CAMDEN PROFILE
PUBLIC HEALTH INTELLIGENCE

Smoking-related hospital admissions

First edition
August 2013

About this profile

PURPOSE

This public health intelligence profile describes the trends and patterns in smoking-related hospital admissions in Camden.

This work will support and inform:

- London Borough of Camden Councillors and public health teams;
- Camden's clinical commissioning group;
- Individual general practices in Camden.

This profile can be found on the Camden Data website:
http://www.camdendata.info/Pages/Home.aspx

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FURTHER INFORMATION AND FEEDBACK

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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. Smoking-related admissions place a significant burden on health services in Camden. Estimates based on local hospital data suggest that around 4% of all hospital admissions are caused by smoking. The directly standardised rate of smoking-related admissions per 100,000 in Camden is significantly higher than London and England. Continued promotion of smoking cessation interventions in the groups with the highest burden of smoking-related admissions to help people quit smoking and lessen the burden on local health services.

2. People living in the most deprived areas, in the wards Regent's Park, St Pancras and Somers Town and Gospel Oak, and men aged 55-79 account for the largest proportion of admissions for smoking-related conditions. Smoking cessations interventions should be targeted at those most at risk of developing smoking related conditions and those with smoking related conditions to help tackle and help reduce health inequality.

3. COPD (25%) and cardiovascular disease (24%) account for the largest proportion of smoking-related admissions in Camden for women and men respectively**.** It is important that both healthcare professionals and the public are aware of the risk of smoking for those with these long term conditions.

KEY MESSAGES

Smoking related hospital admissions in context

- In 2010/11 Camden was ranked 6th highest out of 33 London boroughs for smoking-related admissions. There were a total of 1,777 smoking-related admissions, equating to a rate of 1,690 per 100,000 population aged 35 and over.
- According to local SUS data, there were a total of 1,640 smoking-related admissions in 2,649 individuals* in Camden's responsible** population in 2011/12 (see page 6 for methods).

Local demographics

- Compared to the Camden average, the level of smoking-related admissions is higher than expected in
    - men (40% higher than the Camden average)
    - people living in the most deprived area (33% higher than the Camden average)
- Overall, men account for two-thirds of all smoking-related admissions, but make up just over half of all individuals contributing to smoking-related admissions.
- The majority of individuals contributing to smoking-related admissions are aged 70+ (52%). Women contributing to smoking-related admissions tends to be higher than for men, reflecting women's higher life expectancy. However, the majority of admissions (once SAFs are applied) are in people aged under 70 and this is similar for men and women. This suggests that people aged under 70 should be targeted for the greatest impact on smoking admissions.

*see page 6 for definitions of smoking-related admissions
**see page 7 for a definition of responsible population, individuals and persons

Key messages (cont)

Local Demographics continued

- At ward level, Regent's Park, St Pancras and Somers Town, and Gospel Oak have a higher than expected level of smoking-related admissions compared to the Camden average taking age into account.

Cause of smoking-related admissions

- Cardiovascular disease (22%), COPD (21%) and other cancers (20%) account for the highest proportions of all smoking-related admissions.
- There are differences between men and women with respect to the most common causes of smoking related-admissions. Cardiovascular disease (24%) and other cancers* (21%) are the most common cause of smoking-related admissions for men. For women, COPD is the most common cause (25%), followed by cardiovascular disease (18%) and other cancers (18%).
- Respiratory disease accounts for the highest proportion of smoking-related admissions in eleven of the Camden wards, ranging from 34% up to 45% of admissions. Cardiovascular disease and all cancers are the most common causes for the remaining seven wards (ranging from 29% to 37%).

Type of admission and repeat admissions

- Emergency and elective admissions account for the same proportion of all smoking-related admissions. However, a higher percentage of individuals (63%) contribute to emergency admissions than elective admissions (37%). This can be explained by the higher proportion of repeat admissions for elective admissions compared to emergency admissions.
- Twenty-seven percent of all individuals contributing to smoking-related admissions are admitted two or more times in a year. This varies by GP practice from 16% at Swiss Cottage Surgery to 46% at Kings Cross Road Surgery.
- Half of smoking-related admissions take place at University College London Hospital (50%), followed by Royal Free (38%).

*Other cancers includes the following: Cervix, Kidney and Renal Pelvis, Larynx, Oesophagus, Pancreas and, Stomach

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 geographical areas (wards and deprivation quintiles) and Camden GP practices, as well as variation by demographic factors such as age and sex, that should be the main point of reflection rather than overall figures for Camden. 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*) that is important, 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 geographical area or a GP practice level with clear identification of areas for improvement is needed.

– Populations not individuals

Epidemiology is about the health of the population, not the individual. In this profile this is either all of Camden's responsible or resident and registered population, a geographical area population or a GP practice population.

– 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. However, small numbers between one and five when relating to the individuals or smoking-related hospital admissions (where the smoking-attributable fraction equals one) have been suppressed for disclosure control.

– Hospital admissions

The analysis in this profile is based on hospital admissions and does not include attendances at Accident and Emergency.

This profile contains admission-based, person-based and individual-based analysis. The admission-based analysis relates to the number of *admissions* to hospital for smoking-related conditions (individuals may be counted more than once in any one year). The person-based analysis relates to the number of *people* admitted to hospital each year for smoking-related conditions (individuals are counted only once in any one year) taking into account smoking attributable fractions. Analysis of individuals refers to the actual number of *people contributing* to smoking-related admissions. The number of individuals is higher than the number of admissions because it is the actual number of persons before any smoking-attributable fractions have been applied.

Further details on how the smoking-attributable fractions were applied and how admissions were selected for person and individual based analysis are provided in the next section under methodology' on pages 5 and 6.

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)

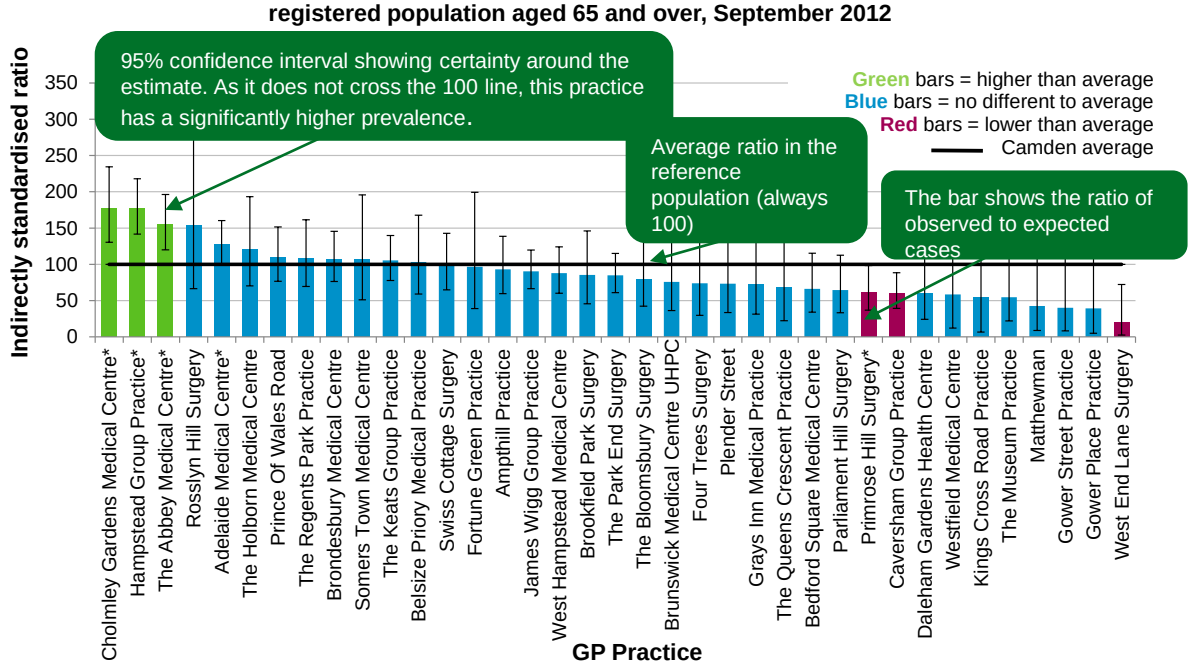
Why is it used?

- 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

SUS dataset and case definition

Secondary Uses Service (SUS) dataset

- The epidemiological analysis in this profile has been undertaken using data extracted from Secondary Uses Service (SUS) by the NHS North Central London Informatics team. SUS is a dynamic database containing all hospital admissions data.

Smoking-hospital admissions: definitions

- **Smoking-related admissions** are based on hospital admission records that contain any diagnosis (ICD10 code) categorised as attributable to smoking (in the primary diagnosis).
- **Smoking-attributable fractions (SAFs)** are used to estimate the number of hospital admissions attributable to smoking. SAF is the proportion of a condition attributable to exposure to smoking in a given population. Smoking-related conditions have attributable fractions ranging from greater than zero to one. A table listing smoking-related conditions, split by age and sex is available from the Health and Social Care Information Centre, Statistics on Smoking England, 2010.These fractions, based on age (over 35) and sex, are applied to each hospital admission with a smoking-related condition in the primary diagnosis field. The total number of smoking attributable admissions is estimated by adding all of these fractions together.

