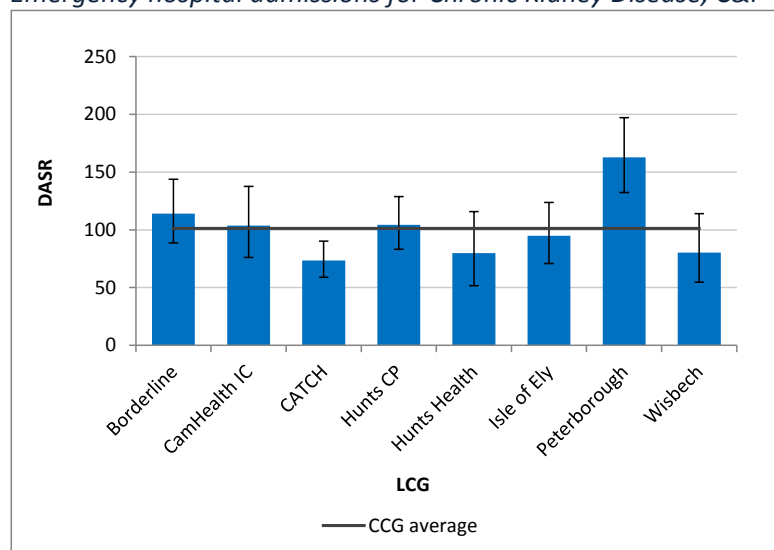
Sources: Health and Social Care Information Centre Primary Care Mortality Database and Office for National Statistics mid-year population estimates. CKD defined by ICD10: N18.

Hospital admissions and episodes of care

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

In 2013/14, there were nearly 600 emergency admissions where CKD was recorded as the primary or subsidiary diagnosis. These admissions resulted in 4,300 emergency bed days and a total cost of £1.5m. In Peterborough LCG, the age-standardised emergency admission rate for CKD is significantly higher than the CCG average. In CATCH LCG, rates are significantly lower than the CCG average. There may be differences in coding of CKD between hospital Trusts.

Emergency hospital admissions for Chronic Kidney Disease, C&P CCG, 2013-14, all ages (20+)

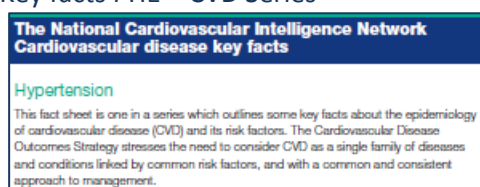


Admissions to All Hospital Trusts. Error bars represent 95% confidence intervals. DASR - directly age-standardised rate. CKD defined by primary or subsidiary diagnosis of ICD10: N18. Sources: Inpatient Commissioning Dataset. FHS Registration System (Exeter) registered population.

- Coding in hospital episode data at discharge records the primary diagnosis (the underlying reason for the admission), a subsidiary diagnosis and up to 12 other contributory causes/diagnoses. Coding is known to be variable between hospital trusts.
- In 2013/14, a diagnosis of chronic kidney disease (ICD10: N18) was recorded in any diagnostic code in over 4,300 emergency admissions which resulted in over 41,000 emergency bed days and a total cost of £12.6m.
- 72% of these emergency admissions were in people aged 75 and over and 51% were in men.
- In emergency admissions where chronic kidney disease was recorded as a diagnosis, 17% had a primary diagnosis of cardiovascular disease (CVD), primarily coronary heart disease, other forms of heart disease and stroke.

Further Resources

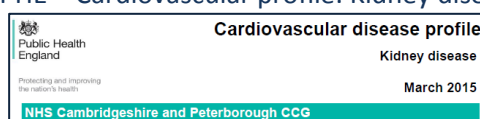
Key facts PHE – CVD Series



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

PHE – Cardiovascular profile: Kidney disease



<http://www.yhpho.org.uk/ncvincvd/default.aspx>

The profile compares the CCG with data for England, a group of similar CCGs and the strategic clinical network (SCN). Information on risk factors, care process and treatment indicators are included.

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

- ¹ NICE. Clinical Guideline 73: chronic kidney disease: early identification and management of chronic kidney disease in adults in primary and secondary care, 2008. Available at: <http://www.nice.org.uk/Guidance/CG73>
- ² NICE. Quality standard 5: chronic kidney disease, 2011. Available at: <http://guidance.nice.org.uk/QS5>
- ³ Roth M, Roderick P, Mindell J. Health Survey for England 10: respiratory health: chapter 8: kidney disease and renal function, 2011, Available at: <http://www.hscic.gov.uk/catalogue/PUB03023> Page 23
- ⁴ Public Health England. Chronic Kidney Disease. Fact sheet No 9. See Further Resources.
- ⁵ Public Health England. Cardiovascular profile: kidney disease. See Further Resources.

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)*.

