Camden ISLINGTON
Working in partnership

NHS Camden Clinical Commissioning Group

CAMDEN JSNA: FOCUS ON

CHRONIC KIDNEY DISEASE

MAY 2017

Chronic kidney disease (CKD) is a condition in which the kidneys do not work properly. CKD can range from a mild condition with no or few symptoms (stage 1 or G1), to a very serious condition where the kidneys stop working, sometimes called kidney failure (stage 5 or G5). Symptoms in the advanced stages include tiredness; shortness of breath; nausea; or blood in the urine. There is no cure, but treatment can slow the progression of CKD. Less than 1 in 10 patients will require dialysis[1]. It is usually caused by other conditions that put a strain on the kidneys and cause damage, such as high blood pressure, high cholesterol or diabetes, putting people with these conditions at risk of developing CKD. Risk increases with age, and having CKD itself increases the risk of other cardiovascular conditions such as stroke and heart attack.

Facts and figures

- **2.5%** of Camden's population have been diagnosed with CKD.[2]
  - Of those diagnosed with CKD in Camden, **96%** are diagnosed with Stage 3 CKD, **3.1%** with Stage 4 CKD, and **1.3%** with Stage 5. [3]
- **28.5%** of people with CKD in Camden are likely to be undiagnosed.[2]
- **90%** of people living with CKD have another long term condition.[3]
- **74%** of people living with CKD also have diagnosed high blood pressure.[3]

Population groups

- Uncontrolled diabetes and high blood pressure are the biggest causes of CKD.
- The risk of developing CKD increases with age, and the majority of individuals diagnosed are people aged over 60.
- CKD is more common in women than men.
- People from Black and Asian population groups are more likely to have CKD.

Measures for reducing inequalities

- Increase access to interventions that reduce risk factors in the general population, such as physical activity, health eating and early diagnosis and appropriate management of diabetes and high blood pressure.
- Case finding and early diagnosis through programmes such as NHS Health Checks and GP Locally Enhanced Service for CKD.
- Systematic management of factors such cholesterol and blood pressure for people with CKD.

National & local strategies

- The Five Year Forward View.
- Childhood Obesity: A Plan for Action.
- The Camden Health and Wellbeing Strategy 2016-18.
- North Central London Sustainability and Transformation Plan.
- The Camden Local Plan.