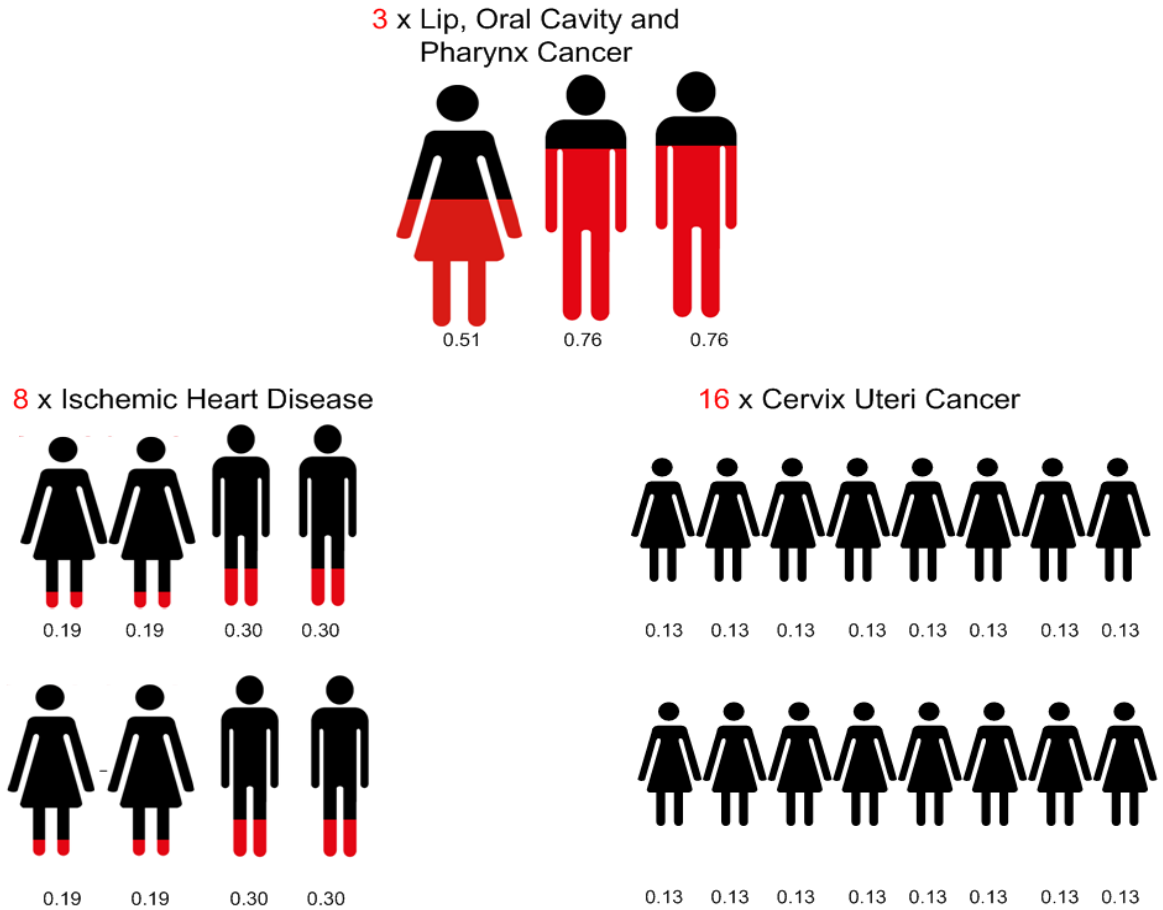


Figure 1: Three examples of two smoking-related hospital admissions calculated using SAFs.
Source: Adapted from original diagram in the Local Alcohol Profiles: Verity Bellamy et al, East Midlands Public Health Observatory

SUS dataset and case definition

Smoking-related hospital admissions: methodology

- This profile estimates the number of:
  - smoking-related hospital *admissions* (with SAFs applied)
  - *people* admitted to hospital for smoking-related conditions (with SAFs applied)
  - *people contributing* to smoking-related admissions, termed individuals in this profile (no SAFs applied).

  The admission-based estimates record multiple admissions from the same individual (i.e. includes people admitted more than once), making this a more useful measure of the burden of smoking-related smoking in a population and so have been used for some of the demographic analyses, specifically deprivation quintiles and ward. Finally, age and sex breakdowns have been provided at an individual level before SAFs have been applied.

- To calculate the number of smoking-related hospital *admissions* SAFs were applied to all SUS hospital admission records that contained a diagnosis (ICD10 code) categorised as attributable to smoking in the primary diagnosis. The age and sex specific SAFs used in this profile are those in the NHS Information Centre method. For more information on how this is calculated, please see: http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/smoking/statistics-on-smoking-in-england-2010-%5Bns%5D

- To calculate the number of *person-based* smoking-related admissions, individuals' main admissions were selected based on their NHS number (where present). Admissions with the largest SAF were selected. If there was more than one admission with the same high SAF then the admission with the earliest start date was selected. If there were still two or more admissions, the admission with the ICD10 code in the lowest diagnostic position was used. This is based on the methodology for person-based analysis used by the North West Public Health Observatory described in the Local Alcohol Profiles for England 2012, which is based on equivalent analysis for alcohol-related admissions. See details at http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/smoking/statistics-on-smoking-in-england-2010-%5Bns%5D. The SAFs were then summed to give the total number of person-based smoking-related hospital admissions.

- To calculate the smoking-related hospital admissions (with no SAFs applied) the main hospital admission was selected for each individual (as described above).

- Smoking prevalence used to calculate the SAFs is based on London smoking prevalence by sex and age, adjusted for Camden's overall smoking prevalence. London smoking prevalence is used because prevalence by sex and age is not available at local level. The data on smoking prevalence are taken from the Integrated Household Survey April 2011 to March 2012, available from Public Health England: http://www.tobaccoprofiles.info/

Populations

- The population used in these analyses is predominantly Camden's responsible population. This is the population that is registered with a GP practice in Camden or is not registered with a GP but resides in the borough. The registered population is used for analysis by GP practice. Ward and deprivation analysis is based on the registered and resident population. Ethnicity analysis is based on the resident population. This is because it was not possible to get the breakdown of the responsible population denominator by ward or ethnicity,

SUS dataset and case definition

Populations (cont.)

- Where rates, ratios, or percentages for Camden's responsible population have been calculated we have used the registered population as a denominator. This will slightly overestimate the rates. Ratios for Camden GP practices were calculated using the registered population for each practice as a denominator. For analysis by ward and deprivation quintile, registered and resident population data was extracted from Open Exeter and used as the denominator for calculating indirectly standardised ratios. ONS census data are used as denominator for the analysis of resident population by ethnicity.

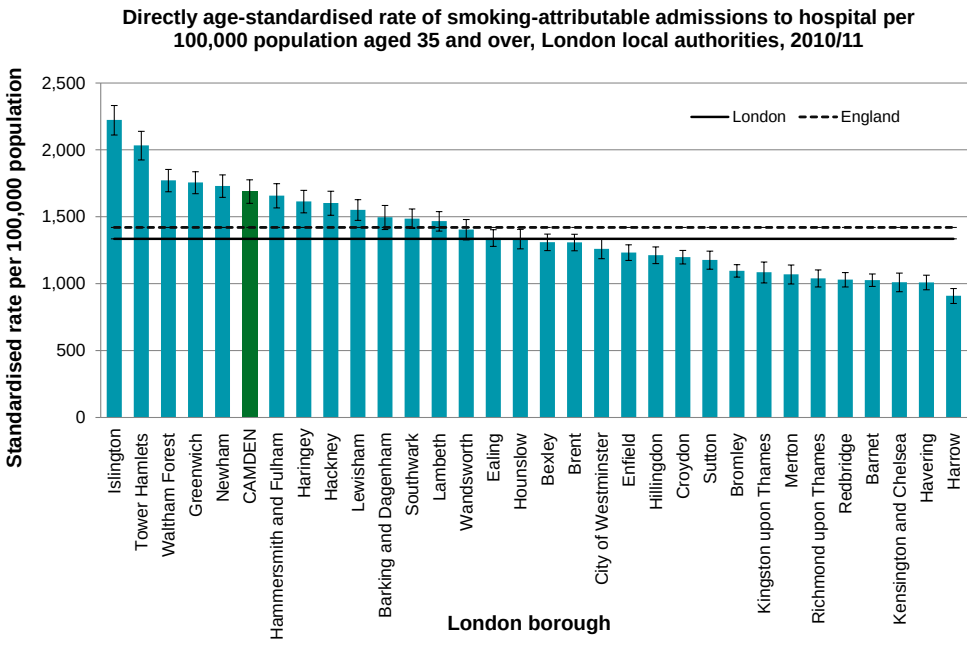
Data Quality

- The SUS data extract provided by NCL Informatics include hospital admissions for the responsible populations of the primary care trusts (PCT) in North Central London (NCL) only. This will result in a slight underestimate of admissions for Camden's resident population as it does not include people living in Camden but registered with a PCT outside of NCL.
- Fewer than 5% (n=130) of hospital admission records with a smoking-related code in Camden's responsible and/or resident population were missing an NHS number which means that it is not possible to tell whether some of these were repeat attendees. This will mean that the percentage of people who re-attend is likely to be slightly underestimated.
- The smoking-attributable fractions (SAFs) are those used in the NHS Information Centre method. For more information on how this is calculated, see: http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/smoking/statistics-on-smoking-in-england-2010-%5Bns%5D.The SAFs take into account the level of smoking at borough level and the relative risk of acquiring smoking-related conditions (see the NHS Information Centre method above). Taking age and sex-specific smoking prevalence into account increases the precision of the SAFs. Both smoking prevalence and relative risks are estimates with some degree of uncertainty, however, and this uncertainty may not be fully reflected in the confidence intervals. Further, factors such as deprivation and ethnic group may not be reflected when applying Camden's smoking prevalence to smaller areas such as ward and GP practice. Therefore, the level of smoking attributable admissions at GP practice and ward level may be slightly underestimated in e.g. deprived areas.