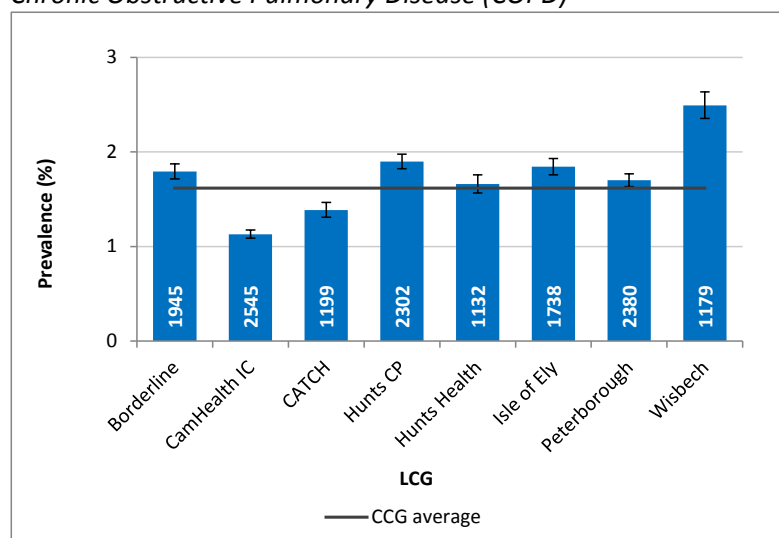
Background

Chronic obstructive pulmonary disease (COPD) describes lung damage that is gradual in onset and results in progressive airflow limitation. The principal cause of COPD is smoking. Other factors include workplace exposure (eg dusts, gas/fumes or chemicals), genetic make-up and general environmental pollution. COPD is a progressive illness, and the likelihood of people dying as a result of COPD increases with age. It is not curable, but it is treatable. Its progress can be halted and can be managed to minimise its burden.¹

What is the prevalence and who is at risk?

Current and ex-smokers are most at risk of contracting COPD. The picture is even worse for smokers from the most disadvantaged sectors of society, where in some cases (eg for people with schizophrenia) smoking prevalence can reach 74%. External factors such as air pollution can also exacerbate conditions. 40% of people with lung disease are below retirement age (1.4 million based on 3.5 million cases nationally) and a quarter of those below retirement age are unable to work at all (400,000 people nationally).²

Chronic Obstructive Pulmonary Disease (COPD)



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

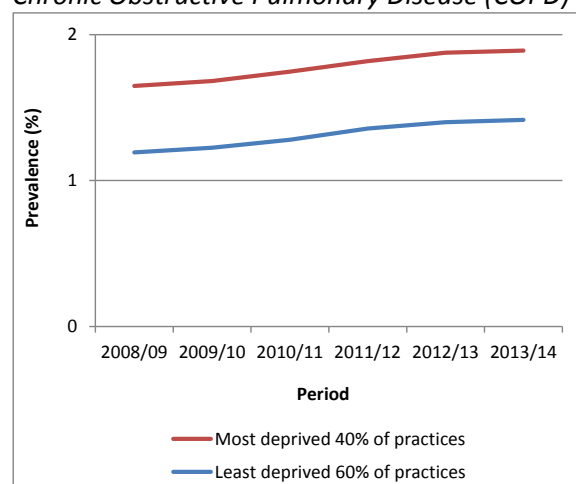
Around 14,400 people are recorded on disease registers for chronic obstructive pulmonary disease (COPD) in general practices across Cambridgeshire and Peterborough CCG.

The prevalence of COPD is lower in C&P CCG as a whole compared with the England average (1.6 % vs 1.8%). However, in Wisbech LCG prevalence is higher than the CCG and national averages, and in Borderline and Hunts, prevalence is higher than the CCG average. In CamHealth and CATCH LCGs prevalence is significantly 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 COPD.

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

Chronic Obstructive Pulmonary Disease (COPD)



The prevalence of recorded COPD has increased across the CCG since 2008/09. Rates are consistently higher in the most deprived 40% of practices in the CCG compared with the least deprived 60%.

The prevalence of COPD is 34% higher in the most deprived 40% of practices in the CCG compared with elsewhere.

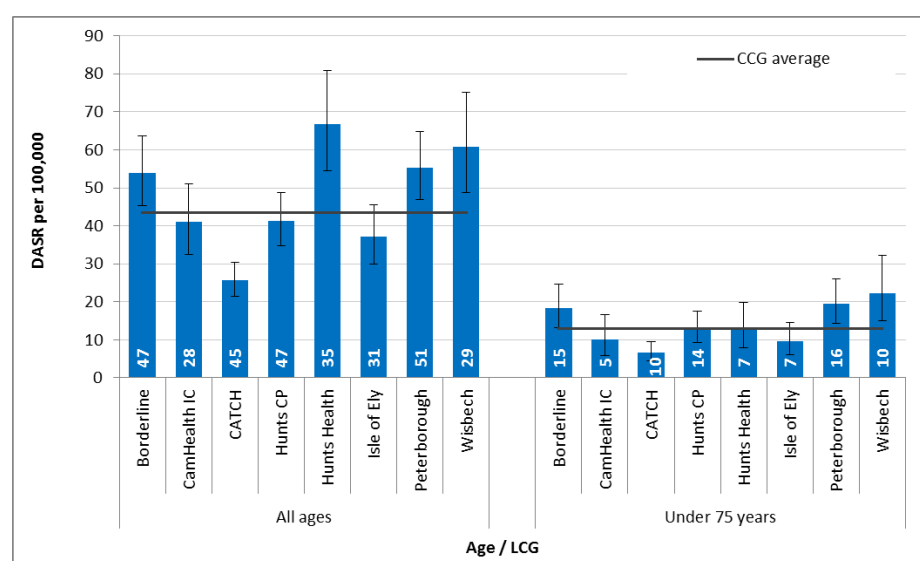
50% of people on COPD registers in the CCG are registered with the most deprived 40% of practices.

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

How many deaths are related to COPD?