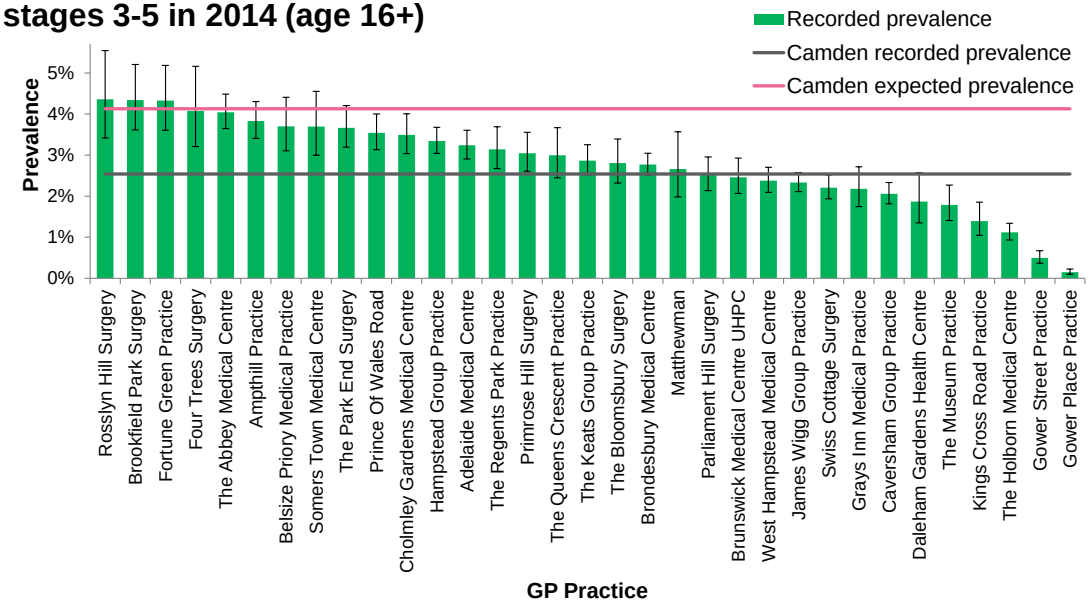
SETTING THE SCENE: THE CAMDEN PICTURE

2.5% of people (5,463) in Camden have been **diagnosed with CKD**.[2]

4.1% of people in Camden are **estimated** to have CKD (based on prevalence model from the National Cardiovascular Intelligence Network), meaning a further estimated 2,173 people are undiagnosed in Camden. In other words, an estimated **28.5%** of people living with CKD in Camden are undiagnosed.[2]

Inequalities in CKD

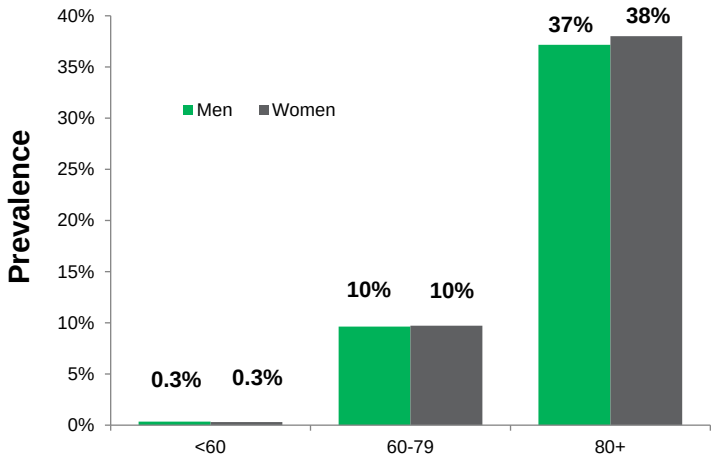
GP Practice Recorded Prevalence of CKD Stages 3-5 in 2015/16 (age 18+) compared to Camden recorded and expected prevalence of CKD stages 3-5 in 2014 (age 16+)



Source: CKD QOF Prevalence 2015/16, PHE CKD prevalence model 2014

The prevalence of diagnosed CKD varies across GP practices in Camden, from **4.4%** in Rosslyn Hill Surgery, to **0.1%** in Gower Place Practice.[2,4] Variation in diagnosed prevalence between GP Practices could be due to a variety of factors, including but not limited to differing age and ethnic structures of the registered population, as well as differences in the prevalence of CKD risk factors (e.g. obesity). The diagnosed prevalence in many GP practices is less than the expected prevalence for Camden.

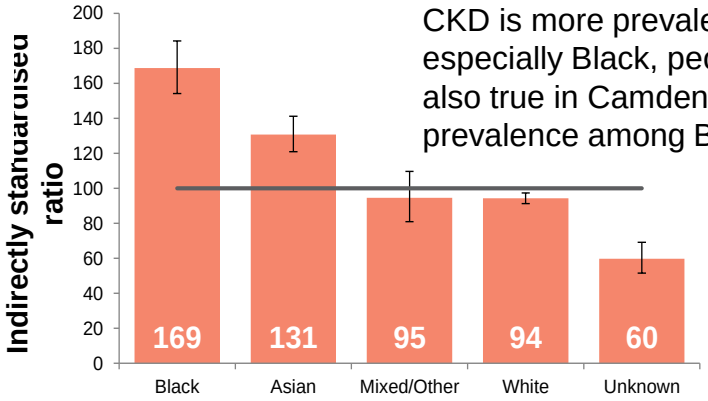
CKD prevalence by age and gender, Camden (2015)