SMOKING-RELATED HOSPITAL ADMISSIONS: OVERVIEW

The analysis presented in this section relates to the number of admissions for smoking attributable conditions. Some people will have more than one smoking-related admission within a year. The number of admissions is based on the sum of fractions attributable to smoking. See methodology section on page 6 for further details.

Smoking-related hospital admissions by London LA

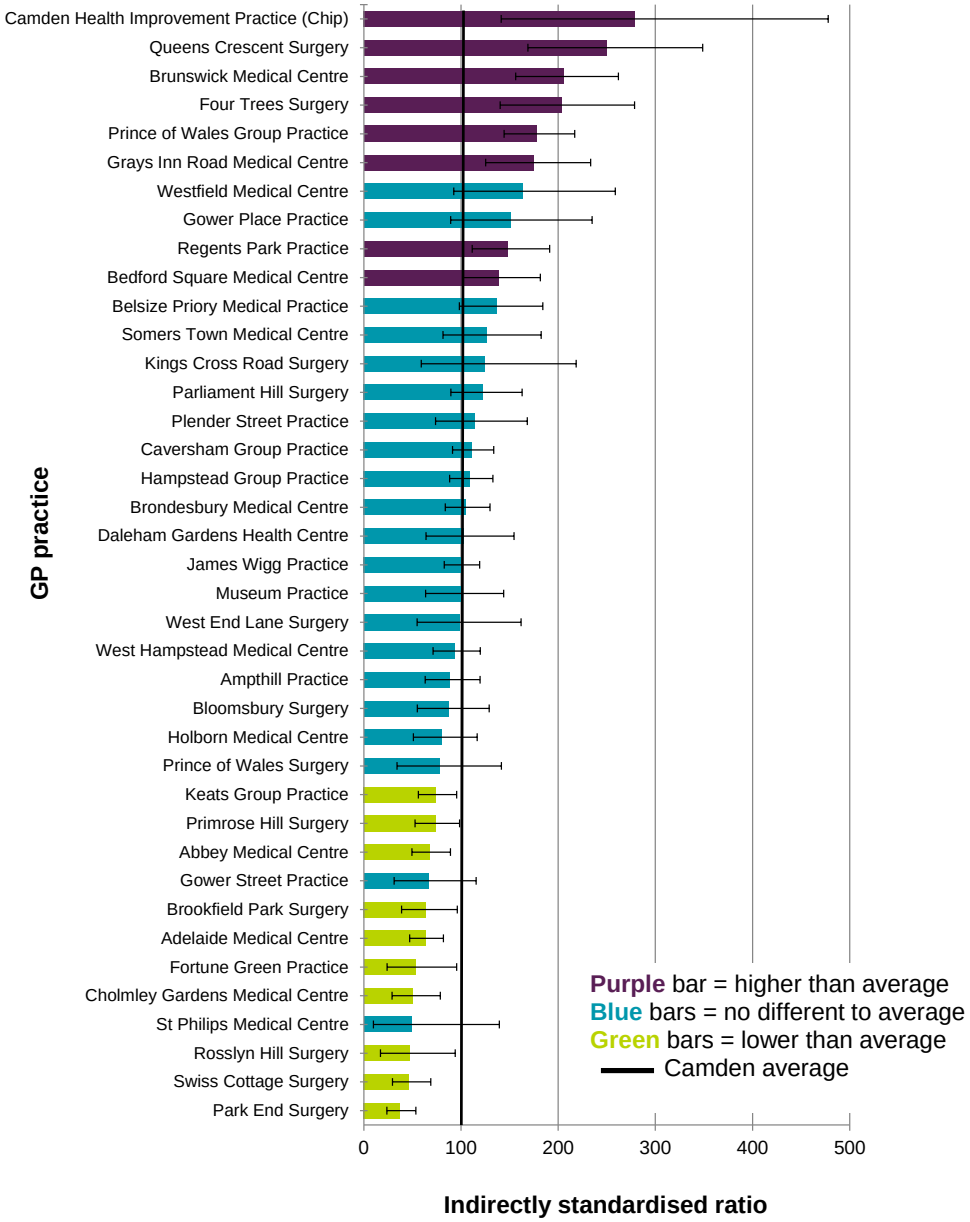


Source: Local Tobacco Control Profiles, LHO (2013)

- Based on nationally available data, there were 1,777 smoking-related admissions in Camden in 2010/11 (a rate of 1,690 per 100,000 resident population).
- Camden had the 6th highest rate of smoking-related hospital admissions in London. The rate was significantly higher than the rate for London (1,334) and England (1,420).
- Based on local hospital data for 2011/12 there were 1,640 smoking-related admissions in Camden's responsible population.
- Note that the national and local figures are not directly comparable due to the different populations used.

Smoking-related admissions by GP practice

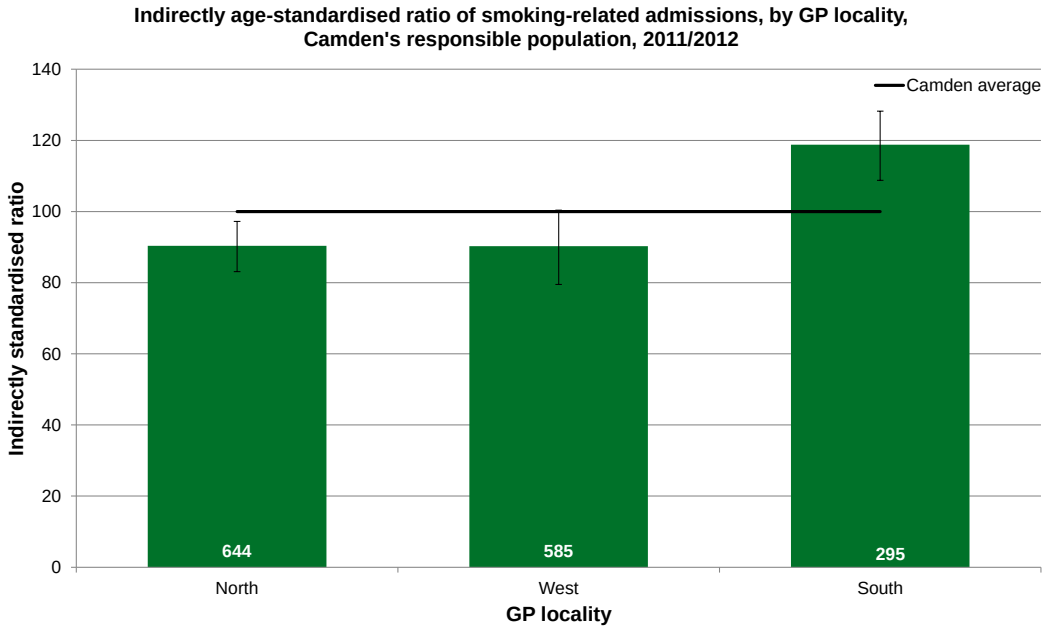
Indirectly standardised ratio of smoking-related admissions by GP practice, Camden's responsible population, 2011/12



Note: This analysis relates to number of smoking -related admissions (some people will have more than one admission in a year). **Source**: SUS, 2012 (admissions); Open Exeter, 2011 (population denominator)

- The smoking related-admissions vary significantly across practices.
- Eight practices have significantly higher admissions than the Camden average and ten have lower admissions.
- The Camden Health Improvement Practice have admissions nearly three times higher than the average.

Smoking-related admissions by GP locality



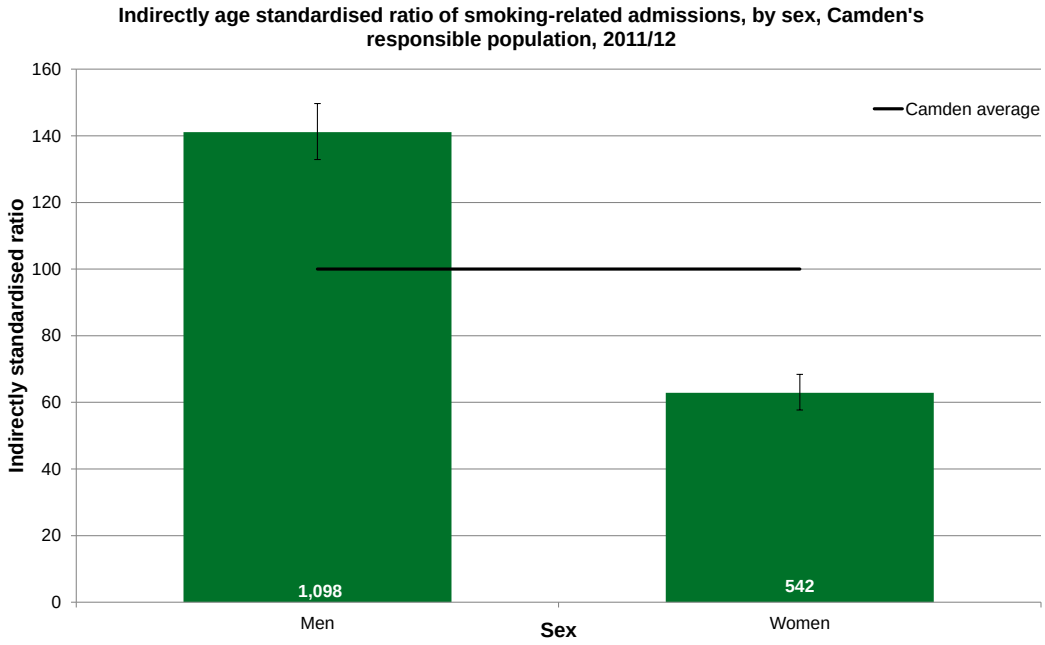
- The South locality has a significantly higher level of smoking-related admissions compared to the Camden average, taking age into account (19% higher than the Camden average adjusted for age).
- The North locality has a lower level of admissions than expected (10% lower).

