

CAMDEN PROFILE PUBLIC HEALTH INTELLIGENCE

Mental Health: Dementia

May 2013



About this profile

PURPOSE

This public health intelligence profile describes the trends and patterns in the prevalence of dementia in Camden. It is the first in a series of profiles on Mental Health.

This work will support and inform:

- Commissioners and Public Health Teams
- Camden's Clinical Commissioning Group
- Individual General Practices in Camden
- Local Authority Decision-Making

CONTENTS

1. Overview and recommendations	2
2. Key messages	2
3. How to use these analyses	4
4. Data source and methodology	5
5. Understanding the data	6
6. Dementia analysis	7
- Diagnosed and expected prevalence of dementia	8
- Breakdown of dementia diagnoses by demographic factors	13
- Dementia and long term conditions	20
- Data recording and risk factors	24

FURTHER INFORMATION AND FEEDBACK

This profile was created by Ester Romeri (Public Health Information Officer) and Colin Sumpter (Public Health Information Officer) and review by Dalina Vekinis (Senior Public Health Information Analyst).

We would like to thank Jane Brett-Jones (Public Health Strategist in Mental Health) for her input and assistance with this profile.

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We would also very much welcome your comments on these profiles and how they could better suit your individual or practice requirements, so please do contact us with your ideas.

Recommendations and key messages

OVERVIEW & RECOMMENDATIONS

- 1. Ensure care pathways related to dementia take comorbidities into account:** Ensuring that the health needs of people with dementia are met is complex, as many will be diagnosed with more than one condition, and 2 out of 3 people will be diagnosed with more than 3 conditions. Developing specific pathways for care for people with dementia will ensure adequate provision of care and medical services for this group.
- 2. Prescribing of antipsychotic drugs:** As there is concern at a national level about the overuse of anti-psychotic drugs for people with dementia, it is important to determine whether the 91 patients with dementia on anti-psychotic drugs, but without a psychotic disorder, are being prescribed appropriate medication.

KEY MESSAGES

Dementia prevalence in context

- In 2012, there are currently 810 people recorded on QOF registers for dementia in Camden. Camden's crude diagnosed prevalence (0.31%) is significantly lower than the London average (0.35%).
- Statistical modelling of the expected number of dementia cases indicates that 56% of the expected number of cases of dementia have been diagnosed in Camden; above the London and England averages (49% and 48% respectively).

Breakdown of Camden prevalence

- This profile focuses on people with dementia recorded in Camden's Public Health GP dataset. In 2012, there were 813 people aged 65 and over with dementia registered with Camden's GP practices. This number differs from the number recorded on QOF registers because of the method of data extraction and coding from the two different sources; Public Health GP and QOF datasets. (For more detail see 'Data source and methodology' section). The number of people with dementia varies by practice from the 80 registered with Hampstead Group Practice to six practices with less than five patients each. Adjusting for age shows significant differences by practice with three practices having a lower than expected prevalence and three with a significantly higher prevalence. It is however important to note that practices with above average prevalence also have a number of patients in care homes.
- Of the Camden population with dementia, the majority (96%; 813) are aged 65 years and over. As such, this report focuses on dementia diagnoses in people over the age of 65 recorded in the GP dataset.
- On average, people with dementia (aged 65+) are diagnosed at the age of 80, however this varies by GP practice (from 73 to 86 years). On average, people 65 and over with a dementia diagnosis have had the diagnosis for 3 years.

Key messages (cont)

- The overall local prevalence of people aged 65 and 85 years and over registered with Camden's GP practices (4% and 13% respectively) is lower than the national prevalence of dementia in the same age groups (7% and 24% respectively).
- Dementia affects a greater proportion of women compared to men (4% vs. 3%), which could be due to women being affected less by other long term conditions at a younger age.
- There were 191 new diagnoses of dementia in 2011/12 at GP practices across Camden, equating to one in every hundred people aged 65 and over being newly diagnosed.

Long term conditions

- People with dementia aged 65 and over have a significantly higher diagnosed prevalence of most of the long term conditions when compared to Camden's general population aged 65 and over. For stroke/TIA and atrial fibrillation, the prevalence among people with dementia is over 2 times that of older people (65 and over).
- In terms of numbers, however, the largest group within people 65 and over with dementia, is those diagnosed with hypertension (27%, 492 people). There are 146 adults 65 and over diagnosed with dementia and stroke/TIA, and 170 with depression and dementia.
- In addition, people with dementia have a higher proportion of comorbidities compared to Camden's general population over the age of 65. Of those with dementia, 83% have more than one long term condition compared to 55% of the total population aged 65 and over, while 15% have five or more long term conditions compared to 2.6% in the older population.

Data recording and risk factor screening

- A greater proportion of people with dementia aged 65 and over have a healthy weight (51%) compared to the general population aged 65 and over (40%). There are also 64 people over 65 with dementia that are recorded as being underweight (9%).
- Reviewing the care of people with dementia (QOF indicator DEM2) was not carried out for 26% (213) of people on the dementia QOF register in Camden in 2011/12. The percentage whose care has been reviewed varies from 63% to 100% across Camden's GP practices.
- Blood pressure recording and regular checks of HbA1c levels are higher than in the general population aged 65 and over.

Prescribing of antipsychotic drugs

- Nationally, there is concern about the overuse of anti-psychotic drugs for people with dementia. In Camden about 91 people with dementia (12%), who do not have a psychotic disorder, are being prescribed antipsychotic drugs. This varies by practice, with seven practices prescribing at higher than average levels. Though numbers are small, if not already carried out, it may be worthwhile assessing whether these prescriptions are appropriate in line with national guidance.

How to use these analyses

It is important to bear in mind the following when looking at this profile (or any other public health intelligence products):

– It is the variation that is important

In this profile, it is the variation between Camden GP practices that should be the main point of reflection rather than average achievement. It is the *unexplained variation* (defined as: *variation in the utilisation of health care services that cannot be explained by differences in patient populations or patient preferences*) as this can highlight areas for potential improvements. For example, it may highlight under- or over- use of some interventions and services, or it may identify the use of lower value or less effective activities.

The data alone cannot tell us whether or not there are good and valid reasons for the variation. It only highlights areas for further investigation and reflection. A perfectly valid outcome of investigations is that the variation is as expected. However, to improve the quality of care and population health outcomes in Camden, a better understanding of reasons behind the variation at a GP practice level with clear identification of areas for improvement is needed.

– Reaching 100% achievement

The graphs may show 100% on their y-axis (vertical) but there is no expectation that 100% will be (ever be) achieved for the vast majority of indicators. Some patients do not wish to have the intervention and for other patients interventions may be unsuitable. Again, it is about the variation between different GP practices, not an expectation of reaching 100% achievement.

It is possible to benchmark against the achievements in Camden with Islington deprived boroughs (i.e. with similar health needs), to give an indication of realistic level of achievement for specific indicators across the whole population and a Camden position.

– Populations not individuals

Epidemiology is about the health of the population, not the individual. In this profile this is either all of Camden's registered population or a GP practice population. It includes everyone registered on GP lists at the end of March/beginning of April 2011, whether they attend the practice regularly or not, or never at all.

– Beware of small numbers

Some of the graphs have small numbers in them. They have been left in so that all GP practices can see what is happening in their practice (according to the data). In these cases, the wide 95% confidence intervals will signify the uncertainty around the percentages, but be careful when interpreting them.

– Problems with coding and/or data extraction

There were some specific problems with data extractions from some GP practices for particular variables and these have been noted on the relevant graphs. If after review of the data, any GP practices think there are other problems with coding or data extraction, we will investigate and will amend publications as appropriate: publichealth.intelligence@islington.gov.uk

Data source and methodology

Camden GP PH Dataset

- Much of the epidemiological analysis in this profile has been undertaken using an anonymised patient-level dataset from GP practices in Camden. The GP Dataset was extracted in September 2012.
- The dataset includes key information on demographics (including language and ethnicity), behavioural and clinical risk factors, key conditions, details on the control and management of conditions, key medications, and interventions.
- This unique resource means that for the first time in Camden, it is possible to undertake in depth epidemiological analysis of primary care data for public health purposes, strengthening evidence based decision making within the borough at all levels.

QOF Data

- The profile also includes information on prevalence and review of care recorded on QOF registers.
- Discrepancies in numbers when comparing information from QOF and the Public Health GP datasets are due to the method of extraction and coding of disease conditions. Data from the Public Health GP dataset are recorded using Read codes and the date of extraction can vary across GP practices. Data from QOF is published by the NHS Information Centre (NHS IC).

Case definitions for dementia

- Specific codes were extracted to determine a diagnosis of dementia aligned with those published in national QOF guidance. These are published on : www.pcc-cic.org.uk

Table 1: QOF Read codes for dementia

READ CODES	DISEASE/DESCRIPTION
E000	Uncomplicated senile dementia
E001	Presenile dementia
E0010	Uncomplicated presenile dementia
E0011	Presenile dementia with delirium
E0012	Presenile dementia with paranoia
E0013	Presenile dementia with depression
E0013	Presenile dementia with depression
E001z	Presenile dementia NOS
E002	Senile dementia with depressive or paranoid features
E0020	Senile dementia with paranoia
E0021	Senile dementia with depression
E0021	Senile dementia with depression
E002z	Senile dementia with depressive or paranoid features NOS
E003	Senile dementia with delirium
E004	Arteriosclerotic dementia
E0040	Uncomplicated arteriosclerotic dementia
E0041	Arteriosclerotic dementia with delirium
E0042	Arteriosclerotic dementia with paranoia
E0043	Arteriosclerotic dementia with depression
E004z	Arteriosclerotic dementia NOS

Understanding the data

95% confidence intervals (95% CI)

- Percentages and standardised ratios are reported with 95% confidence intervals. These quantify imprecision in the estimate.
- The imprecision is influenced by the random occurrences that are inherent in life.
- By comparing the 95% CIs around estimates or a target, we can say whether statistically, there are differences or not in the estimates we are observing, identifying which areas to focus on.