The majority of people with CKD in Camden are over the age of 60. The prevalence in men and women is similar, which is different to the national picture, where the prevalence in higher for women.[3]

Source: Camden PH GP Dataset 2015

CKD prevalence by ethnicity, Camden (2015)



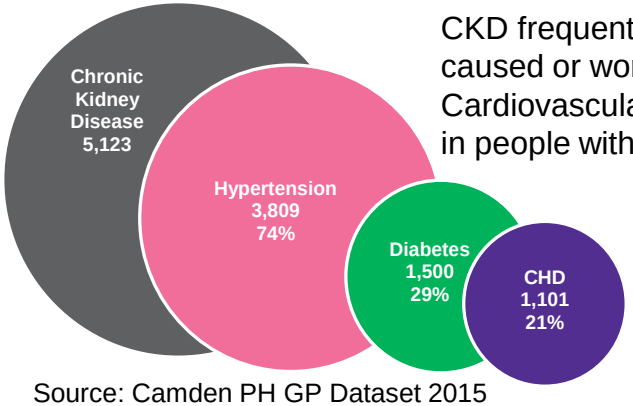
CKD is more prevalent among Asian, and especially Black, people in the UK. This is also true in Camden, where the CKD prevalence among Black and Asian people is 69% and 31% higher, respectively, than expected for Camden, even when taking in to account age.

Source: Camden PH GP Dataset 2015

SETTING THE SCENE: THE CAMDEN PICTURE

What other conditions do people with CKD have?

Prevalence of other long term conditions (LTCs) among the Camden population with CKD (2015)

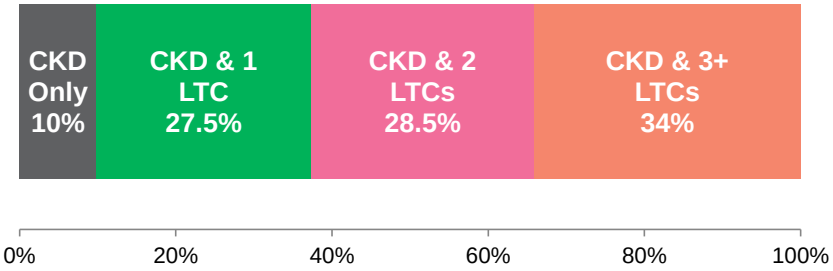


Source: Camden PH GP Dataset 2015

CKD frequently occurs alongside, and can be caused or worsened by, other long-term conditions. Cardiovascular disease is the main cause of death in people with CKD.[5]

The most common comorbidities among people with CKD are high blood pressure (hypertension) (74%) and diabetes (29%).[3]

Number of long term conditions (LTCs) among the Camden population with CKD (2015)

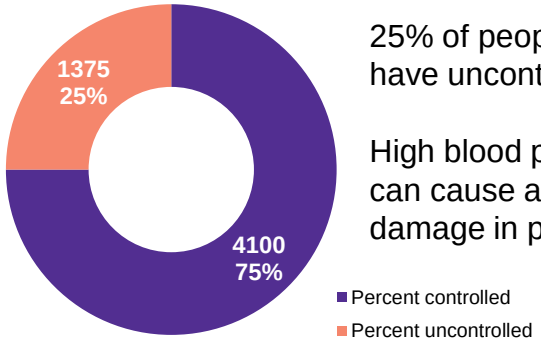


Source: Camden PH GP Dataset 2015

90% of people with CKD have another diagnosed long term condition (LTC).

Management

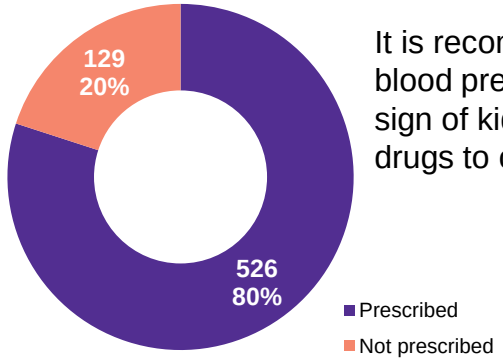
Percentage of eligible people with CKD who have uncontrolled blood pressure in 2014/15, Camden



25% of people with CKD in Camden have uncontrolled blood pressure.[4]

High blood pressure (hypertension) can cause additional kidney damage in people with CKD.