Note: This analysis relates to the number of smoking-related admissions (some people will have more than one admission within the year). One practice is not included in this analysis as it does not belong to a locality. **Source:** SUS, 2012 (admissions); Open Exeter, 2011 (denominator)

SMOKING-RELATED HOSPITAL ADMISSIONS: DEMOGRAPHICS

The analysis presented in this section relates to both the number of people admitted for smoking-related conditions and the number of smoking-related admissions. Analysis based on people involves applying smoking attributable fractions (SAFs) to an individual's main admission. In addition, some of the analysis is based on individuals, that is, the number of people contributing to smoking-related admissions without applying SAFs. See methodology section on page 6 for further details.

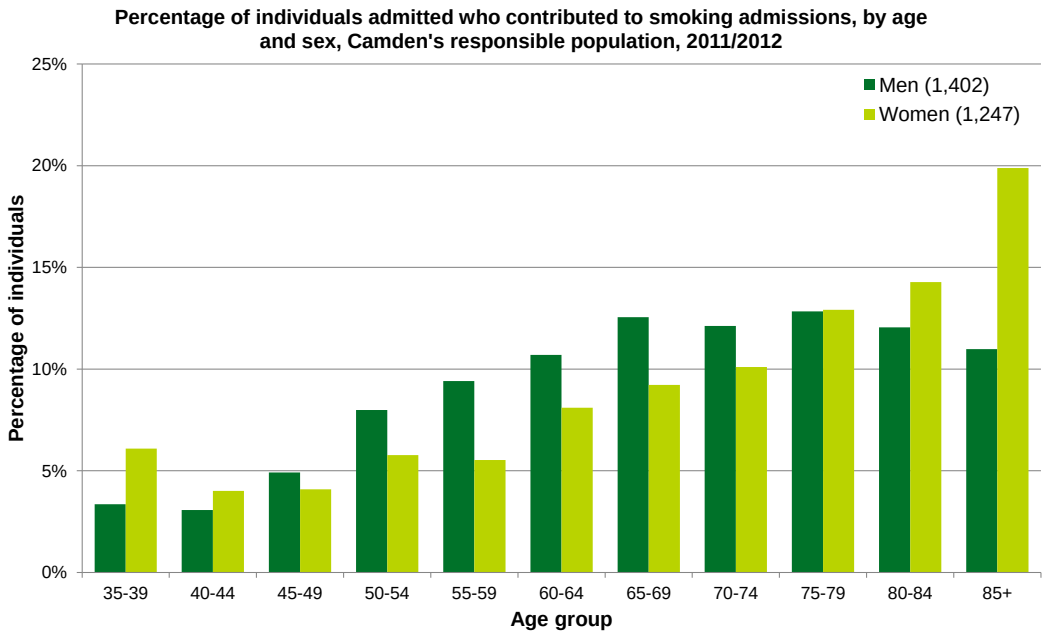
Smoking-related hospital admissions by sex



- Men account for 67% of smoking-related admissions in 2011/12 (about 1,100 admissions).
- Standardised for age, men in Camden are 41% more likely than the average (both sexes) to be admitted for smoking-related conditions. In contrast, women are 37% less likely to be admitted than the average.

Note: This analysis relates to number of smoking-related admissions (some people will have more than one admission in a year).
Source: SUS, 2012 (admissions), Open Exeter, 2011 (denominator).

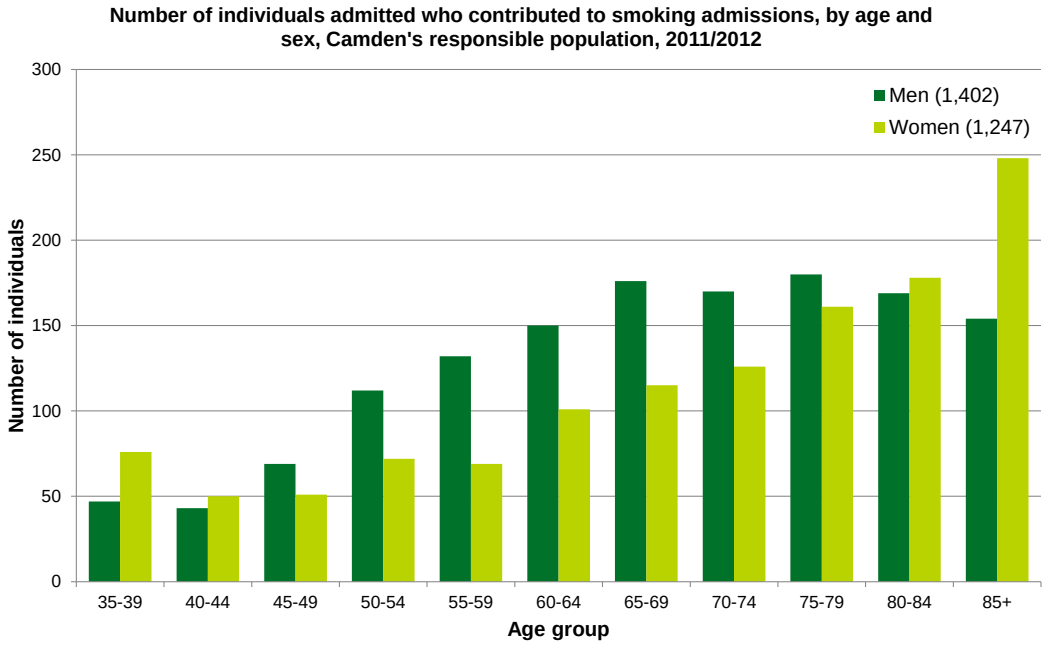
Smoking-related hospital admissions by age and sex: percentage of individuals



- The age distribution for smoking-related admissions is different for men compared to women.
- The percentage of women contributing to smoking admissions shows a linear increase with age.
- In contrast, the percentage of men contributing to smoking admissions increases with age until the age group 65-69 and then in older age groups represents a similar proportion.
- Overall, thirty-seven percent of individuals contributing to smoking-related admissions are aged under 65, but they contribute 48% of admissions.

Note: Percentages are based on the total number of people admitted for smoking-related conditions (people are counted only once within the year). **Source:** SUS, 2012

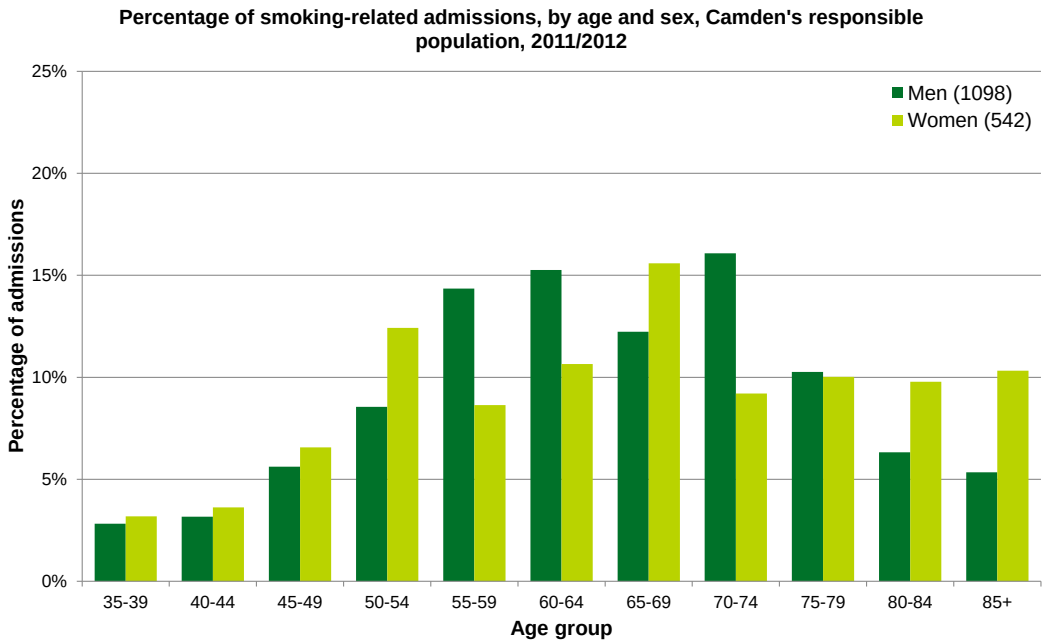
Smoking-related hospital admissions by age and sex: number of individuals



Note: Numbers are based on the total number of people admitted for smoking-related conditions (people are counted only once within the year).
Source: SUS, 2012

- Overall, the number of men contributing to smoking admissions is higher than women in each age group apart from 35 to 44 and 80+.
- There were about 2,600 individuals contributing to smoking-related hospital admissions during 2011/12. Just over half were men (53%, about 1,400).
- There were over 800 men and 800 women aged 65 and over who were admitted for smoking-related conditions. The equivalent figures for the age group 45-64 were about 500 men and 300 women.