Around 310 deaths occur due to chronic obstructive pulmonary disease in Cambridgeshire and Peterborough CCG each year. 57% of COPD deaths in the CCG are in men and 27% occur in people aged less than 75 years. All age mortality is significantly higher than the CCG average in Hunts Health, Peterborough and Wisbech LCGs. Under 75 mortality is significantly higher than the CCG average in Wisbech LCG. The mortality rate is significantly lower than the CCG average in CATCH LCG for both all age and under 75 mortality. Note that the number of deaths annually is relatively small and the confidence intervals are wide.

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

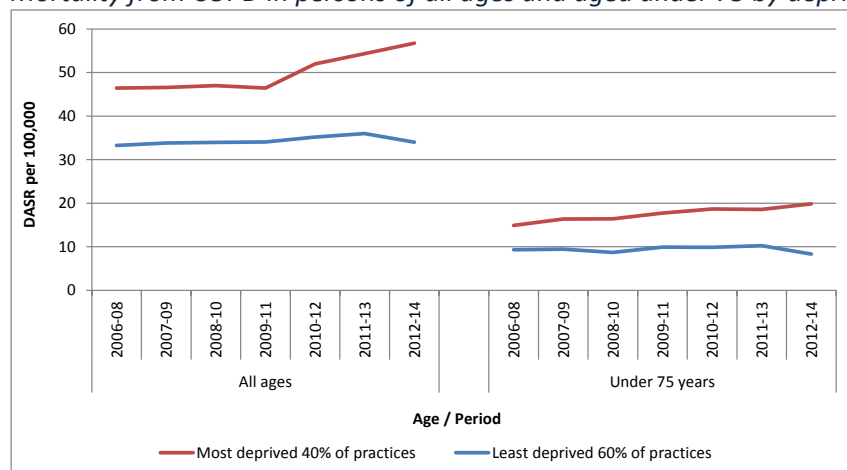


Average number of deaths per year stated at the base of each bar. Error bars represent 95% confidence intervals. DASR - directly age-standardised rate. COPD defined by ICD10 : J40-J44.

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 COPD mortality, with more deprived areas experiencing higher death rates than less deprived areas. Rates remain higher and have increased in the most deprived 40% of practices in the CCG compared with the remaining 60%, in both all ages and in those aged under 75 years. Rates of premature mortality (in people aged under 75) are 2.4 times higher in the most deprived 40% of practices compared with elsewhere and the gap is increasing. 62% of deaths in people aged under 75 occur in people registered with the 40% most deprived practices.

Mortality from COPD 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. COPD defined by ICD10: J40-J44

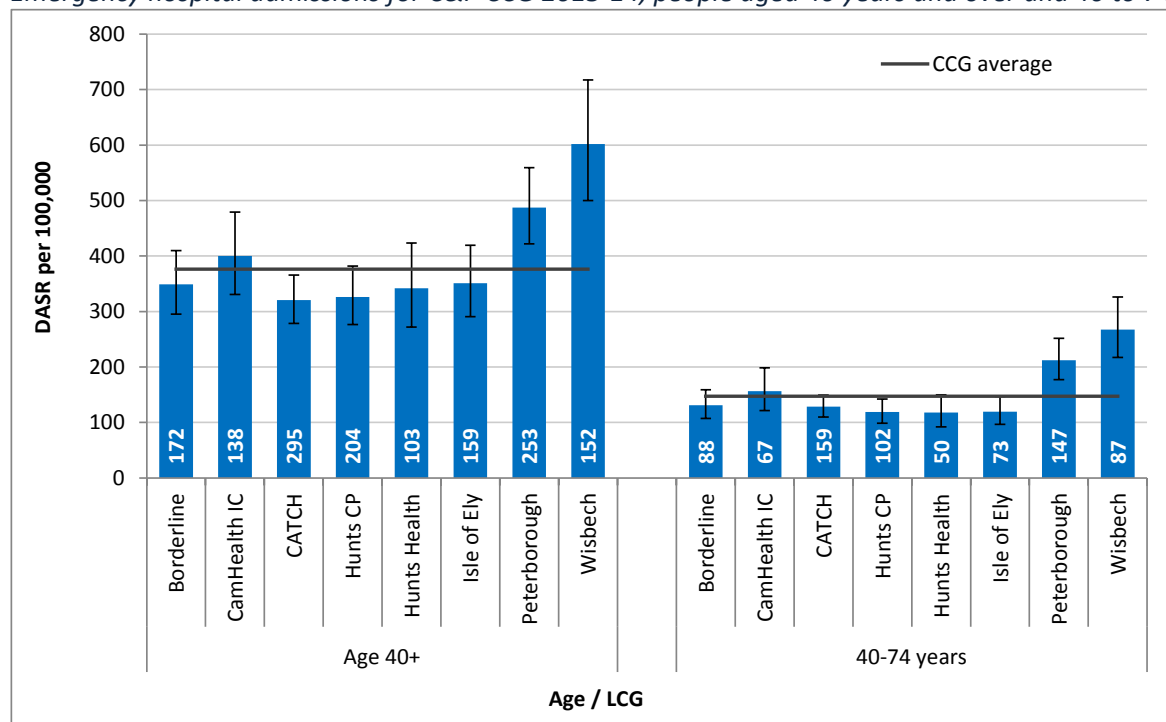
Hospital admissions and episodes of care

All people registered with C&P CCG GP Practices, 2013/14, aged 40 and above.

- In 2013/14, of the 1,660 hospital episodes in the CCG where COPD was the primary diagnosis (ie the main reason for the hospital episode) 1,480 (89%) were emergency admissions.
- Emergency admissions with COPD as primary diagnosis resulted in 9,150 bed days and a cost of £3.6m.
- 52% of emergency admissions occur in people aged under 75, 52% of whom are male.