Indirectly standardised prevalence ratios (IDSR)

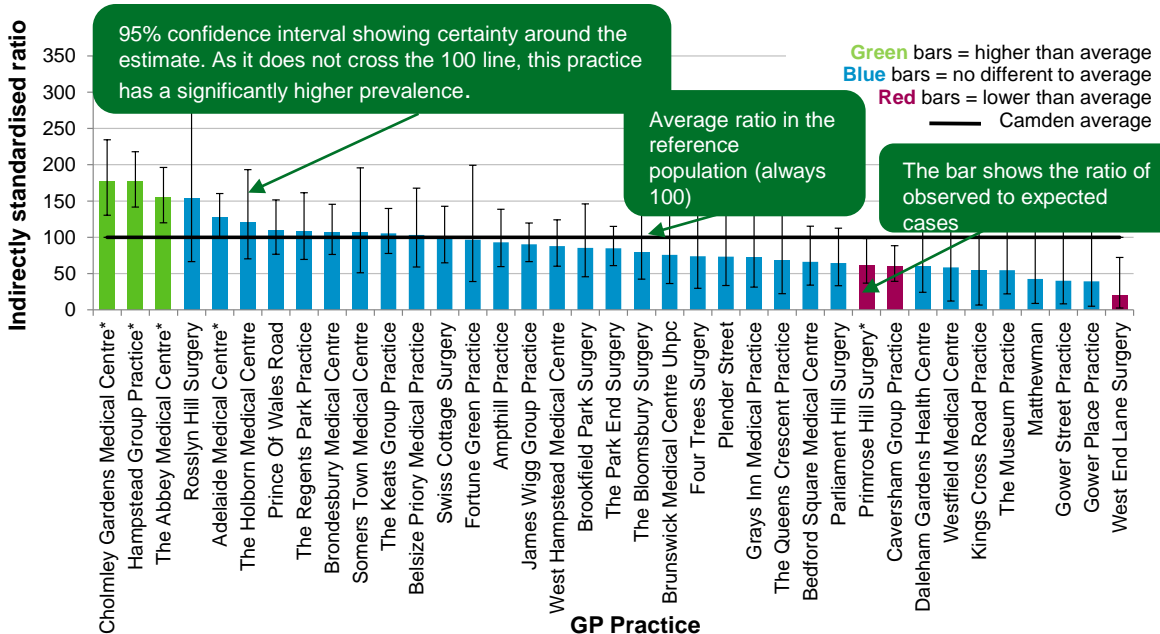
Why is it used?

- These ratios are the number of people diagnosed with each condition, relative to the number of events expected if the practice had the same disease profile and age structure as the Camden average.
- By using the standardised ratios, any differences in disease prevalence because of differences in age structures are taken into account. This allows for direct comparisons to be made (robustly) between practices with different population age structures.

Interpreting the values

- The Camden average is always 100. If the IDSR is over 100, it means that the practice had a higher than expected prevalence of the condition compared to Camden (and this was not due to the practice having an older population, for example). If the IDSR is less than 100, it means the practice had a lower than expected prevalence.
- The size of the IDSR tells how different a practice is from Camden. For example, an IDSR of 150 for a practice show that prevalence is 50% higher than the Camden average. Conversely, an IDSR of 60 indicates that the practice was 40% lower than the Camden average.

Indirectly age standardised ratio of dementia prevalence by GP practice, Camden's registered population aged 65 and over, September 2012



Source: Camden's GP PH dataset, 2012
Note: St. Philips Medical Centre and Camden Health Improvement Practice are excluded

* Practice is associated with one or more care homes

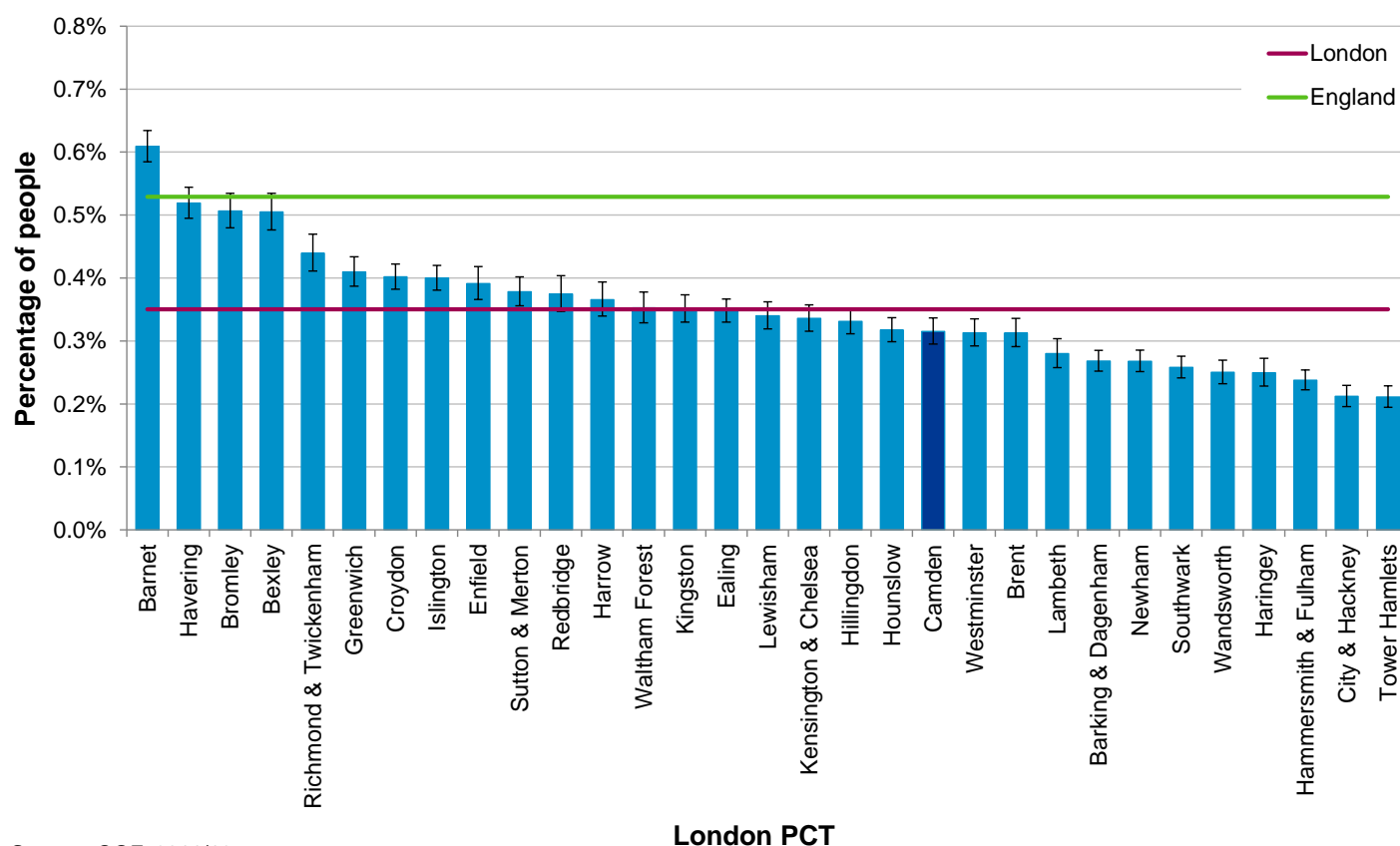
DIAGNOSED AND EXPECTED PREVALENCE OF DEMENTIA

This section describes the prevalence based on people with dementia (all ages and 65+), registered in Camden's Public Health GP dataset or recorded on QOF registers.

8

London PCTs: crude prevalence (all ages)

Prevalence of people diagnosed with dementia, all ages, London PCTs, 2011/12



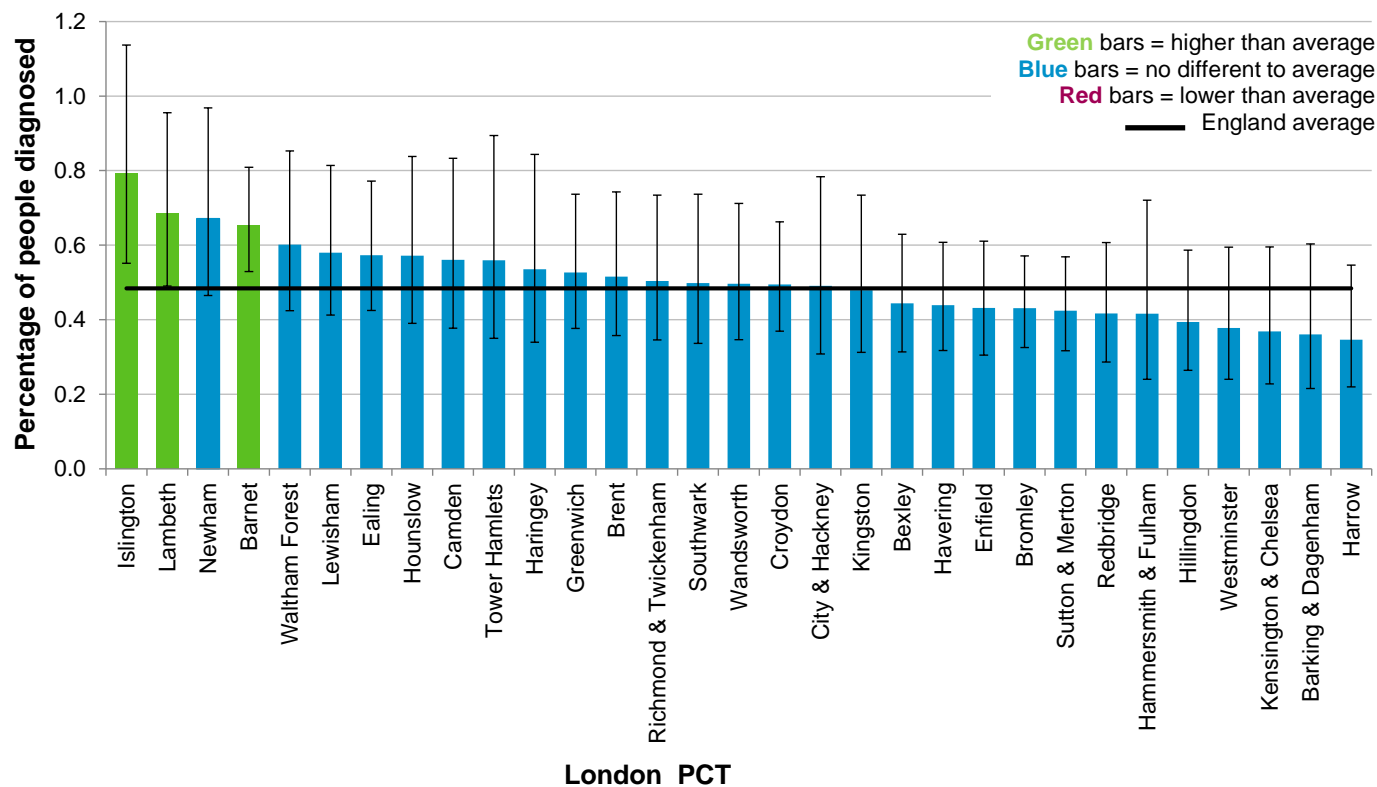
- 810 people in Camden were recorded as having a diagnosis of dementia for the 2011/12 QOF.
- Camden prevalence (0.3%) of people recorded with a diagnosis of dementia in London is significantly lower than the London average.
- The QOF all age prevalence rate does not account for population age structure.