Smoking-related hospital admissions by age and sex: percentage of admissions

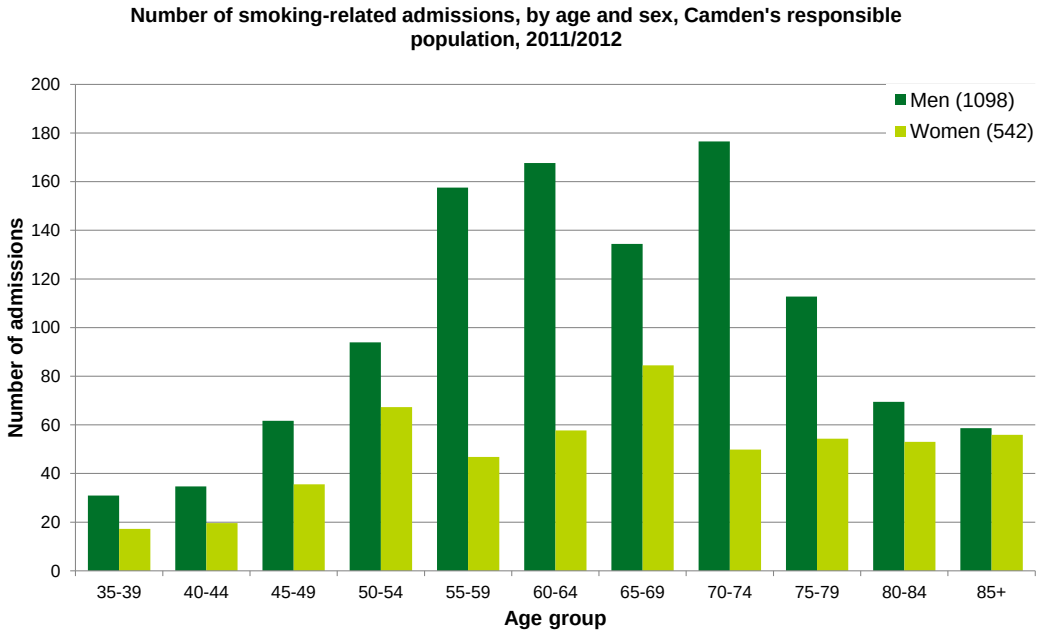


Note: This analysis relates to the number of smoking admissions (some people will have more than one admission within one year).
Source: SUS, 2012

*See page 6 for more information on smoking attributable fractions (SAFs)

- Overall, the age distribution of smoking-related admissions shows middle-aged people account for a higher proportion of admissions.
- While men make up slightly more than half of individuals admitted for smoking-related conditions, they contribute 67% to these admissions once age and sex specific SAFs are applied.
- This is in contrast to the age distribution of individuals above (before SAFs have been applied), which shows that most people contributing to these admissions tends to be in those age aged 65+.

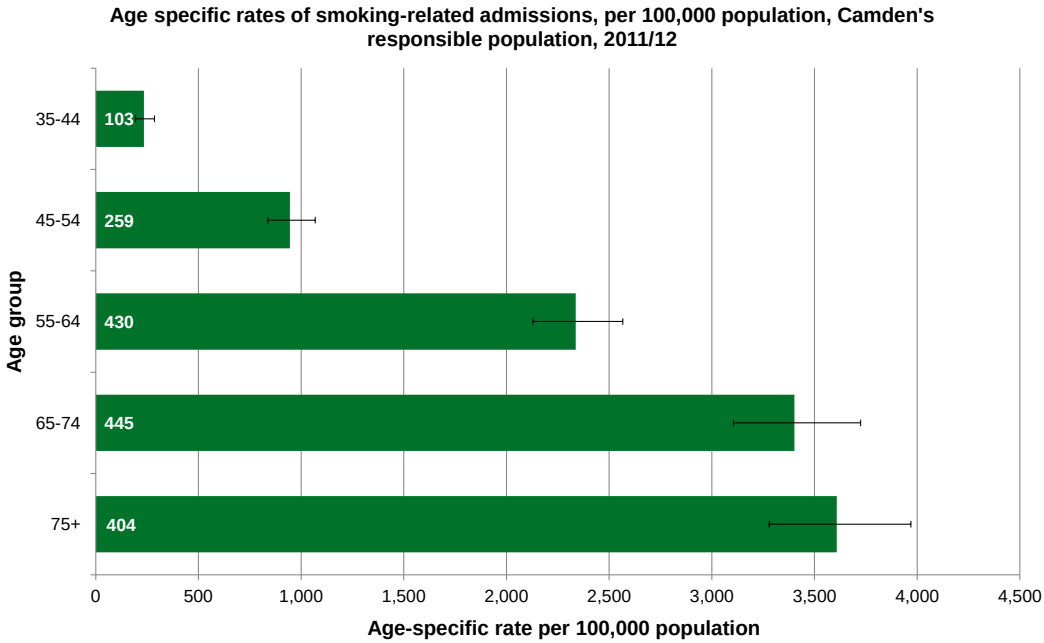
Smoking-related hospital admissions by age and sex: number of admissions



- The number of smoking-related admissions is higher in every age group for men compared to women.
- There are about 750 men aged 55 to 79 and about 300 women aged 55 to 79 contributing to smoking related admissions.

Note: This analysis relates to the number of smoking admissions (some people will have more than one admission within one year).
Source: SUS, 2012

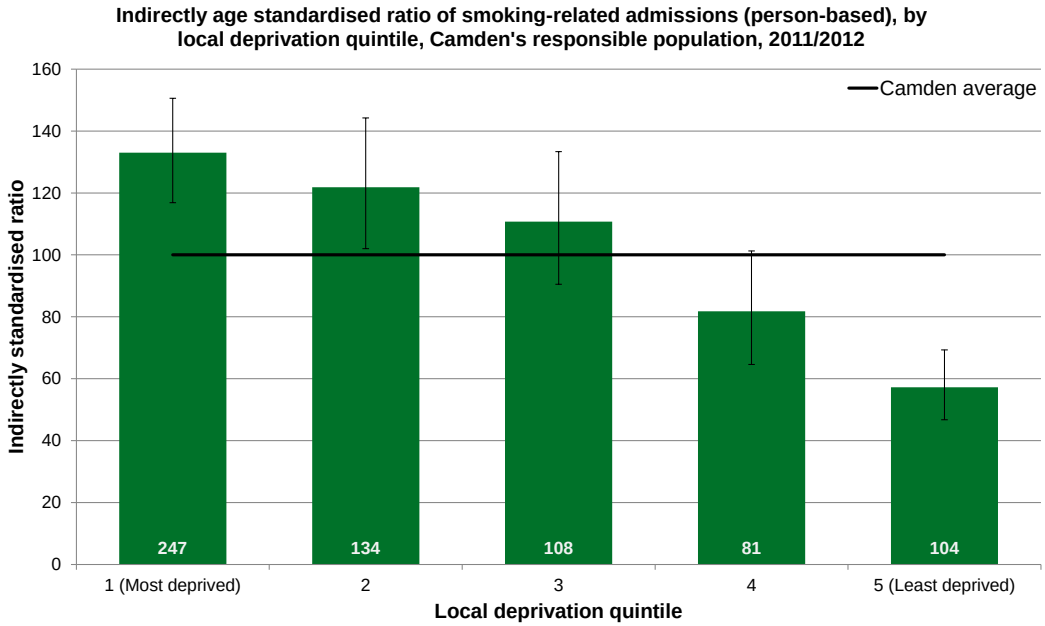
Smoking-related hospital admissions by 10 year age bands



- The rate of smoking related admissions increases with age and is highest among people aged 65 and older.
- Overall, people age 65 -74 account for the largest number of admissions (about 450 admissions).