In Wisbech and Peterborough LCGs, the age-standardised emergency admission rate is significantly higher than the CCG average in people of all ages (40+) and in people aged 40 to 74 years.

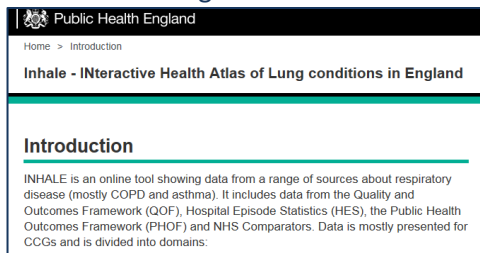
Emergency hospital admissions for C&P CCG 2013-14, people aged 40 years and over and 40 to 74 years



Number of emergency admissions per year stated at the base of each bar. Admissions to All Hospital Trusts. Error bars represent 95% confidence intervals. DASH - directly age-standardised rate. COPD defined by primary diagnosis of ICD10: J40-J44. Sources: Inpatient Commissioning Dataset. FHS Registration System (Exeter) registered population.

Further Resources

Public Health England - INHALE



<http://fingertips.phe.org.uk/profile/inhale>

INHALE – interactive Health Atlas of Lung Conditions in England

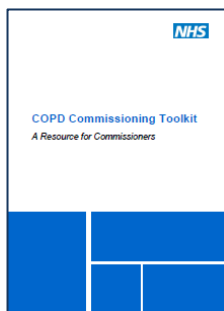
NHS Atlas of Variation in Healthcare for Respiratory Disease



<http://www.rightcare.nhs.uk/index.php/atlas/respiratorydisease/>

<http://www.sepho.org.uk/extras/maps/NHSatlasRespiratory/atlas.html>

COPD Commissioning Toolkit



https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/212876/chronic-obstructive-pulmonary-disease-COPD-commissioning-toolkit.pdf

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 local 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

¹ COPD Commissioning Toolkit (2015) See Key Resources .

² An Outcomes Strategy for Chronic Obstructive Pulmonary Disease (COPD) and Asthma in England

Department of Health, 2011. Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216139/dh_128428.pdf

Data supplement: Diabetes 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)*.

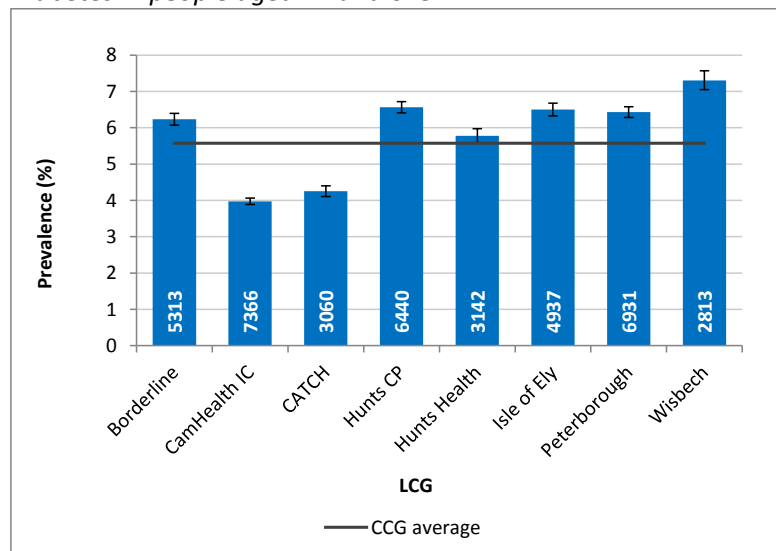
Background

Diabetes is a lifelong metabolic condition in which the body does not produce sufficient insulin to regulate blood glucose levels. The two main types of diabetes, that account for about 98% of all diagnosed patients, are Type 1^a and Type 2.^b

What is the prevalence and who is at risk?

The risk of diabetes increases with age. In 2010 the national prevalence of diabetes was 0.4% for people aged 16 to 24 years, rising to 15.1% for people aged 70 to 84 years old. The higher prevalence of diabetes among older people is due to a higher risk of developing Type 2 diabetes at older ages.¹

Diabetes in people aged 17 and over



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

Nearly 40,000 people aged 17 and over are recorded on disease registers for diabetes in general practices across Cambridgeshire and Peterborough CCG.

The prevalence of diabetes is lower in C&P CCG as a whole compared with the England average (5.6% vs 6.2%). However, in Hunts Care Partners, Wisbech, Isle of Ely and Peterborough LCGs, prevalence is higher than both the CCG and national averages. In CATCH and CamHealth LCGs, prevalence is significantly 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 diabetes.

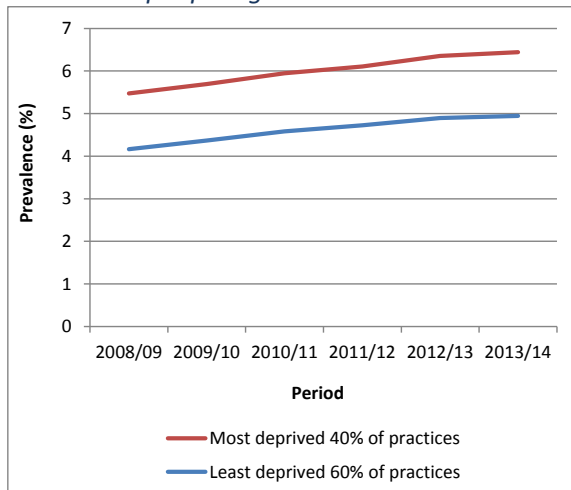
^a Type 1 diabetes is an auto-immune condition in which the cells that produce insulin are destroyed and require lifelong treatment with insulin. About 10% of people with diagnosed diabetes have Type 1 diabetes.