Percentage of eligible people with CKD on anti-hypertensive drugs in 2014/15, Camden



It is recommended that people with CKD who have high blood pressure and high levels of protein in their urine (a sign of kidney damage) be treated with anti-hypertensive drugs to control their blood pressure.[5]

80% of eligible people with CKD in Camden had been prescribed anti-hypertensive drugs in 2014/15.[4]

Hospital use and outcomes by patients with CKD in Camden (2014/15)

7,415 inpatient admissions for dialysis by **74 different patients**.[6]
The average cost of a dialysis admission was £154 in 2015/16.[8]

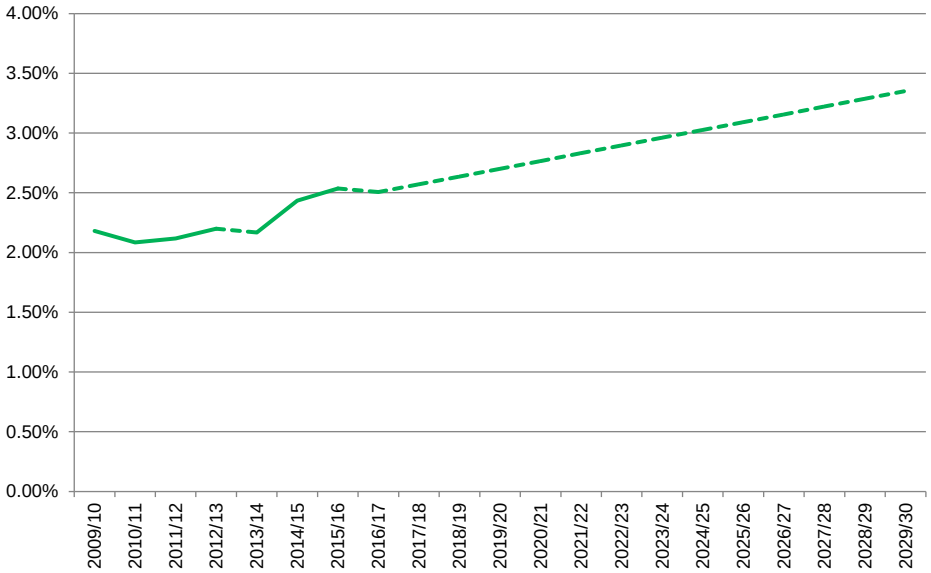
12 deaths per year due to chronic renal failure in Camden.[7]

FUTURE NEED

Future prevalence

The prevalence of CKD has been predicted to rise markedly in the UK, largely due to rising risk factors, such as excess body weight, and an ageing population.[9, 10]