Note: This analysis relates to the number of smoking-related admissions (some people will have more than one smoking-specific admission within the year); **Source:** SUS 2012 (admissions); Open Exeter, 2011 (denominator)

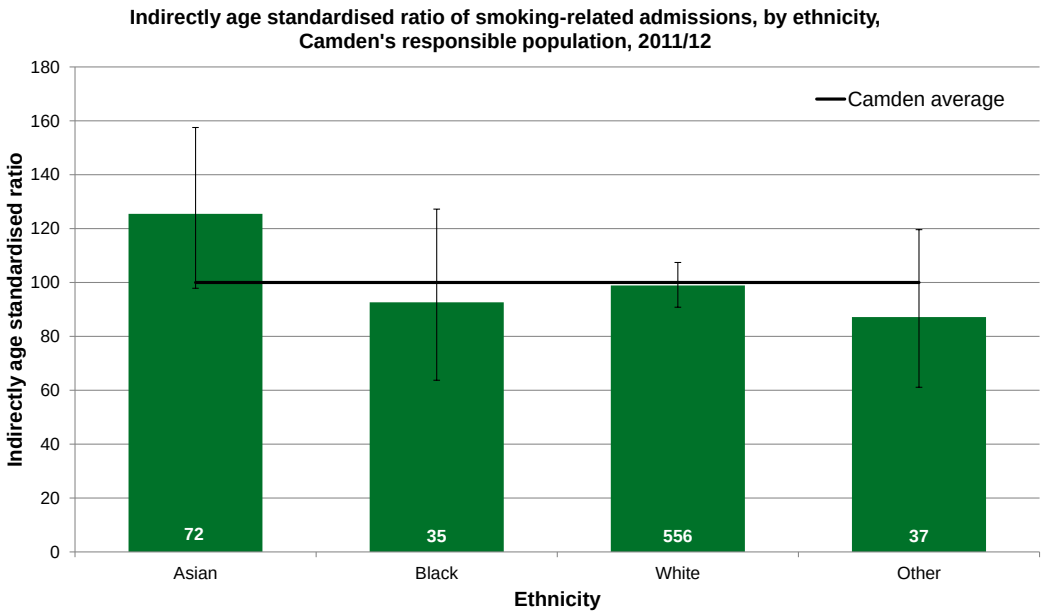
Smoking-related hospital admissions by deprivation quintile



- Based on persons contributing to smoking-related admissions (with SAFs applied), the level of admissions is higher among people living in the most deprived areas compared to the Camden average, taking age into account.
- The level of admissions is significantly lower among those living in the least deprived areas (43% lower compared to the Camden average).

Note: This analysis relates to the number of people (SAF applied to main conditions) admitted to smoking-related conditions (people are counted only once in a year).
Source: SUS, 2012 (admissions); Open Exeter, 2011 (population denominator)

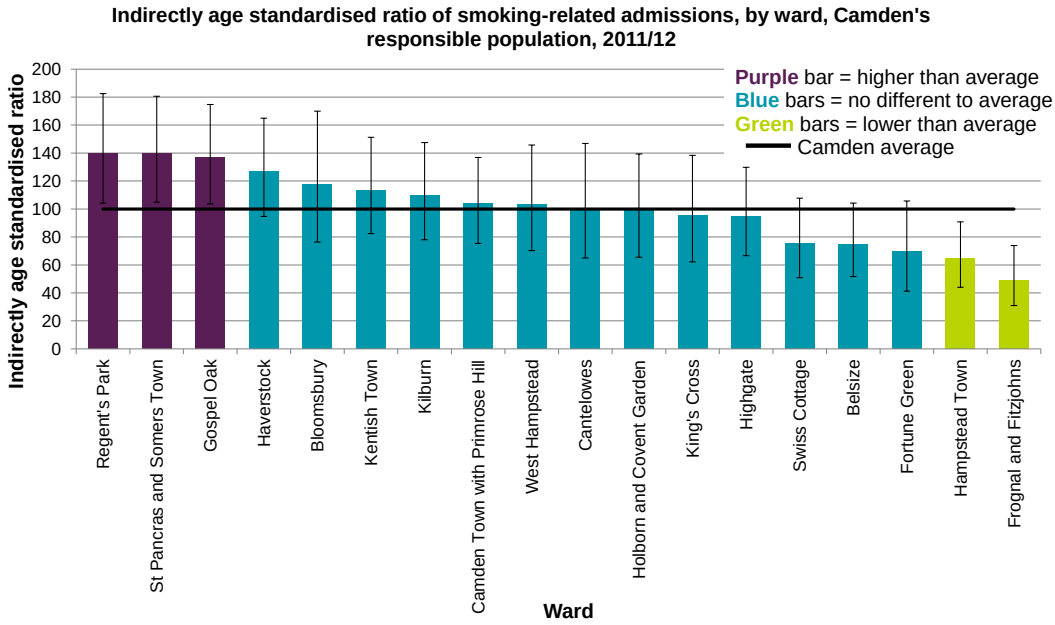
Smoking-related hospital admissions by ethnicity



- The data suggests that no ethnic group is statistically different from the Camden average for smoking-related hospital admissions when adjusted for age.
- This may be due to poor recording of ethnicity in SUS data.

Note: This analysis relates to the number of people (SAF applied to the main conditions) admitted to smoking-related conditions (people are counted only once in a year), 168 people with unknown or not recorded ethnicity were not included in this analysis. **Source:** SUS, 2012 (admissions), ONS Census, 2011 (population denominator)

Smoking-related hospital admissions (persons based) by ward



- Smoking-related admissions are approximately 40% higher among people in Regent's Park, St Pancras and Somers Town, and Gospel Oak compared to the Camden average, adjusted for age.
- Hampstead Town and Frognal and Fitzjohns have significantly lower levels of smoking-related hospital admissions compared to the Camden average.

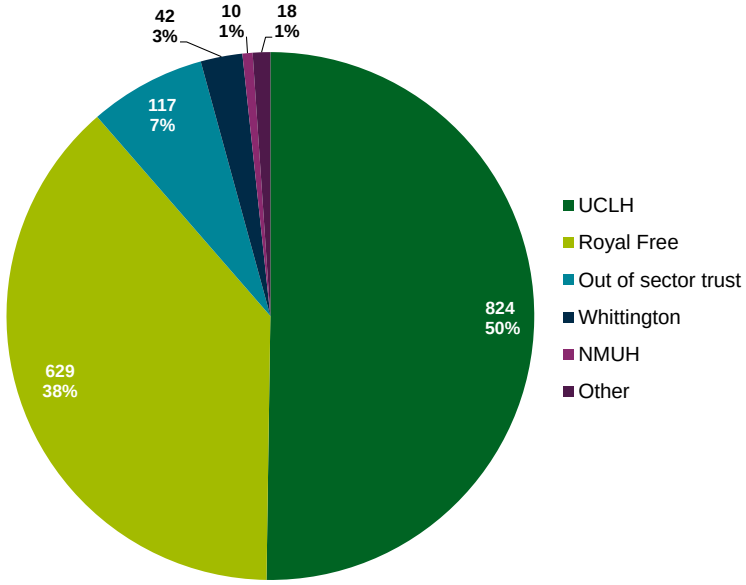
Note: This analysis relates to the number of people (SAF applied to main conditions) admitted to smoking-related conditions (people are counted only once in a year). **Source:** SUS, 2012 (admissions); Open Exeter, 2012 (population denominator).

SMOKING-RELATED HOSPITAL ADMISSIONS: TYPE OF ADMISSION

The analysis presented in this section relates to both the number of people admitted for smoking-related conditions and the number of smoking-related admissions. Some people will have more than one smoking-related admission in a year. See methodology section on page 6 for further details.

Smoking-related hospital admissions by provider

Number and percentage of smoking-related admissions, by provider, Camden's responsible population, 2011/12

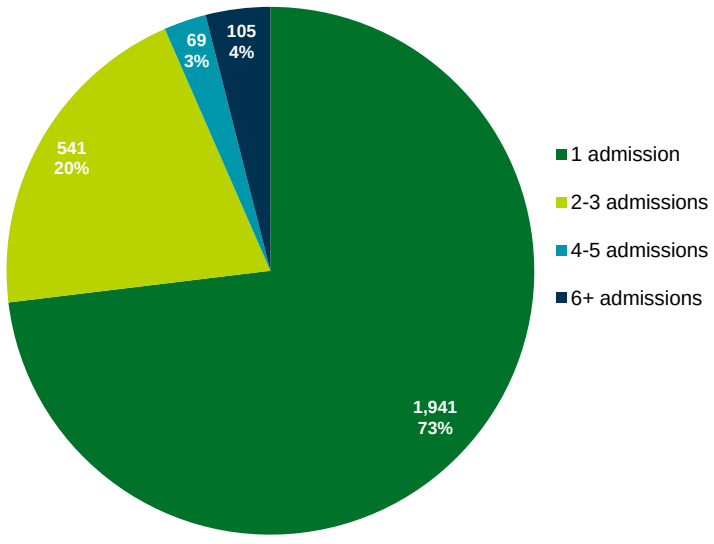


Note: This analysis relates to the number of smoking-related admissions (some people will have more than one admission within the year). **Source:** SUS, 2012

- The largest share of smoking-related hospital admissions for Camden's responsible population are at University College of London Hospital (UCLH) (50%, about 820 admissions), followed by Royal Free (38%, about 630 admissions).