^b Type 2 diabetes occurs when the body stops producing enough insulin for its needs and is usually accompanied by resistance to the effect of insulin. The condition is progressive requiring lifestyle management (diet and exercise) at all stages, and possibly medication or insulin.

The number of adults who have been diagnosed with diabetes in C&P CCG has increased by 28% from 31,260 in 2008-09 to 40,000 in 2013-14. Prevalence has increased from 4.7% in 2008/09 to 5.6% in 2013/14. This is because more people with undiagnosed Type 2 diabetes are being identified, along with an increase in the underlying prevalence of diabetes together with an ageing population. The increasing burden of diabetes in the UK is driven by the rising prevalence of obesity as well as demographic changes in the age and ethnic structure of the population.²

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

Diabetes in people aged 17 and over



The recorded prevalence of diabetes has increased across the CCG since 2008/09. Rates are consistently higher in the most deprived 40% of practices in the CCG compared with the least deprived 60%.

The prevalence of diabetes is 30% higher in the most deprived 40% of GP practices in the CCG compared with elsewhere.

49% of people on diabetes registers in the CCG are registered with the most deprived 40% of GP practices.

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

What are the complications of diabetes?

Diabetes (of all types) can lead to long term complications that affect small blood vessels (microvascular – coronary heart disease, stroke, peripheral artery disease) and large blood vessels (macrovascular – retinopathy, nephropathy, neuropathy).

People with diabetes are:³

- 48% more likely to have been admitted to hospital for a myocardial infarct (heart attack) ;
- 65% more likely to have a hospital admission related to heart failure;
- 25% more likely to have a hospital admission for a stroke than the general population;

Diabetes is also a major risk factor for the development of peripheral artery disease (PAD) and patients with diabetes are four times more likely to develop PAD.⁴

How many deaths are related to diabetes in C&P CCG?

There is significant under-recording of diabetes as an underlying cause of death, because deaths in people with diabetes are often attributed to other conditions for which diabetes is a complication or risk factor, such as kidney or cardiovascular disease.⁵ This means that there is a large number of additional deaths where diabetes is not the main cause, but is a significant contributing factor. Diabetes increases the risk of cardiovascular and kidney disease which is associated with higher death rates.

Between 2012-14 there were 219 deaths (an average of 73 deaths annually) in C&P CCG where the primary cause of death was a diabetic emergency. 27% of deaths occur in people aged under 75 and 56% of diabetes deaths in the CCG are in women. Although not statistically significantly so, rates of diabetes mortality appear to be higher in Peterborough LCG.

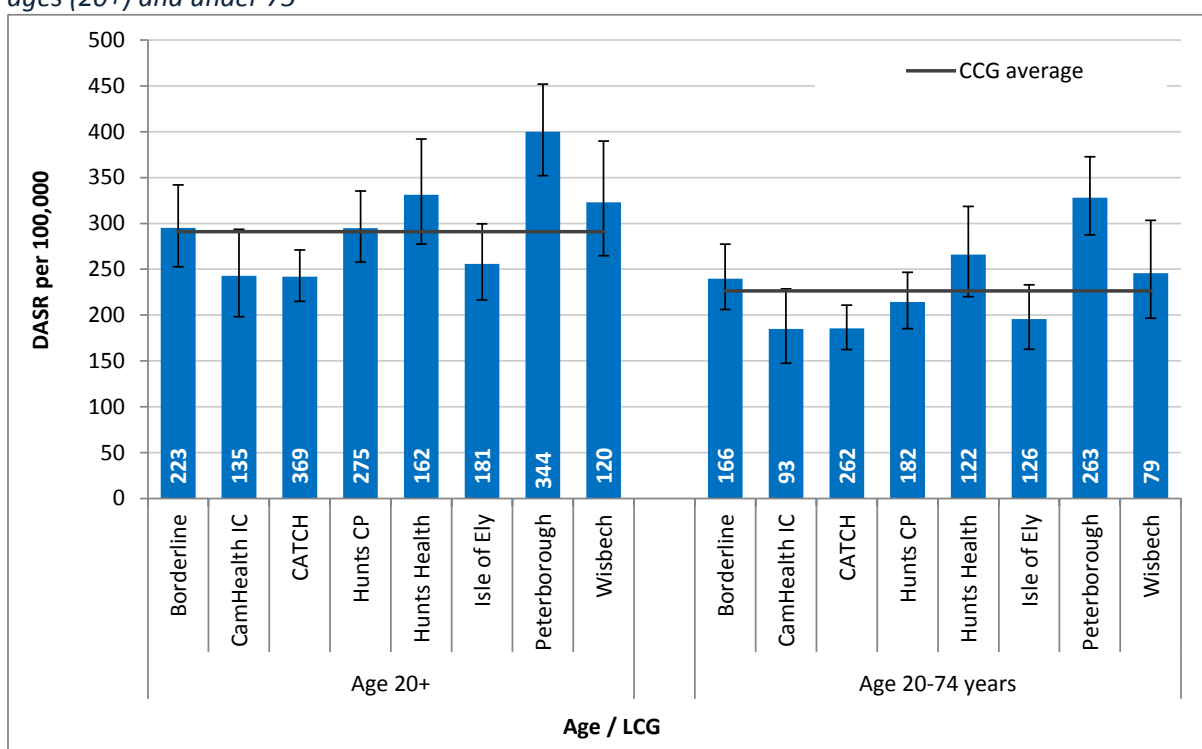
Hospital admissions and episodes of care