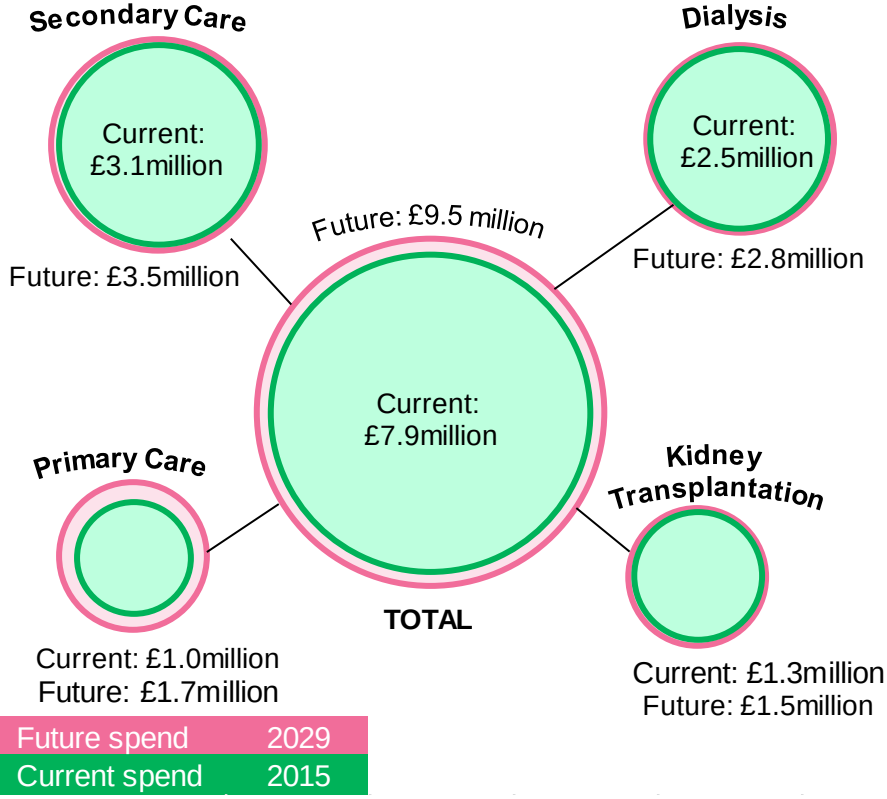
Predicted trend in diagnosed CKD prevalence 2009/10 to 2029/30, Camden



Source: QOF 2015/16

If the trend in recorded CKD prevalence continues, the proportion of Camden residents diagnosed with CKD is predicted to increase from 2.5% in 2015/16 to an **estimated 3.4% by 2029/30 (approximately 8,700 cases)**. However, this is likely to be a conservative estimate as it does not account for an ageing population, or increased obesity prevalence.

Current and predicted future spending



The current cost of CKD to the local health and care system is estimated to be around £7.9 million.[11] This is the result of several components, including the cost of primary care visits to manage CKD and associated hypertension, the cost of secondary care treatment for CKD **(hospital stays for patients with CKD are estimated to be 35% longer than for patients without CKD[10])** as well as the costs of dialysis and kidney transplantation associated with CKD. Based on prevalence modelling, the future cost of CKD to Camden's health and care system is estimated to be around £9.5 million in 2029 if current trends continue.

WHAT INFLUENCES CKD?

Around 2.6 million people are estimated to live with CKD in the UK.[4]

The prevalence of CKD is thought to increase over the coming years. This is due to factors such as the ageing population, rising levels of obesity, lack of exercise and alcohol misuse.

Many of the risk factors for CKD are lifestyle factors, meaning that many cases of CKD are preventable by maintaining a healthy diet, regular exercise, drinking within recommended limits and stopping smoking.[5]

There is no cure for chronic kidney disease, and early diagnosis and prompt treatment, as well as changes in diet and lifestyle, are important and can often help slow down or prevent further damage.[5]

CKD may lead to kidney failure and the need for dialysis or a kidney transplant if not treated early.[5]