Source: QOF, 2011/12

9

London PCTs: expected versus observed prevalence (ratio)

Ratio of diagnosed: expected dementia cases (65+), London PCT 2011/12

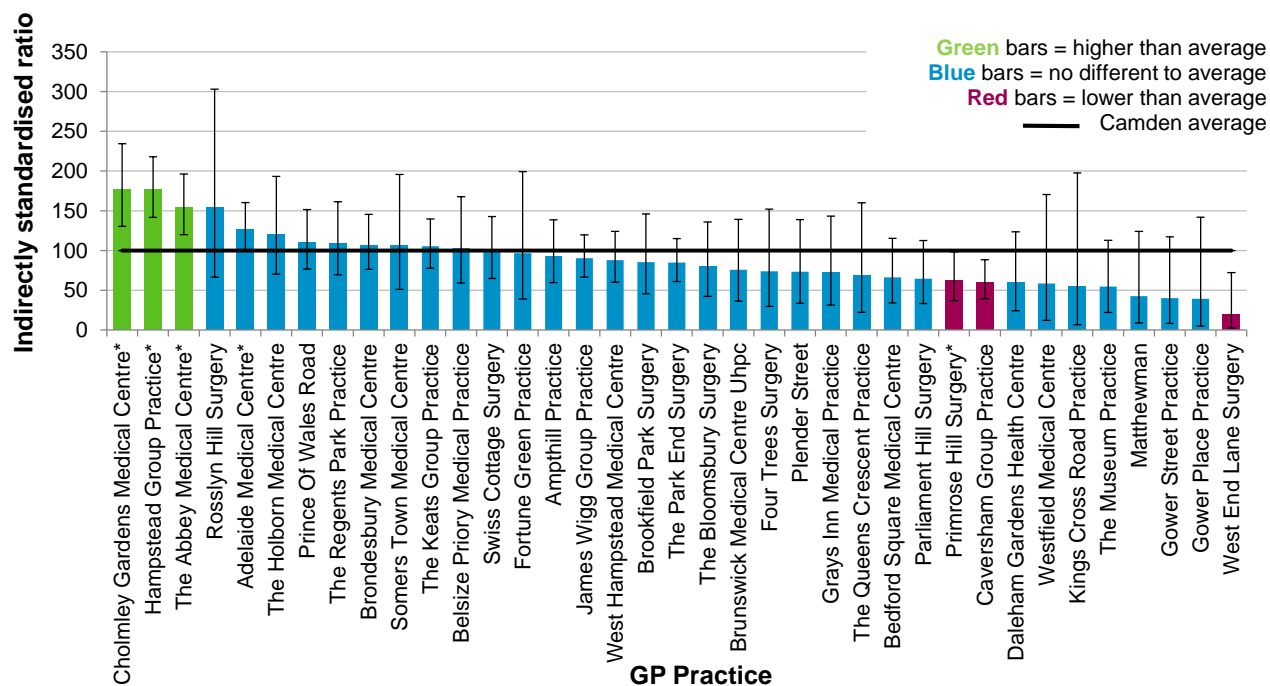


- About 48% of people expected to have dementia are diagnosed in England, but there is variation across areas.
- Islington, Lambeth and Barnet have a statically significant prevalence gap for dementia, meaning that all three areas have significantly higher expected than recorded prevalence of dementia.

Source: QOF, 2011/12 (diagnosed), NEPHO, 2008 (estimated using ONS revised 2010 sub-national population projection)

Camden GP practices: indirectly standardised ratio

Indirectly age standardised ratio of dementia prevalence by GP practice, Camden's registered population aged 65 and over, September 2012



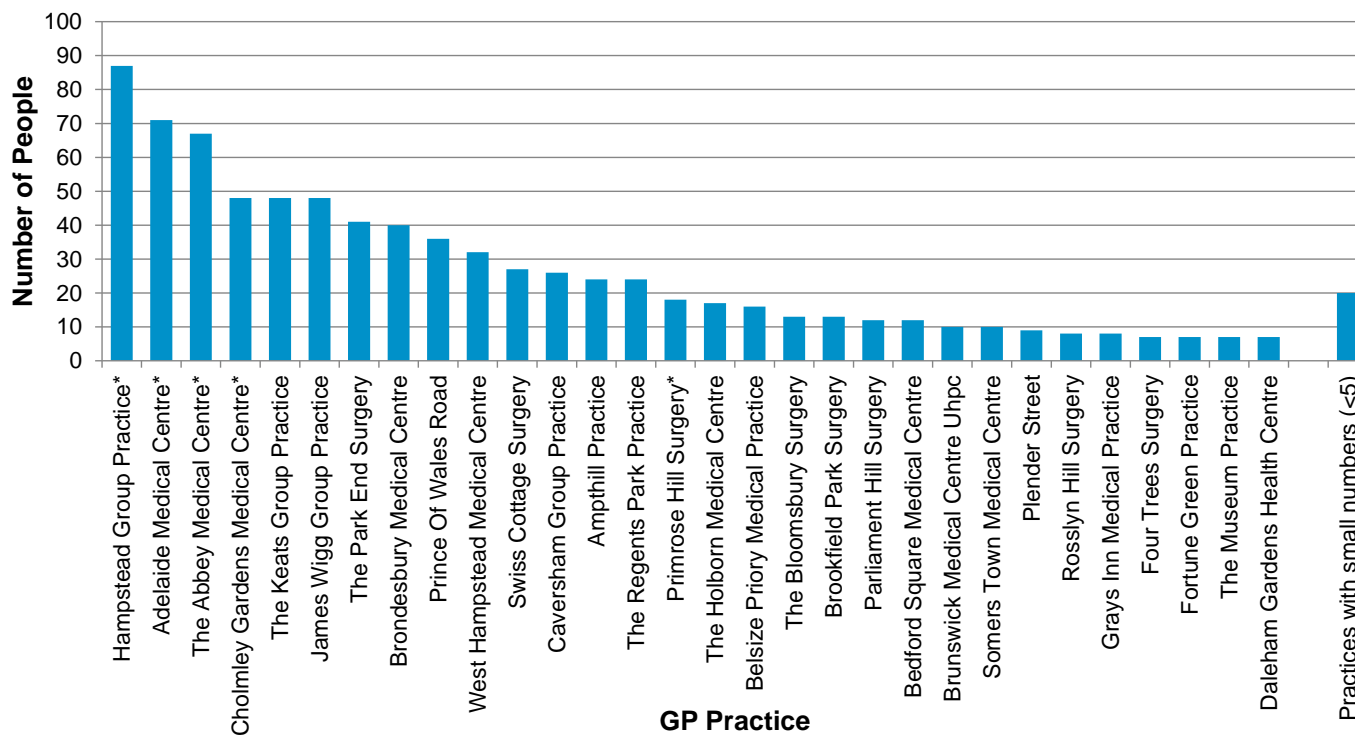
- Diagnosed prevalence of dementia varies by practice, adjusted for the age structure of the population.
- Cholmley Gardens Medical Centre, Hampstead Group Practices and Abbey Medical Centre have a prevalence ratio about 50% higher than the Camden average. Three practices have significantly lower prevalence.
- Some of the variation between practices is likely to be due to the presence of care homes. Five practices associated with care homes (asterisked) experience higher prevalence with three practices, significantly higher than the Camden's average. Variation may be due to differences between practices in terms of other population characteristics and/ or diagnosis and recording practices.

Source: Camden's GP PH dataset, 2012
 Note: St. Philips Medical Centre and Camden Health Improvement Practice are excluded

* Practice is associated with one or more care homes

Camden GP practices: numbers recorded

Numbers of people diagnosed with dementia, by GP practice, Camden's registered population aged 65 and over, September 2012



NOTE: Seven practices have been excluded from this analysis because of small numbers

Source: Camden's GP PH Dataset, 2012

*Practice is associated with one or more care homes

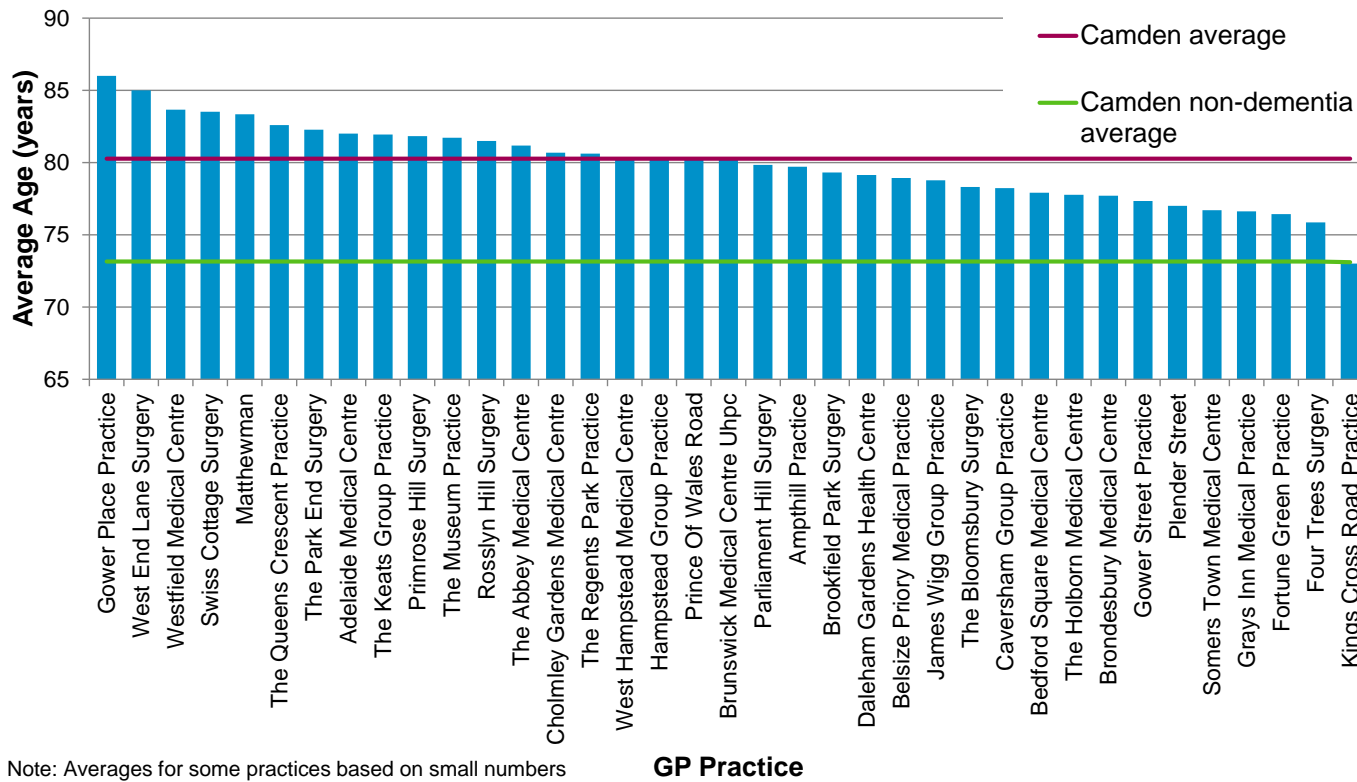
- A diagnosis of dementia, which predominantly affects people aged 65 and over, was recorded for 846 people registered in Camden. 813 (96%) were 65 and over; 33 were under 65.
- The total number of patients registered with a dementia diagnosis aged 65 and over varies by practice, from less than five to 87 at Hampstead Group Practice.

BREAKDOWN OF DEMENTIA DIAGNOSIS BY DEMOGRAPHIC FACTORS

This section describes the demographic characteristics of people aged 65 and over with dementia in terms of age, sex, ethnicity and deprivation.