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

- Coding in hospital episode data at discharge records the primary diagnosis (the underlying reason for the admission), a subsidiary diagnosis and up to 12 other contributory causes/diagnoses. Coding is known to be variable between hospital trusts.
- A diagnosis of diabetes (ICD10: E10-14) was recorded in any diagnostic code in over 8,500 emergency admissions which resulted in over 61,500 bed days and a total cost of £21.4m.
- In 1,800 admissions (21%), diabetes was recorded as the primary or subsidiary diagnosis. These admissions resulted in 9,000 emergency bed days and a total cost of £3.5m.
- 71% of these emergency admissions were in people aged under 75 of whom 54% were male.
- 75% of diabetic emergency admissions (primary and subsidiary diagnoses) were in non-insulin-dependent diabetics (Type 2), admitted for complications related to their diabetes.

At both ages 20 and above and in people aged 75 and under, the age-standardised emergency admission rate in Peterborough LCG is significantly higher than the CCG average. In CATCH LCG the admission rate is significantly lower than the CCG average.

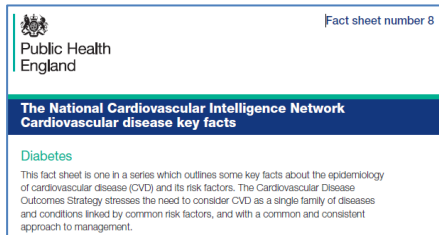
Emergency hospital admissions for diabetes as primary or subsidiary diagnosis, C&P CCG, 2013-14, all ages (20+) and under 75



Number of emergency admissions per year stated at the base of each bar. Admissions to All Hospital Trusts. Error bars represent 95% confidence intervals. DASH - directly age-standardised rate. Diabetes defined by primary or subsidiary diagnosis of ICD10: E10-E14. 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.

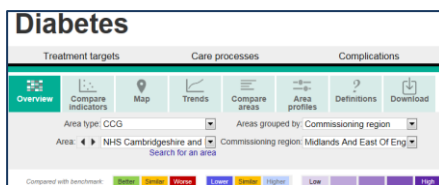
Each factsheet summarises information about a cardiovascular disease (CVD) risk factor or disease area.

PHE - Longer Lives



<http://healthierlives.phe.org.uk/>

Information at CCG and GP practice level on prevalence, risk factors, treatment targets, care processes and complications of diabetes.



<http://fingertips.phe.org.uk/diabetes#gid/1938132727/pat/44/ati/19/page/0/par/E40000002/are/E38000026>

Prevalence, risk factors, treatment targets, care processes and complications of diabetes.

In addition, the PHE Knowledge and Information Gateway <http://datagateway.phe.org.uk/> contains many more links on Diabetes 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 local 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

¹ Health and Social Care Information Centre. National Diabetes Audit 2009/10: executive summary, 2011. Available at: <https://catalogue.ic.nhs.uk/publications/clinical/diabetes/nati-diab-audi-09-10/nati-diab-audi-09-10-exec-summ.pdf>

² Gattineau M, Hancock C, Holman N et al. Adult obesity and type 2 diabetes. Public Health England, 2014. Available at: http://www.noo.org.uk/NOO_pub/briefing_papers

³ Health and Social Care Information Centre. National Diabetes Audit 2010 – 11: report 2 complications and mortality, 2012. Available at: <https://catalogue.ic.nhs.uk/publications/clinical/diabetes/nati-diab-audi-10-11/nati-diab-aud-10-11-comp-and-mort-v3.pdf>

⁴ Newman ABV et al, Gregg EW et al cited in Department of Health. Cardiovascular Disease Outcomes Strategy, 2013. Available at: <https://www.gov.uk/government/publications/improving-cardiovascular-disease-outcomes-strategy>

⁵ Health and Social Care Information Centre. Mortality from diabetes. Available at: <https://indicators.ic.nhs.uk/webview/>

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)*.

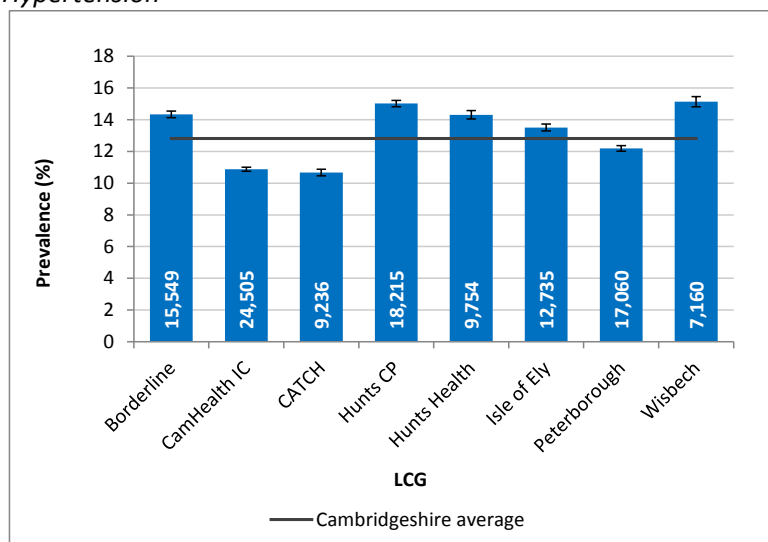
Background

Hypertension, persistently high blood pressure is a major risk factor for stroke, heart attack, heart failure, aneurysms and chronic kidney disease. It can also lead to early death.¹ Known as ‘the silent killer,’ it is often preventable yet is a leading cause of cardiovascular disease, chronic kidney disease and cognitive decline.²

What is the prevalence and who is at risk?