Smoking-related hospital admissions: repeat admissions

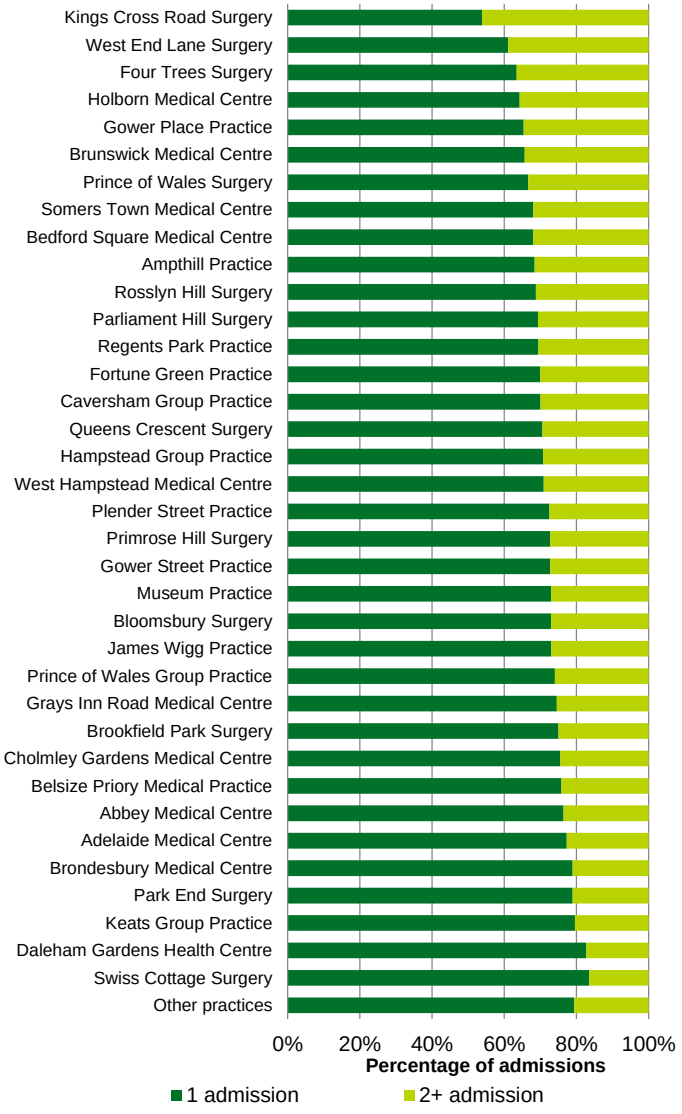
Repeat admissions for smoking-related hospital admissions, percentage of individuals by number of admissions, Camden's responsible population, 2011/12



- Seventy-three percent of all individuals contributing to smoking-related admissions were admitted only once during 2011/12.
- Twenty percent of individuals were admitted two or three times.
- Around 170 individuals (7%) were admitted four or more times.

Repeat smoking-related admissions by GP practice

Repeat admissions for smoking-related admissions, individuals by number of admissions, Camden's responsible population, 2011/12



Note: Due to small numbers three practices have been grouped to 'Other practices'
Source: SUS, 2012 (admissions)

- The proportion of individuals admitted to hospital more than once for a smoking related condition varies across practices from 16% to 46%.

Smoking-related hospital admissions by cause of admission

Cause	Smoking-related admissions*	Percentage of all smoking-related admissions	Main admission for each individual**	Percentage of all individuals
Cardiovascular Disease	354	22%	1,183	45%
COPD[1]	341	21%	247	9%
Other Cancers[2]	329	20%	194	7%
Lung Cancer	195	12%	81	3%
Others/Unspecified	183	11%	548	21%
Lip, Oral cavity and Pharynx Cancers	125	8%	29	1%
Other Respiratory Disease	115	7%	367	14%
Total	**1,640**	100%	**2,649**	100%

*Some people will have more than one smoking-related admission within the year

**This is the number of people admitted for smoking-related conditions (people are counted only once within the year)

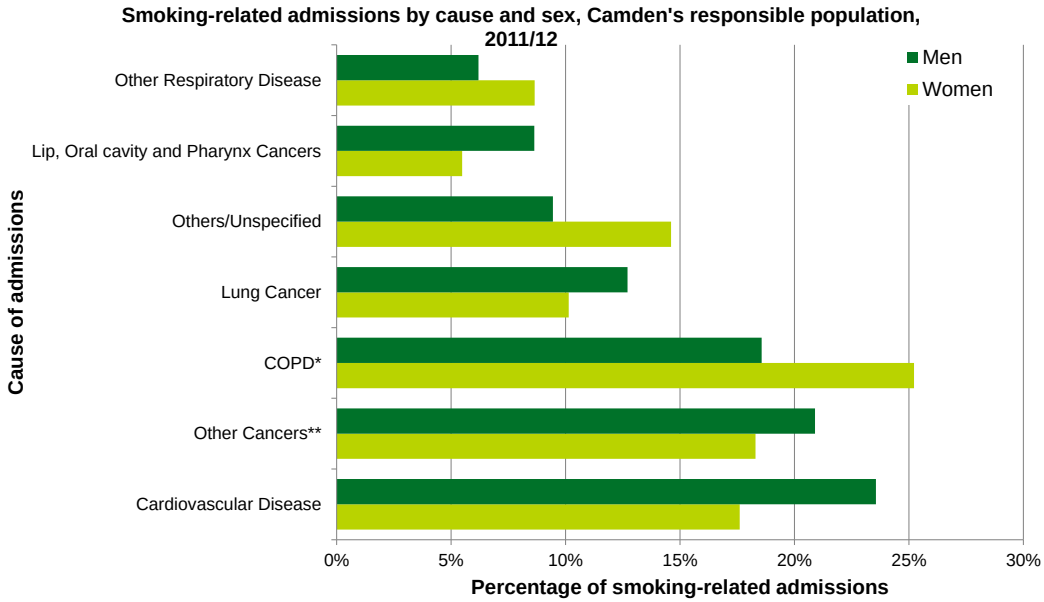
[1] COPD includes Bronchitis, Emphysema and Chronic Airway Obstruction

[2] Other Cancers include the following: Cervix, Kidney and Renal Pelvis, Larynx, Oesophagus, Pancreas and Stomach

Source: SUS 2012

- The three top causes of smoking-related admissions account for 62% of all smoking-related admissions.
- The top three causes are:
  - Cardiovascular diseases (22%)
  - COPD (21%)
  - Other cancers (20%).
- Based on individuals contributing to smoking-related admissions (before age and sex SAFs are applied), cardiovascular disease accounts for nearly half (45%) of all smoking-related conditions.

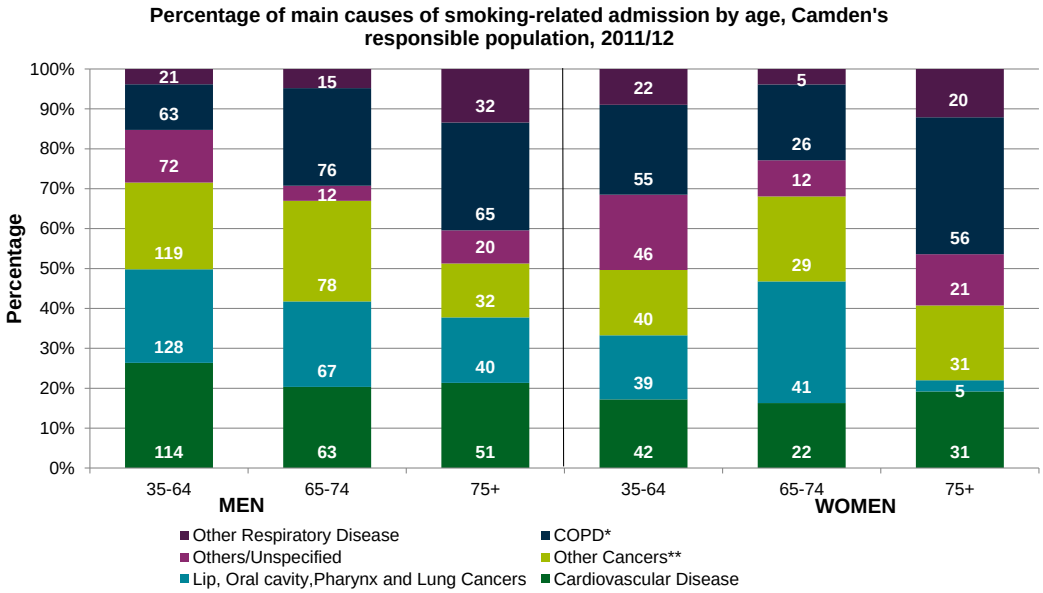
Smoking-related hospital admissions by cause of admission: men and women



* COPD includes Bronchitis, Emphysema and Chronic Airway Obstruction
** Other Cancers include the following: Cervix. Kidney and Renal Pelvis, Larynx, Oesophagus, Pancreas, Stomach
Note: This analysis relates to the number of smoking-related admissions (some people will have more than one admission within a year) **Source:** SUS, 2012

- Overall, men account for two-thirds of all smoking related admissions, whereas women account for a third.
- Cardiovascular disease is the most common cause of smoking-related admissions for men (24%), followed by other cancers (21%).
- COPD is the most common cause for women (25%), followed by other cancers (18%) and cardiovascular disease (18%).