Camden GP practices: average age

Average age of people aged 65 years and over diagnosed with dementia, by GP practice, Camden's registered population, September 2012

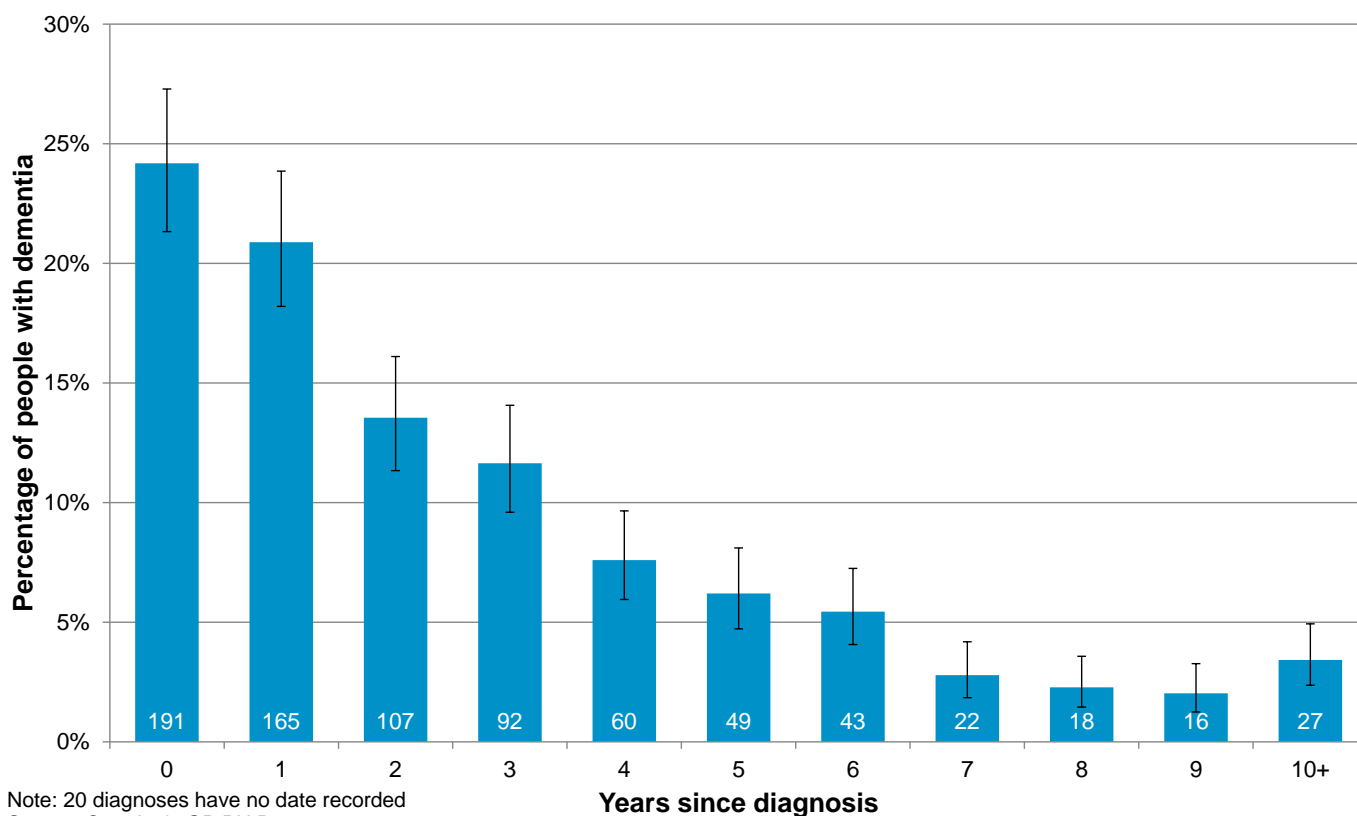


Note: Averages for some practices based on small numbers (<5 diagnoses)
Source: Camden's GP PH Dataset, 2012

- The average age at diagnosis (65 years and over only) across GP practices ranged from 73 to 86 years. The average of people with a diagnosis of dementia for Camden overall was 80 years.
- The overall average age (65 years and over) of the non-dementia population for Camden was 73 years.

Years since diagnosis

Years since diagnosis in people with dementia, Camden's registered population aged 65 and over, September 2012

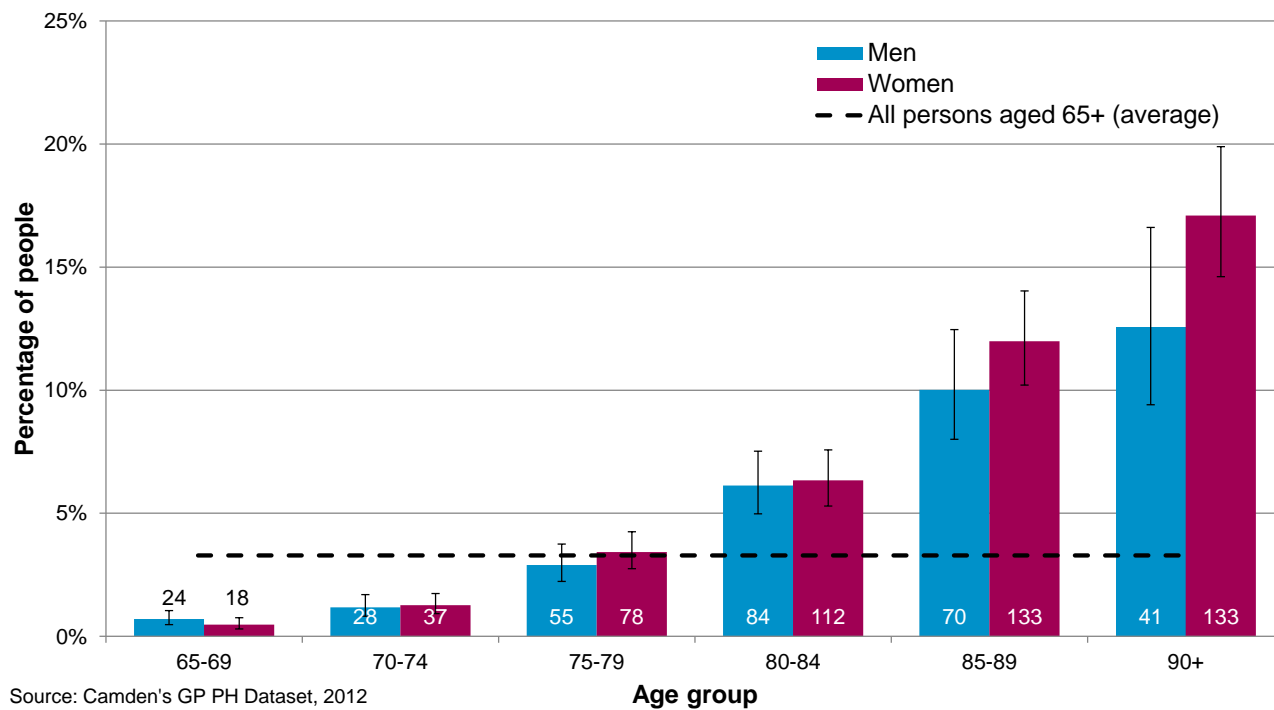


Note: 20 diagnoses have no date recorded
Source: Camden's GP PH Dataset, 2012

- The largest group of people aged 65 and over, by time since diagnosis of dementia, (24%), were diagnosed within the last year (191 people).
- 27 people (3%) have had dementia for 10 years or more.

Differences by age and sex

Prevalence of people diagnosed with dementia by age and sex, Camden's registered population aged 65 and over, September 2012

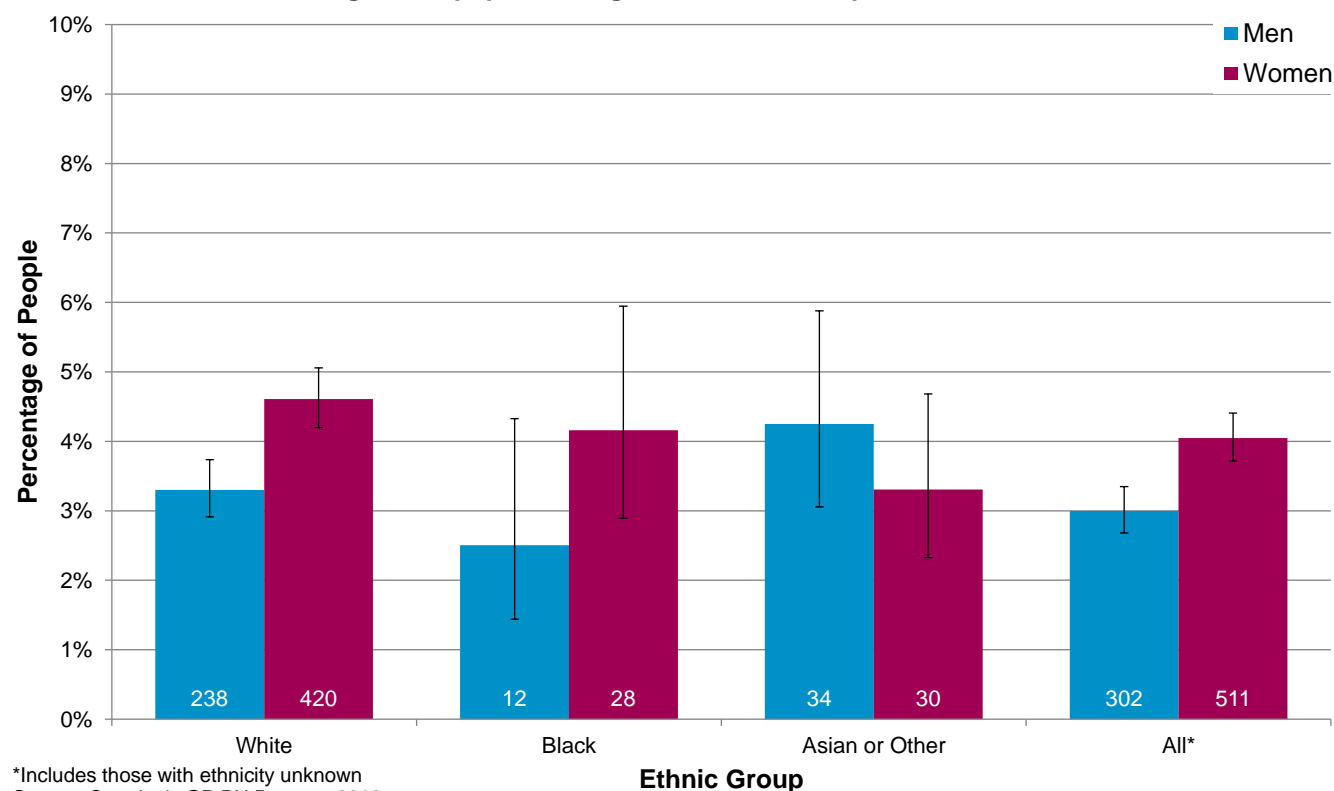


Source: Camden's GP PH Dataset, 2012

- As expected, the diagnosed prevalence of dementia increases with age.
- The average diagnosed prevalence of dementia overall in people aged 65 and over is 3.5%.
- In Camden the diagnosed prevalence for women aged 65 and over is significantly higher than for men. Nationally late-onset dementia is considered to be only marginally more prevalent in women¹ suggesting women in Camden are much more likely to be diagnosed than men.
- Almost two-thirds of people with dementia in Camden aged 65 and over are women. This is due to a contribution of both the higher mortality among men and the higher age-specific dementia prevalence in women.
- 1 Knapp, M. & Prince, M. (2007) Dementia UK. London: Alzheimer's Society