Hypertension affects more than one in four adults, and is the second biggest risk factor for premature death and disability in England. The risk of hypertension increases with age. In England in 2011 the prevalence of hypertension was 7.4% among people aged 16 to 24 years. This rose to 44.0% among those aged 55 to 64 years and 72.6% in people aged 75 years or older. The prevalence of hypertension was higher among men than women (31.1% for men compared to 28.0% for women).³

Hypertension



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

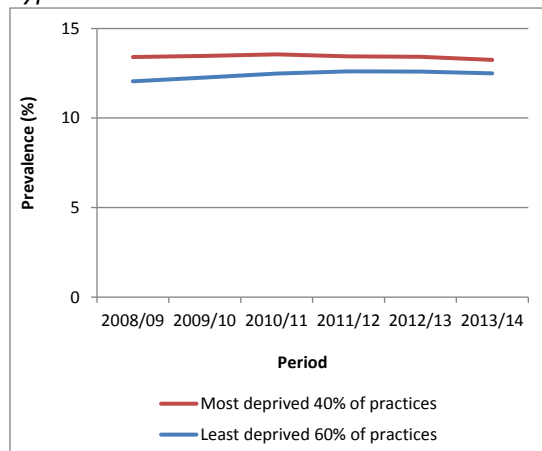
Over 114,000 people are recorded on disease registers for hypertension in general practices across Cambridgeshire and Peterborough CCG.

The prevalence of hypertension is lower in C&P CCG as a whole compared with the England average (12.8% vs 13.7%). However, in Borderline, Hunts Care Partners, Hunts Health and Wisbech LCGs prevalence is higher than both the CCG and national averages. In CamHealth and CATCH prevalence is lower than the county 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 hypertension.

Hypertension is most common among individuals from low income households and those living in deprived areas.³ In England, the proportion of people from black African and black Caribbean ethnic groups who have hypertension is higher than in the general population.⁴

Hypertension



The prevalence of recorded hypertension has increased slightly since 2008/09 in the least deprived 60% of practices in the CCG but has remained stable in the most deprived 40%.

Rates of hypertension are 6% higher in the most deprived 40% of practices compared with elsewhere.

44% of people on hypertension registers are registered with the 40% most deprived practices.

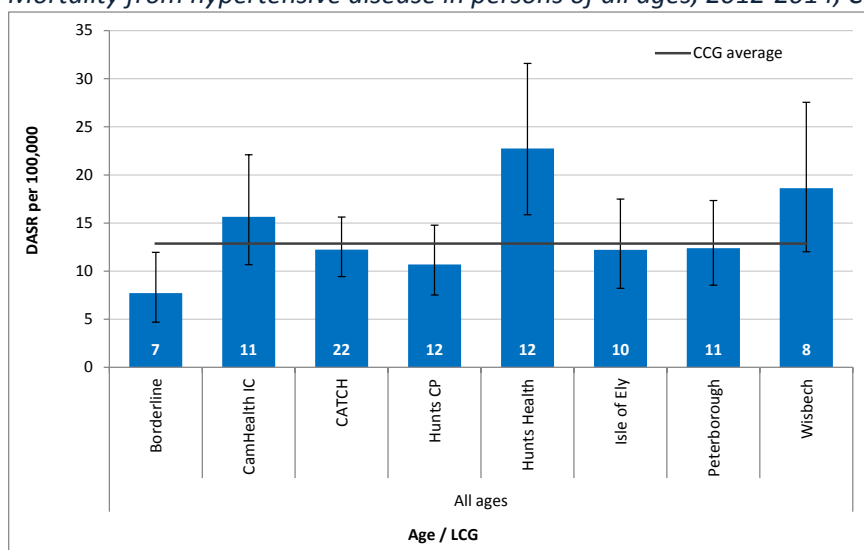
Source: Quality & Outcomes Framework (QOF) 2013/14

How many deaths are related to hypertension?

Routine mortality statistics of death from hypertension are an under-estimate of the total number of deaths as it is not routinely recorded as the underlying cause of death, rather as a contributing factor. High blood pressure is a major risk factor for other conditions such as stroke, heart attack, heart failure and chronic kidney disease, and there will be further deaths associated with hypertension not included in the figures below.⁵

Between 2012-14 there were 280 deaths (an average of around 90 deaths annually) in C&P CCG where the underlying cause of death was hypertensive disease. 28% of deaths occur in people aged under 75 and 60% of hypertensive disease deaths are in women. All-age mortality is significantly higher in Cambridgeshire and Peterborough CCG compared to the national average (although this is comparing 2012-14 data for the CCG to 2011-13 data for England (2012-14 not available)). At LCG level, rates for CamHealth, Hunts Health and Wisbech LCGs are also higher than the national average. Rates for Hunts Health LCG are also higher than the CCG average. Note that the number of deaths annually is relatively small and the confidence intervals are wide.