Risk factors and associations of CKD		In Camden…
Lifestyle factors	• **High salt** intake increases the risk of CKD and of high blood pressure. • **Smoking** increases the risk of cardiovascular disease generally and increases the likelihood that any existing kidney disease will get worse. • Drinking above the recommended amount of **alcohol** increases CKD risk.	• **15.9%** of the population are current smokers.[12] • **28%** are thought to be drinking at an increased or higher risk of harm.3 • **26.6%** of the population aged 16+ are inactive.[12]
Excess body weight	• People who are **obese or overweight** are at higher risk of CKD.	• **46.5%** of the adult population and **37.8%** of 10 – 11 year olds are overweight or obese.[12]
Deprivation	• People from more deprived socio-economic groups are more likely to have one or more underlying risk factor for developing CKD, which include diabetes, obesity, and smoking.	• 7 areas in Camden are among the country's most deprived **10%.**
Age and gender	• Most cases of CKD are in people over 60 years of age. • There is a higher prevalence of CKD in women than men.	• **12%** of Camden's population is aged 65+. This is expected to increase to 20.5% in 2026.[13]
Ethnicity	• CKD is more prevalent in South Asian and Black population groups in the UK, and is more likely to progress to end stage kidney failure.[5]	• **17%** of adults are Asian and **8%** are of Black ethnicity.
Clinical risk factors	• High blood pressure and high cholesterol increase people's chances of developing CKD. • People with diabetes are more likely to develop CKD.	• **9%** of people have been diagnosed and a further **8%** are estimated to have high blood pressure. **3%** of people are diagnosed with CVD.[3] • **6.7%** of the population is estimated to have diabetes and **4**% have been diagnosed.[3]

WHAT WORKS?

Primary Prevention

Interventions to reduce the prevalence of CKD risk factors in both the general population, and especially, people with long term conditions. These include:

- smoking cessation
- increasing physical activity and healthy eating
- decreasing alcohol consumption
- controlling blood pressure and cholesterol
- reduce salt intake.

Case Findings/Early diagnosis

- Close monitoring of kidney test results can identify CKD early.
- Tests to identify CKD in high risk groups can be offered. These include patients with existing conditions such as diabetes, high blood pressure or high cholesterol and those over 75 years old.
- Testing for CKD among people who take drugs which have the potential to harm kidney function.
- The National NHS Health Checks Programme helps identify and assess patients at high risk of CKD and manage key risk factors.

Management and control

- Management of CKD in primary and secondary care can help reduce the risk of progression.
- There's no medicine specifically for CKD, but medication can help control many of the risk factors and complications that can occur as a result of it.
- Patients should have an annual 'flu jab (influenza vaccination), and have the pneumonia (pneumococcal) vaccine once.
- Avoid certain medicines, including over-the-counter non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen – these medicines can harm the kidneys if you have CKD.
- Dialysis – treatment to replicate some of the kidney's functions, may be necessary in advanced (stage 5/ G5) CKD.
- Kidney transplant – this may be necessary in advanced (stage 5/ G5) CKD.

Taken from the NICE Guideline: Chronic kidney disease in adults: assessment and management[13]

ASSETS AND SERVICES

Assets and services across Camden focus on the detection and management of CKD, as well as interventions to reduce risk factors such as excess weight, lack of exercise and smoking. Below is an overview of these services.

Primary Prevention

Rebalance is a 12-week **weight and lifestyle programme** that offers free one-to-one advice about your diet and nutrition and a tailored programme of group activity classes to help you lose weight and get healthy.

Later Life community exercise programme and community **physical activity** opportunities such as tai chi, health hearts, healthy bones, yoga, badminton, seated exercise, free health walks, swimming and water exercise, classes for women only, free swimming for those aged 60+.

One You provides lifestyle advice and health promotion.

Alcohol Screening & Advice is available to all residents via primary care providers.

Stop Smoking Services are available in all GP practices, as well as pharmacies and community locations and are available to anyone living, working or studying in Islington who smokes.

National Diabetes Prevention Programme
Lifestyle modification support to people with high blood sugar (and therefore a high risk of diabetes) to prevent or delay onset of Type 2 diabetes.

Kidney disease health check is an online tool for residents to assess their risk of CKD.

Case Findings/Early diagnosis

NHS Health Checks Programme
This programme aims to prevent heart disease, stroke, diabetes, and kidney disease by identifying people at high risk of the diseases or who are living with undiagnosed disease.

Under **Camden's Planned Care Locally Enhanced Services (LES) 2016-19**, GP practices undertake case-finding to increase recorded prevalence.

Management and control

Under the **Planned Care LES 2016-19**, GP practices list reviews to identify people with CKD at higher risk of adverse outcomes.