Differences by ethnic group and sex

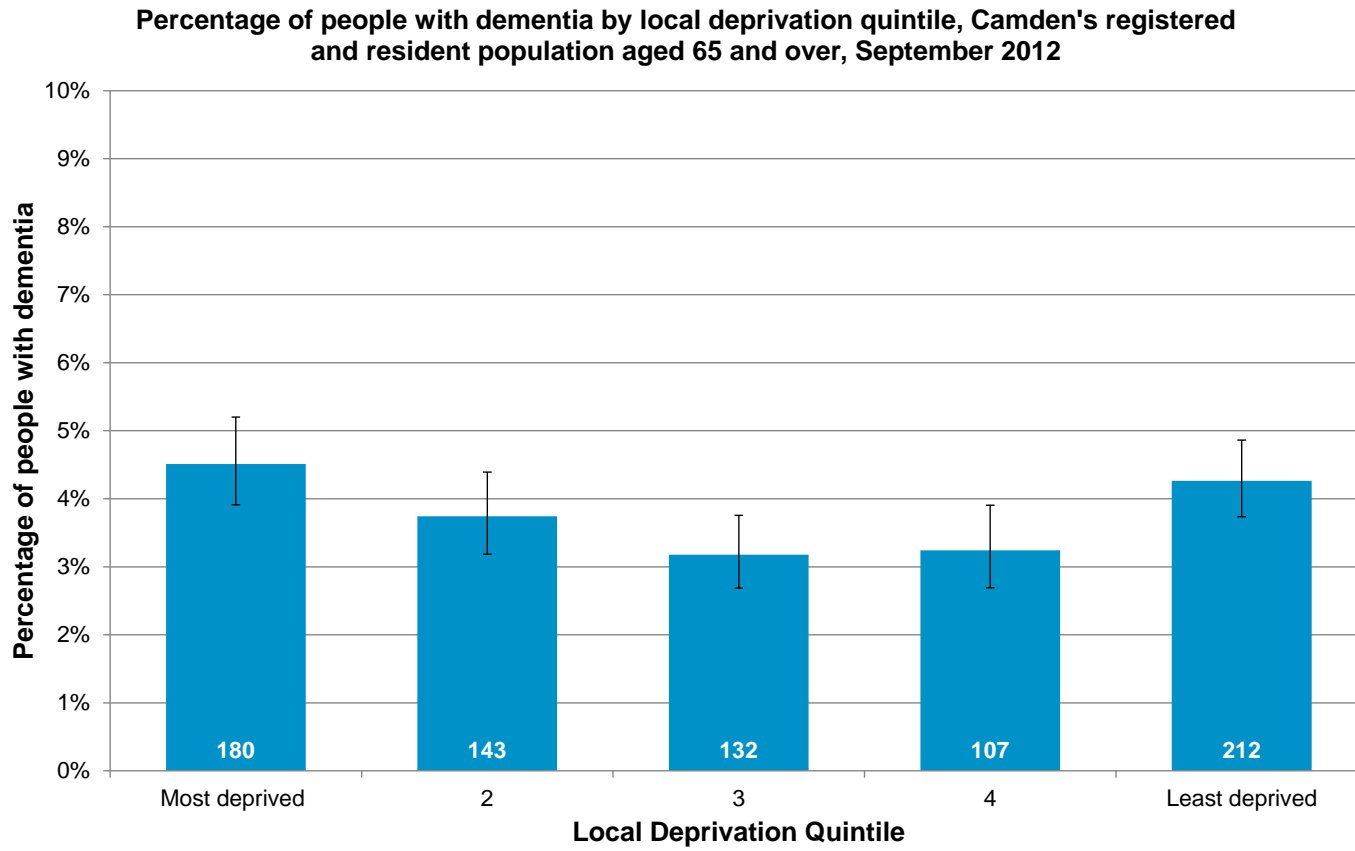
Prevalence of people diagnosed with dementia by ethnic group and sex, Camden's registered population aged 65 and over, September 2012



*Includes those with ethnicity unknown
Source: Camden's GP PH Dataset, 2012

- The diagnosed prevalence of dementia does not differ significantly by ethnic group. This may be due to the smaller numbers among black and minority ethnic groups.
- 13% (104) of people with dementia aged 65 and over, and with their ethnicity recorded by their GP, classify themselves as Black, Asian or Other. This is similar to the proportion for the general population aged 65 and over (13%, 2,859).
- Only 4% of people with dementia do not have ethnicity recorded (compared to the 10% for the general registered population aged 65 years and over).

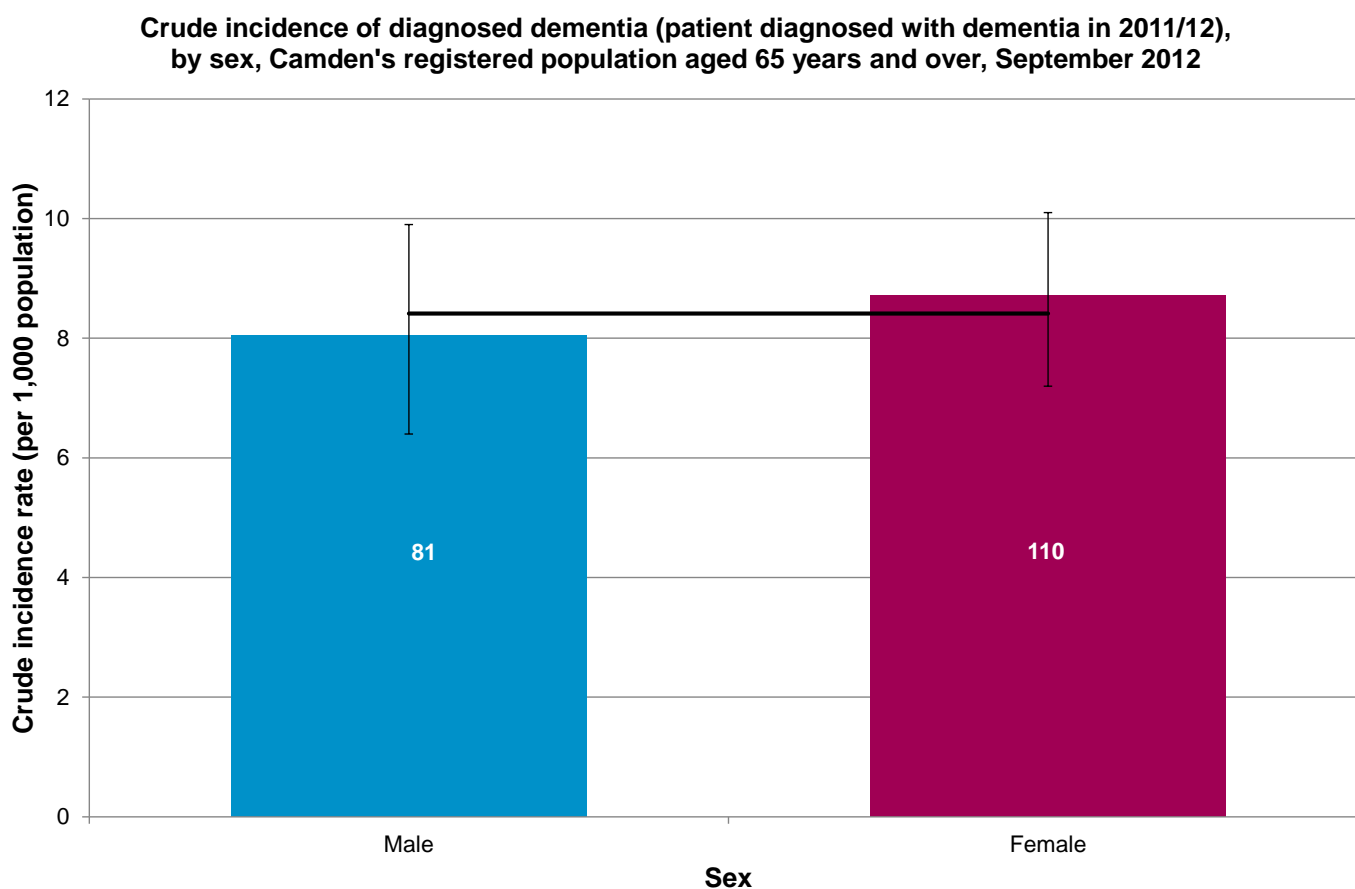
Differences by local deprivation



Source: Camden's GP PH Dataset, 2012
Note: 39 people living outside Camden were not included

- There is no significant difference in dementia prevalence between local deprivation quintiles.

New diagnoses



Source: Camden's GP PH Dataset, 2012

- 191 people aged 65 and over were diagnosed with dementia in 2011/12.
- The crude incidence rate across Camden was 8.4 per 1,000 population aged 65 years and over.
- The incidence rate did not vary significantly by sex (8.7 vs 8.0 for men).

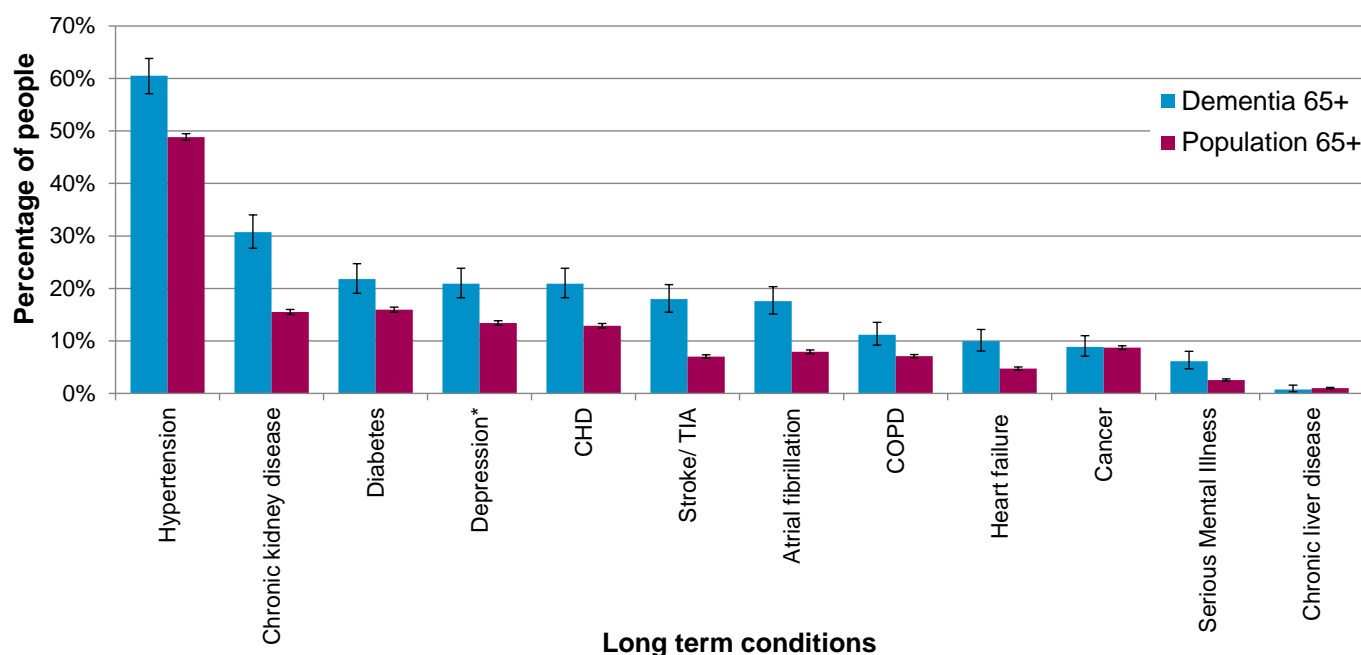
DEMENTIA AND LONG TERM CONDITIONS

This section looks at comorbidity, in terms of long term conditions, of people with dementia.