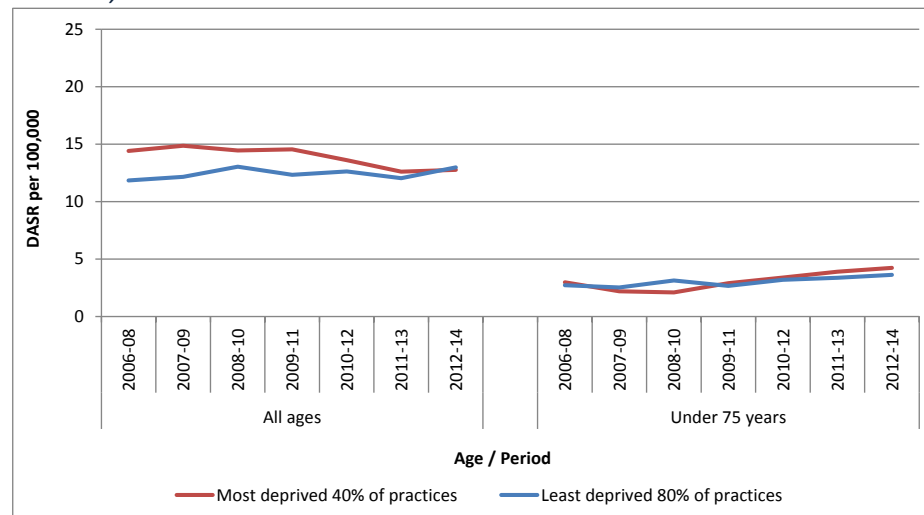
Mortality from hypertensive disease in persons of all ages, 2012-2014, C&P CCG



Error bars represent 95% confidence intervals. Average number of deaths per year is small and confidence intervals are wide. DASR - directly age-standardised rate. Hypertensive disease defined by ICD10 : I10-I15.

Current literature suggests there is a social gradient in mortality from hypertensive disease, with more deprived areas experiencing higher death rates than less deprived areas. Rates of mortality from hypertensive disease have declined in the least deprived 60% of practices but remained relatively stable in the most deprived 40%. Rates are now similar in both deprivation groups. 44% of deaths in people aged under 75 occur in people registered with the 40% most deprived practices.

Mortality from hypertensive disease 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. Hypertensive disease defined by ICD10: I10-I15

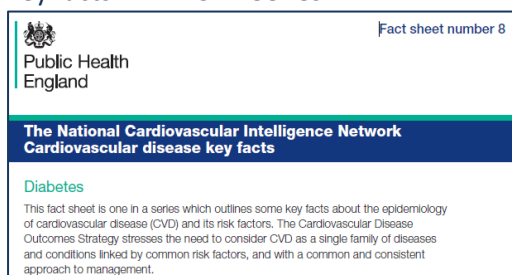
Hospital admissions and episodes of care

All people registered with C&P CCG GP Practices, 2013/14, aged 30 and above

- Coding in hospital episode data at discharge records the primary diagnosis (the underlying reason for the admission), a subsidiary diagnosis and up to 12 other contributory causes/diagnoses. Coding is known to be variable between hospital trusts.
- In 2013/14, a diagnosis of hypertension (ICD10: I10-I15) was recorded in any diagnostic code in nearly 17,000 emergency admissions which resulted in over 120,000 emergency bed days and a total cost of £43m.
- 43% of these emergency admissions were in people aged under 75 and 52% were in women.
- In emergency admissions where hypertension was recorded, 21% had a primary diagnosis of CVD, primarily stroke and coronary heart disease.
- In 2013/14, there were 170 hospital episodes in C&P CCG where essential (primary) hypertension was the primary diagnosis (ie the main reason for the hospital episode). Emergency admissions accounted for 114 (66%), 73% of which were in people aged under 75 and 57% were in women.

Further Resources

Key facts PHE – CVD Series



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

PHE - Healthier Lives



<http://healthierlives.phe.org.uk/topic/hypertension>

Interactive Atlas describing prevalence, expected prevalence, risk factors, treatment and care and complications

Find more detailed comparison tools, at GP practice level, on [National General Practice Profiles](#).

Faculty of Public Health Toolkit



The Faculty of Public Health's [Toolkit for developing a local strategy to deal with high blood pressure](#) is a comprehensive resource, giving local partners useful information, tools, templates and checklists to help develop effective strategies on high blood pressure prevention, detection and control.

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

- ¹ NICE. Quality Standard 28, 2013. Available at: <http://guidance.nice.org.uk/QS28> and NICE. Clinical guideline 127: hypertension, 2011. Available at: <http://guidance.nice.org.uk/CG127/NICEGuidance/pdf>
- ² Faculty of Public Health. Easing the pressure: tackling hypertension. www.fph.org.uk/uploads/hypertension_all.pdf
- ³ Knott C, Mindell J. Hypertension. In: Craig R, Mindell J, editors. Health survey for England 2011: volume 1: health, social care and lifestyles. Available at: <http://www.hscic.gov.uk/catalogue/PUB09300>
- ⁴ Chaudhury M, Zaninotto P. Blood pressure. In: Sproston K, Mindell J, editors. Health survey for England 2004: volume 1: the health of ethnic minority groups. Available at: <http://www.hscic.gov.uk/catalogue/PUB01209>
- ⁵ Mortality from hypertensive disease: directly standardised rate, all ages, annual trend, MFP cited in The Health and Social Care Information Centre. Indicator portal. Available at: <https://indicators.ic.nhs.uk/webview/>