CKD Clinics
For complex cases, the Royal Free Hospital runs clinics providing expert nursing care to patients with advanced and progressive chronic kidney disease (CKD).

TARGETS & OUTCOMES

Target	Related document or strategy	Timeframe to meet target
Quality and Outcomes Framework There are four indicators within QOF that relate directly to CKD. • The contractor establishes and maintains a register of patients aged 18 years or over with CKD with classification of categories G3a to G5 (previously stage 3 to 5). • The percentage of patients on the CKD register in whom the last blood pressure reading (measured in the preceding 12 months) is 140/90 mmHg or less (Inherited). • The percentage of patients on the CKD register who have hypertension and proteinuria and who are currently being treated with renin-angiotensin system antagonists. • The percentage of patients on the CKD register whose notes have a record of a urine albumin:creatinine ratio (or protein:creatinine ratio) test in the preceding 12 months (Inherited).	The Quality and Outcomes Framework, 2016-17	Annual (end of March)
Camden's Planned Care Locally Enhanced Service • Percentage of people on the CKD register with stage 3 and above (G3) indicators and high blood pressure (eGFR < 45 and with: UACR>= 30, BP<= 130/80 UACR< 30, BP<= 140/90).	Planned Care LES	Annual until 2019 (end of March)
NHS Health Checks • 100% of the eligible population offered an NHS Health Check over five years.	NHS Health Check Best practice guidance, 2017	2019 (end of March)

Other targets which influence CKD

The Camden Health and Wellbeing Strategy 2016-18 prioritises several areas likely to have an important impact on the prevention of CKD:

- **Healthy weight, healthy lives.** In the short term, Camden aims to at least double the number of Camden businesses signed up to the Healthy Catering Commitment, from 24 to 50; and to reduce the proportion of Camden residents who are physically inactive by 5%. In the longer-term, we aim to increase to 70% the proportion of Camden residents achieving recommended physical activity levels; to halve the proportion of children aged 10-11 who are obese; and to halt the trend of rising rates of overweight in this age group.
- **Reducing alcohol-related harm.** In the short term, Camden aims to increase the number of dependent drinkers accessing treatment by 19% - this would be equivalent to 200 additional residents accessing treatment each year; and to increase the number of residents receiving evidence-based interventions for their alcohol use in primary care, so that at least 370 people each year receive enhanced brief interventions within primary care. In the longer-term, we are aiming for a 5% reduction in hospital admissions directly related to alcohol.

GAPS: UNMET NEEDS

It is likely that the prevalence of CKD will rise over the coming years, as the population ages and behavioural risk factors continue to rise. Given the large numbers of people at risk of CKD, improving access to Health Checks and other lifestyle support services are important for reducing the risk of developing CKD.

Many people with CKD have **not been diagnosed** with the condition**.** This means they are less likely to be aware of the risks associated with CKD and how they can reduce these, nor do they have the treatment and management needed to slow the progression of CKD. Case finding activities are very important to ensure early identification of CKD to prevent kidney failure and avoid the need for dialysis or a kidney transplant.

Inequalities in CKD prevalence persist: as is the case nationally, people of Black and Asian ethnicity are at increased risk of CKD, as well as those from lower socioeconomic groups.

CKD patient feedback is collected by the local CKD service, and shows that the majority of respondents are happy with the service and it improved their knowledge of CKD. There is an absence of information to inform the wider understanding of the needs of local people with CKD. However learning from consultations on how to support people to prevent, identify and manage LTCs, including CKD, may provide useful insights into the needs of this group.

FURTHER INFORMATION

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About Camden’s JSNA

Open Data Camden brings together information held across the organisations into one accessible place. It provides access to evidence, intelligence and data on the current and anticipated needs of Camden’s population and is designed to be used by a broad range of audiences including practitioners, researchers, commissioners, policy makers, Councillors, students and the general public.

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