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Long term conditions: crude prevalence

Prevalence of long term conditions among people diagnosed with dementia compared to Camden's registered population aged 65 and over, September 2012

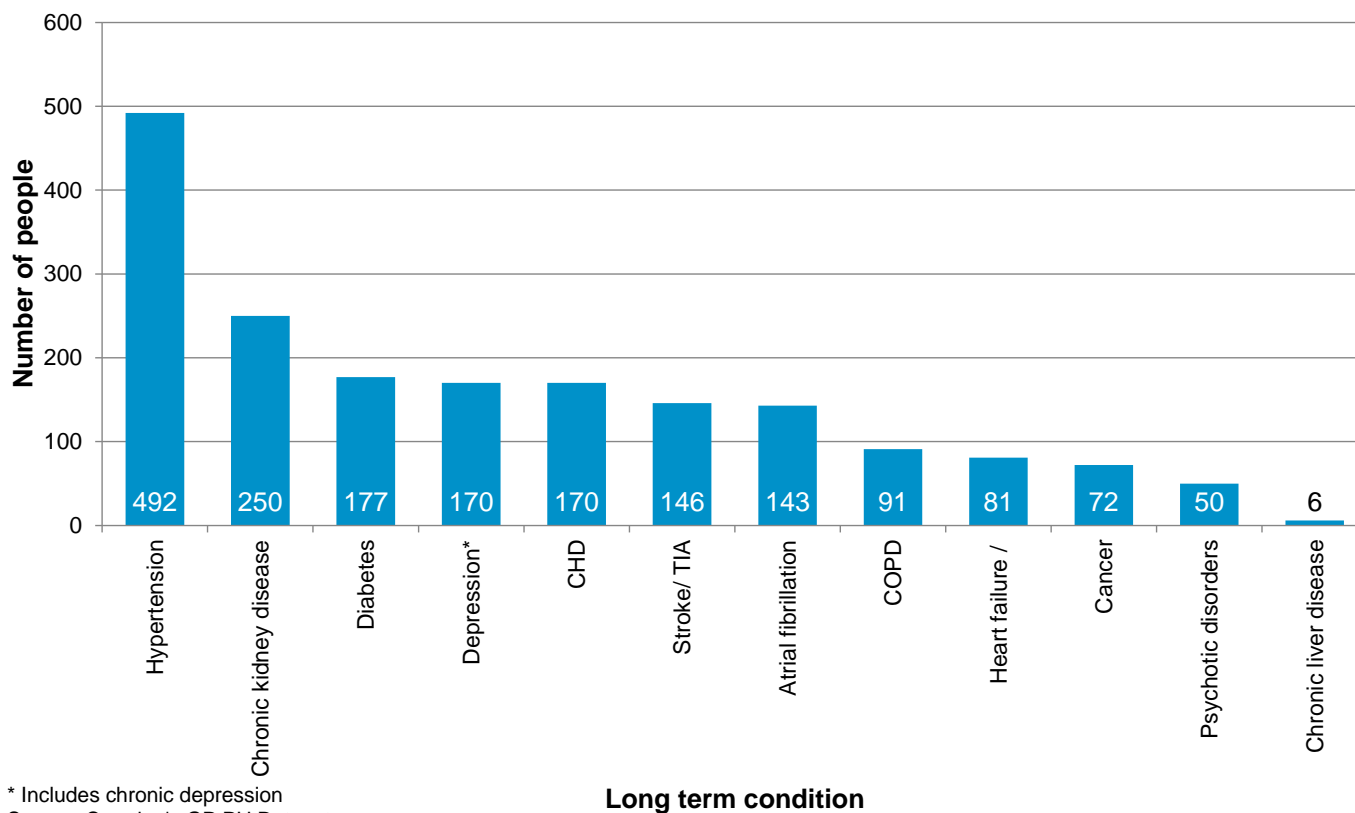


* Includes chronic depression
Source: Camden's GP PH Dataset, 2012

- Diagnosed prevalence rates comparing the presence of 13 long terms conditions in people with dementia to the general population aged 65 years and over are significantly increased for most of the long term conditions except for cancer and chronic liver disease.
- Compared to the general population people with dementia are:
 - 2.3 times more likely to have strokes/ TIAs
 - 2.2 times more likely to have
 - atrial fibrillation
 - 1.8 times more likely to have chronic kidney disease.

Long term conditions: numbers recorded

Number of other long term conditions in people diagnosed with dementia, Camden's registered population aged 65 and over, September 2012

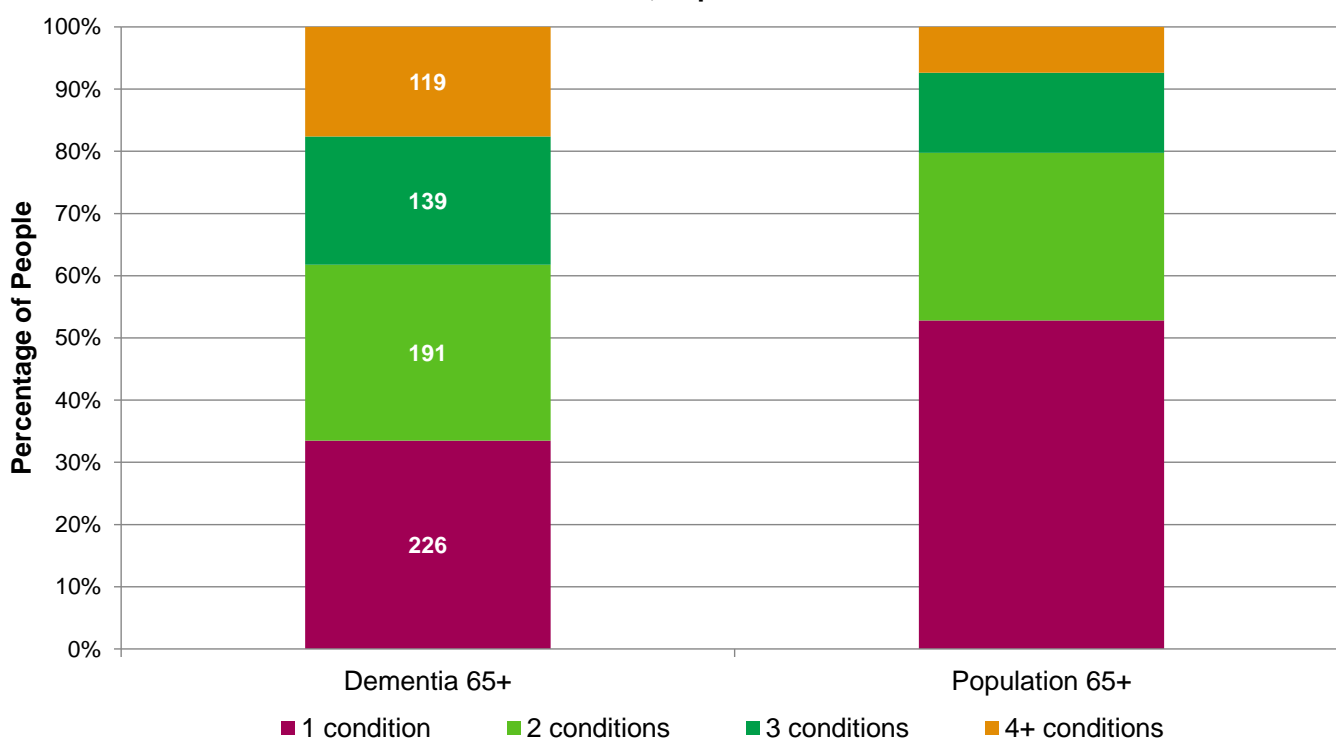


* Includes chronic depression
Source: Camden's GP PH Dataset

- Hypertension is by far the most common long term condition among people with dementia registered with a GP in Camden.
- This is followed by chronic kidney disease, diabetes, depression and coronary heart disease, with 40% diagnosed of both conditions.

Comorbidity

Percentage of people diagnosed with dementia, by number of long term conditions, compared to Camden's registered population aged 65 and over with a diagnosed long term condition, September 2012