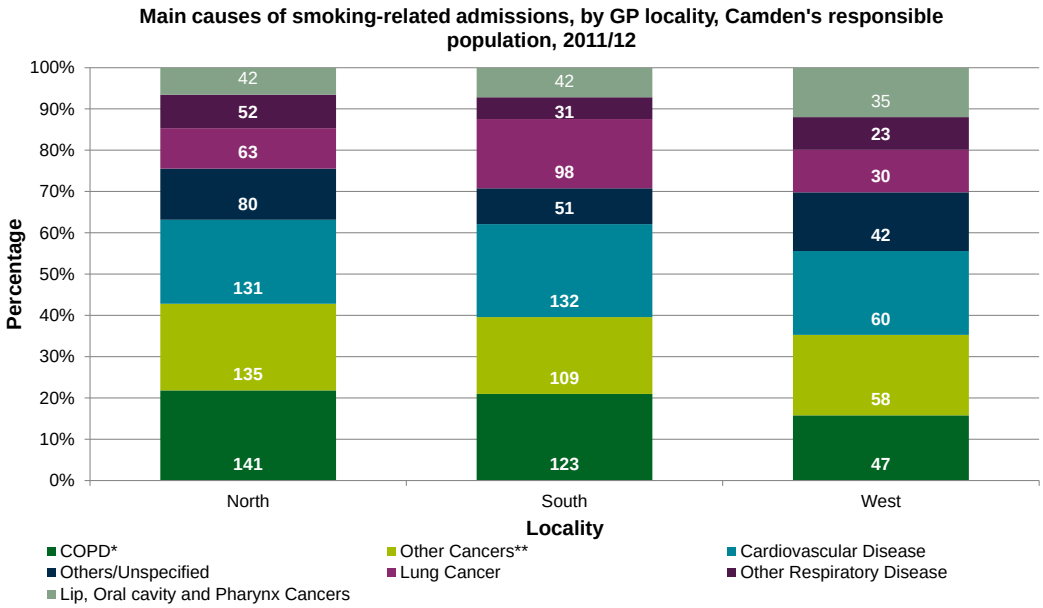
Smoking-related hospital admissions, by age group



- The causes of smoking-related admissions vary by age group and by sex.
- For men aged 35-64,cardiovascular disease is the most common cause (26%), whereas for women COPD is the most common cause (23%).
- COPD accounts for the largest proportion of admissions among men and women aged 65 and over (53% and 52% respectively).
- Causes have been grouped for disclosure control.

* COPD includes Bronchitis, Emphysema and Chronic Airway Obstruction
** Other Cancers include the following: Cervix. Kidney and Renal Pelvis, Larynx, Oesophagus, Pancreas, Stomach
Note: This analysis relates to the number of smoking-related admissions (some people will have more than one admission within a year). The numbers in the bar chart reflect the numbers of smoking-related admissions in each age group and sex. **Source:** SUS, 2012

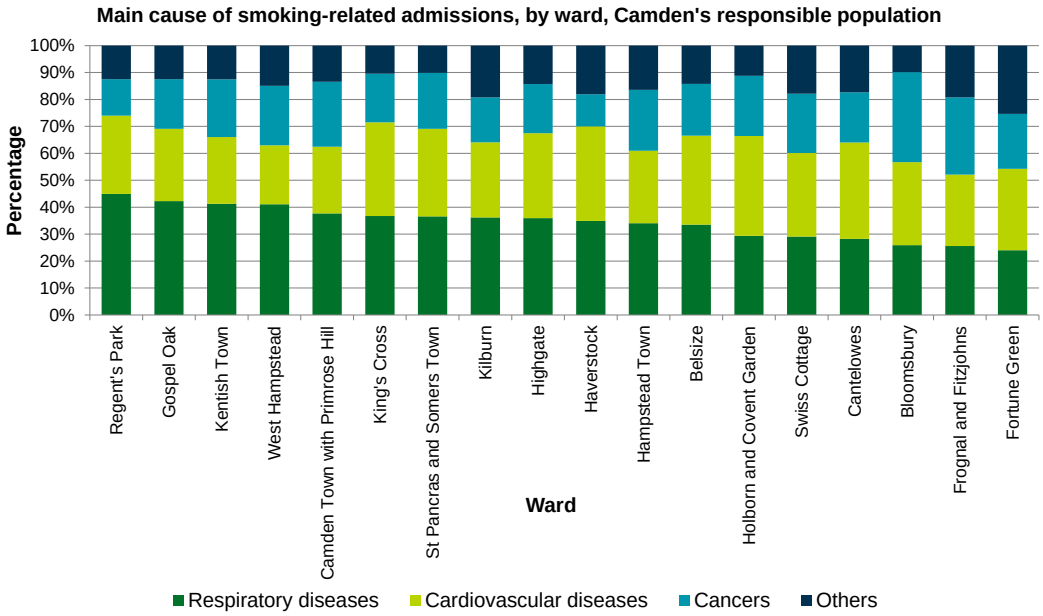
Smoking-related hospital admissions by locality and cause



- There is variation between collaboratives for the most common causes of smoking related admissions.
- Cardiovascular disease is the most common cause of smoking-related admissions in the South and West (20% and 23% respectively).
- The second most common cause in the South is COPD (21%) and in the West is other cancers (19%).
- COPD is the most common cause in the North collaborative (22%) followed by other cancers (21%) and cardiovascular disease (20%).

* COPD includes Bronchitis, Emphysema and Chronic Airway Obstruction
** Other Cancers include the following: Cervix. Kidney and Renal Pelvis, Larynx, Oesophagus, Pancreas, Stomach
Note: This analysis relates to the number of smoking-related admissions (some people will have more than one admission within a year). One practice is not included as it does not belong to a collaborative. **Source:** SUS, 2012

Smoking-related hospital admissions (persons-based) by cause and ward



- The most common cause of smoking-related admissions varies between wards.
- Respiratory disease accounts for between 24% and 45% of all smoking-related admissions across wards. It is the most common in 11 wards.
- Cardiovascular disease and Cancers are the most common cause in 5 and 2 of the remaining wards respectively.
- Causes have been grouped for disclosive control.

Note: This analysis relates to the number of people (SAF applied to main conditions) admitted to smoking-related conditions (people are counted only once in a year. **Source:** SUS, 2012

Smoking-related hospital admissions by method of admission

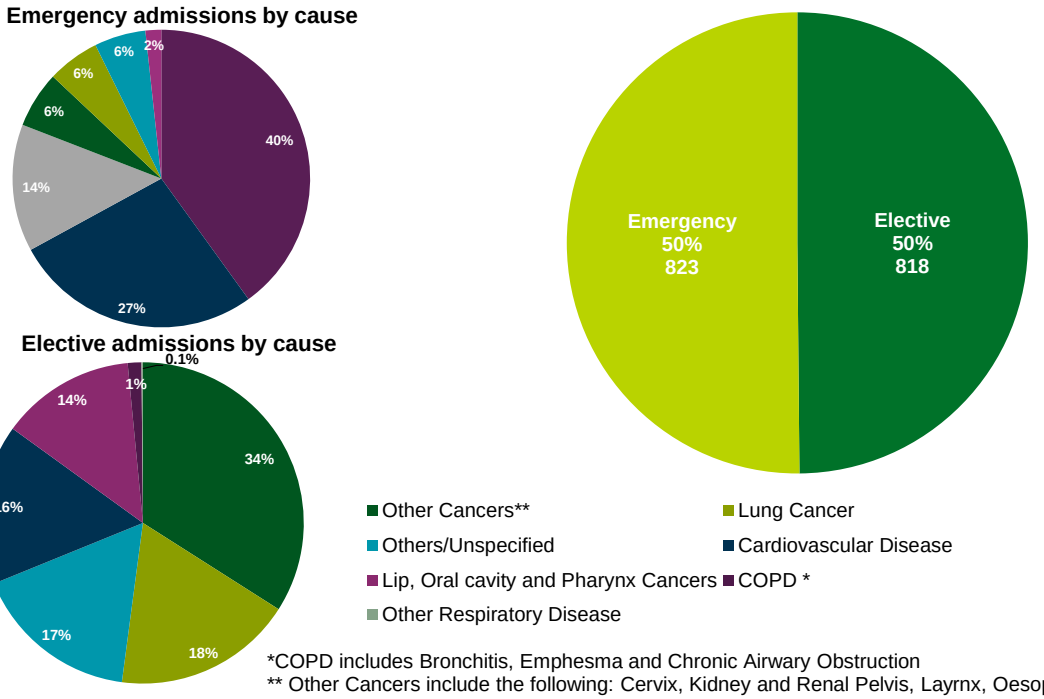
Admission method	Smoking-related admissions*	Percentage of all smoking-related admissions	Main admission for each individual**	Percentage of all individuals
Emergency	823	50%	1,658	63%
Elective	818	50%	991	37%
All admissions	**1,640**	100%	**2649**	100%

*Some people will have more than one smoking-related admission within the year
**This is the number of people admitted for smoking-related conditions before SAFs have been applied (people are counted only once within the year)

Source: SUS 2012

- Elective and emergency admissions account for the same proportion of smoking-related admissions (50%).
- However, most individuals admitted (before SAFs are applied) were admitted as emergencies (63%).
- This reflects a higher percentage of repeat admissions for elective admissions compared to emergency admissions.

Smoking-related hospital admissions by method of admission and cause



- The causes of smoking related admissions differ between elective and emergency admissions.
- The main causes for emergency admissions are COPD and cardiovascular disease. In contrast, the main causes for elective admissions are other cancers and lung cancer.

*COPD includes Bronchitis, Emphesma and Chronic Airway Obstruction
** Other Cancers include the following: Cervix, Kidney and Renal Pelvis, Layrnx, Oesophagus, Pancreas and Stomach
Note: This analysis relates to the number of smoking-related admissions (some people will have more than one admission within a year)
Source: SUS, 2012

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.

FURTHER INFORMATION & FEEDBACK

This profile has been created by Camden and Islington's Public Health Intelligence team. For further information please contact Tanya Khera-Butler.

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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.