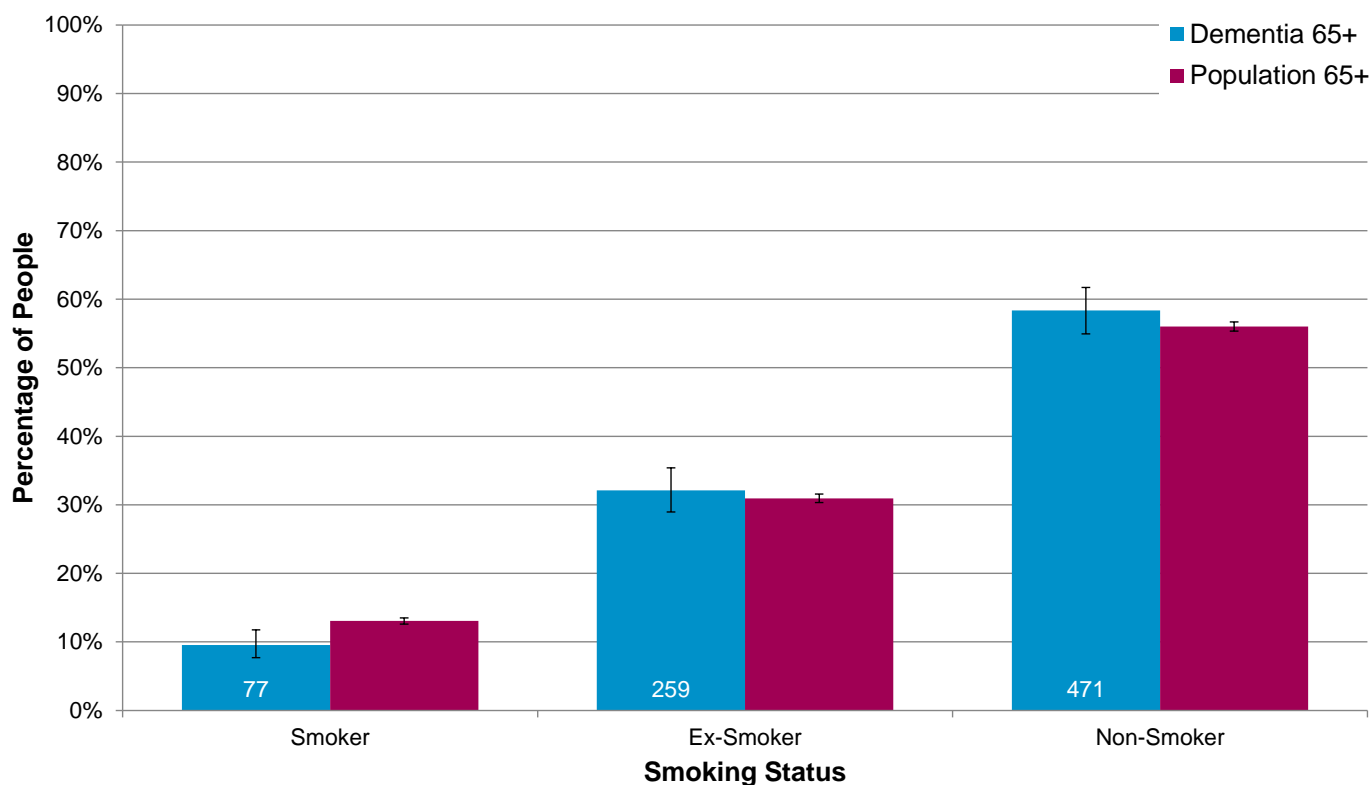
- Among people aged 65 and over with long term conditions (LTCs), people with dementia are significantly more likely to have three and more than four LTCs
- 17% of people with dementia have four or more LTCs compared to 7% of the registered population with a diagnosed LTC

DATA RECORDING AND RISK FACTOR SCREENING

This section compares the smoking status, alcohol consumption, body mass index and blood pressure recording of people with dementia to the general population.

Smoking status

Smoking status in people diagnosed with dementia and a smoking status recorded, compared to Camden's registered population, aged 65 and over, September 2012

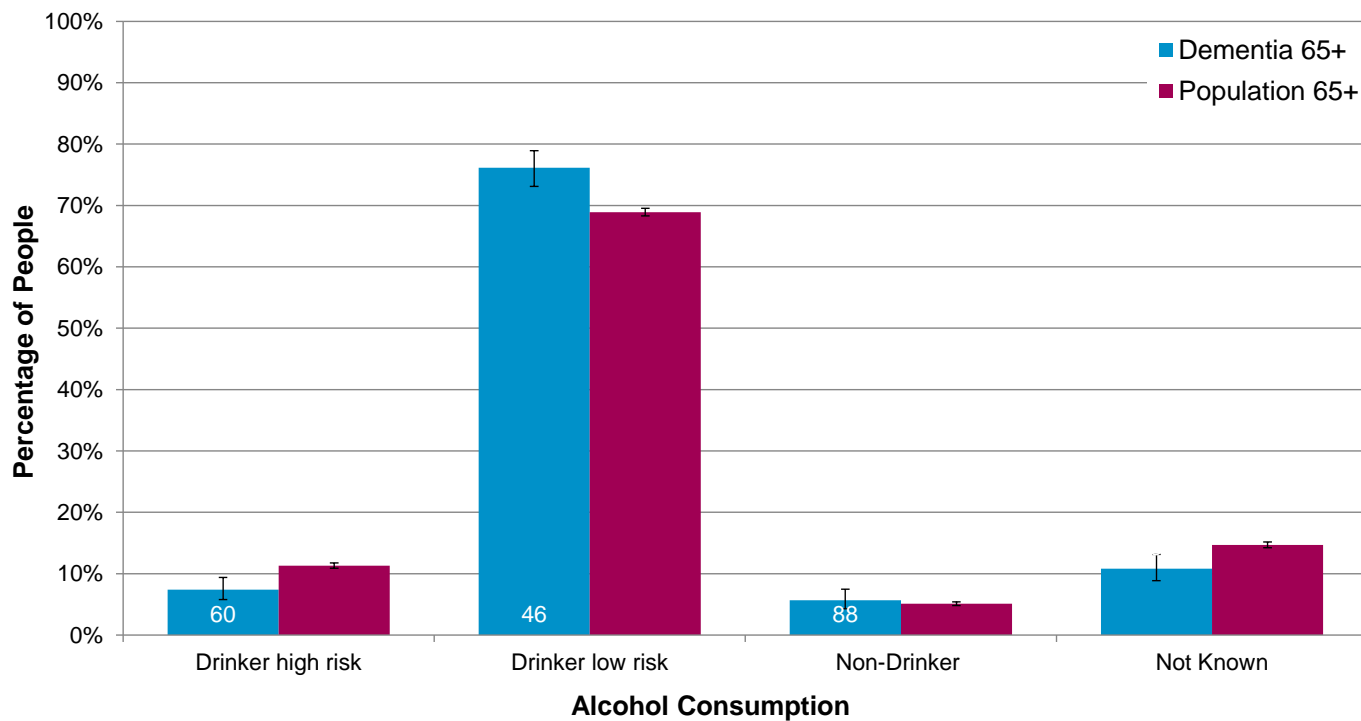


- 9% of people with diagnosed dementia, and with a smoking status recorded, are smokers, whilst 32% are ex-smokers.

Source: Camden's GP PH Dataset, 2012
Excludes 1243 people with no recorded smoking status including 6 people with dementia

Alcohol consumption

Alcohol consumption in people diagnosed with dementia compared to Camden's registered population aged 65 and over, September 2012

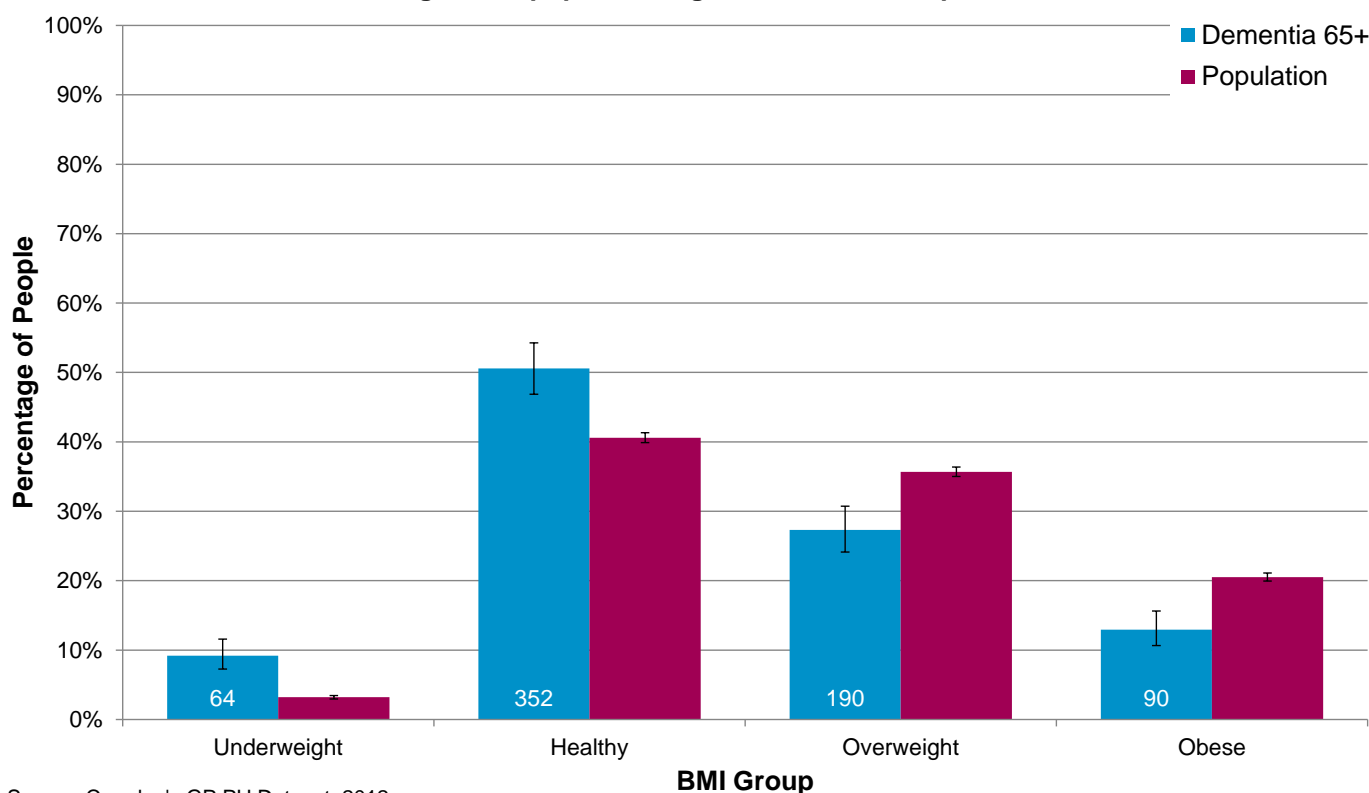


- People with dementia are more likely to be moderate drinkers than the general population aged 65 years or over (73% compared to 68%).
- However, people diagnosed with dementia are less likely to be heavy drinkers than the general population (7% compared to 11%).

Source: Camden's GP PH Dataset, 2012
Note: Information on alcohol consumption was not well recorded.

Body Mass Index

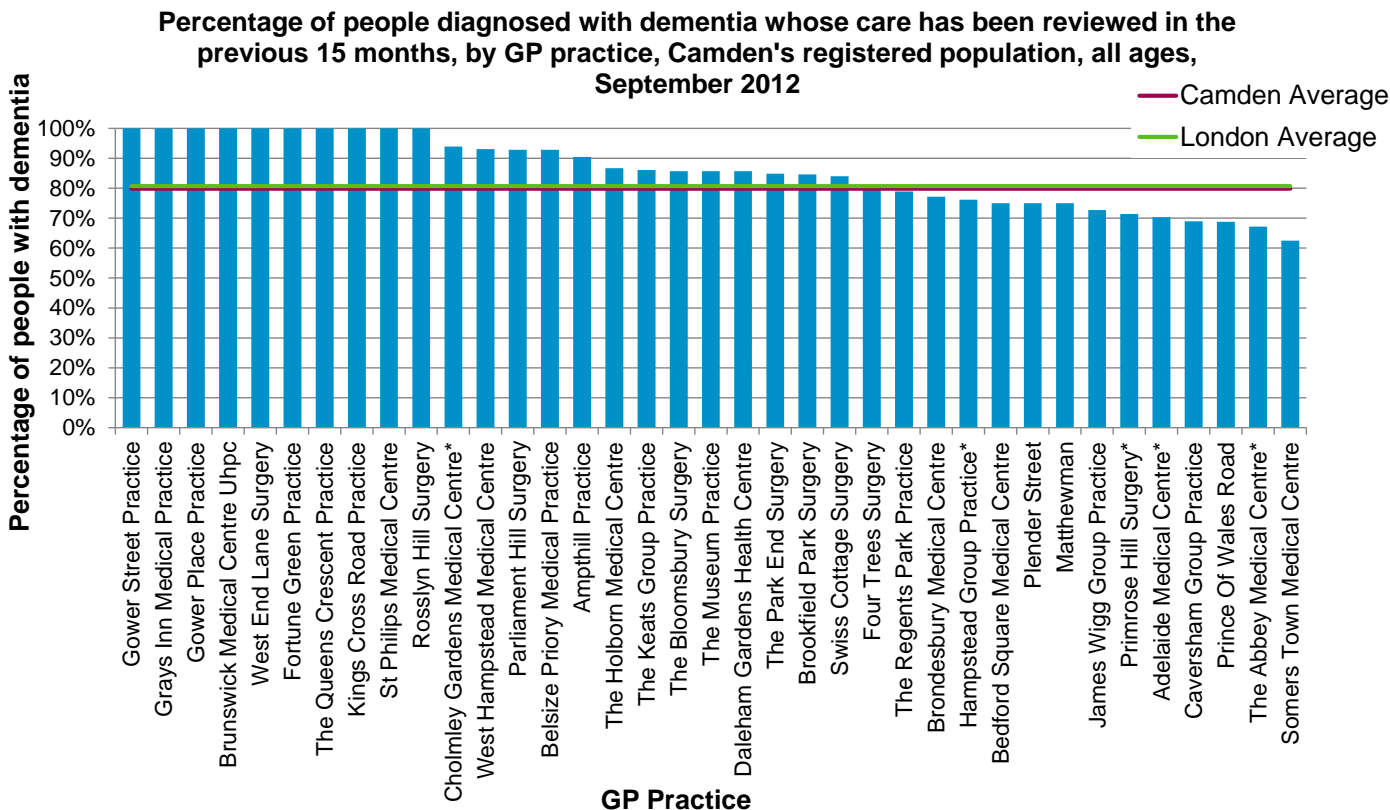
BMI groups in people diagnosed with dementia and a BMI recorded compared to Camden's registered population aged 65 and over, September 2012



- People with dementia are significantly more likely to have a healthy weight for height (51%) compared to the general population (40%).
- In addition, people with dementia aged 65 and over are significantly more likely to be underweight.

Source: Camden's GP PH Dataset, 2012
Excludes 3889 people with no recorded BMI status including 117 people with dementia

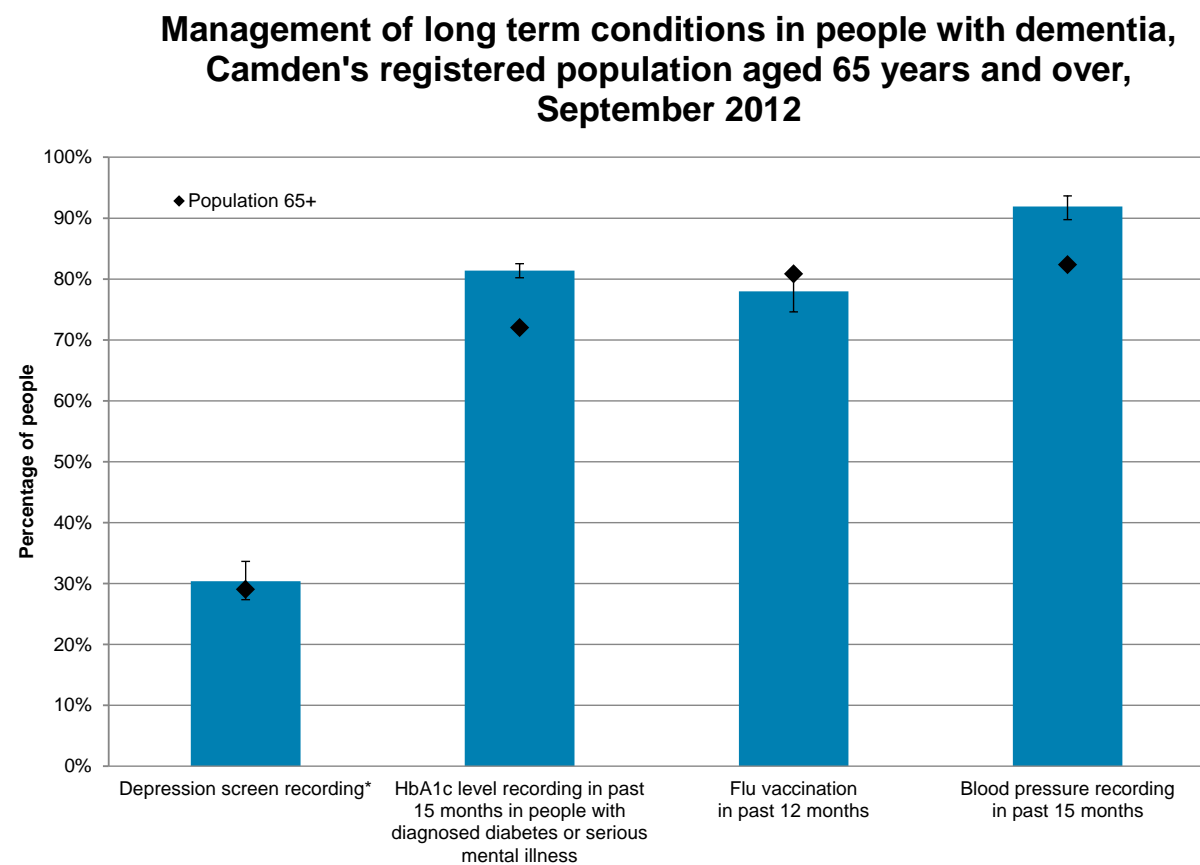
Camden GP practices: review of care (QOF indicator- DEM2)



Source: QOF, 2012
 Note: Of the 810 people on the register, 57 were exception reported
 *Practice is associated with one or more care homes

- 213 (26%) out of an eligible 814 people with dementia in Camden did not have their care reviewed in the previous 15 months.
- The percentage of people with dementia who had their care reviewed in the previous 15 months varies across GP practices in Camden from 63% to 100%, with an average of 82% for Camden.
- The average for Camden is not significantly different to London (80%).

Management and control of long term conditions

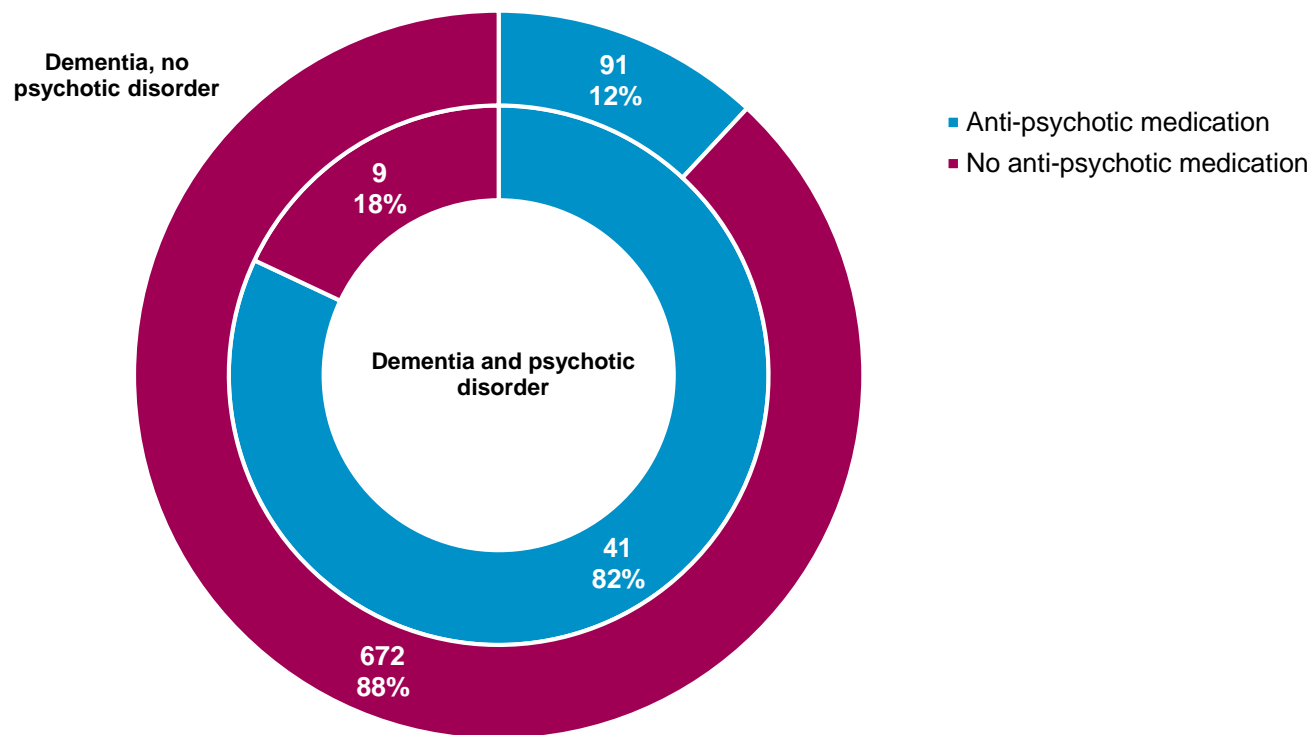


* on or after date of dementia diagnosis
 Source: Camden's GP PH dataset, 2012

- The proportion of people with dementia who were screened for depression (after diagnosis) is similar compared to the general Camden population.
- The proportion of people with dementia and either diabetes or a psychotic disorder who had their blood sugar level (HbA1c) tested or blood pressure recorded is higher compared to the general Camden population.

Prescribing of anti-psychotic medication

Numbers of people diagnosed with dementia prescribed anti-psychotic medication, by presence of psychotic disorder, Camden's registered population aged 65 years and over, September 2012



- Nationally, there is widespread concern at the overuse of anti-psychotic drugs for people with dementia.
- Overall, 18% (9) of people diagnosed with dementia and had a psychotic disorder were not prescribed anti-psychotic medication.
- 12% (91) of people diagnosed with dementia in Camden, with no psychotic disorder recorded, were prescribed anti-psychotic medication.

About Public Health Intelligence

Public health intelligence is a specialist area of public health. Trained analysts use a variety of statistical and epidemiological methods to collate, analyse and interpret data to provide an evidence-base and inform decision-making at all levels. Camden and Islington's Public Health Intelligence team undertake epidemiological analysis on a wide range of data sources.

All of our profiles, as well as other data and outputs can be accessed on the Evidence Hub at: <http://evidencehub.islington.gov.uk>

FURTHER INFORMATION & FEEDBACK

This profile has been created by Camden and Islington's Public Health Intelligence team.

For further information please contact Ester Romeri.

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We would also very much welcome your comments on these profiles and how they could better suit your individual or practice requirements, so please contact us with your ideas.

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