



Public Health
England

Protecting and improving the nation's health

Hypertension prevalence estimates in England: Estimated from the Health Survey for England

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through advocacy, partnerships, world-class science, knowledge and intelligence, and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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Background

Hypertension prevalence estimates have been created for areas in England based on Health Survey for England data from 2013 and 2014.

Estimates at GP level were created for both diagnosed hypertension and undiagnosed hypertension using a modelled approach by the Department of Primary Care & Public Health at Imperial College London and the undiagnosed estimates are presented here.

The estimates were developed using data from the following: Health Survey for England; Health and Social Care Information Centre for population estimates at practice level; Neighbourhood Statistics for level of educational attainment, employment status, and limiting long lasting illness; Office for National Statistics for ethnicity and Department of Communities and Local Government for Index of Multiple Deprivation.

Full details of the method and data sources used can be found in their 'Technical document' available from the 'National Cardiovascular Intelligence Network' (NCVIN). Please email ncvin@phe.gov.uk.

This document also shows estimates at clinical commissioning group (CCG), and for the whole of England using weighted averages of the GP estimates. All estimates are available to download at: www.ncvin.org.uk

Key information

It is estimated that 13.4 million people in England have either GP recorded or undiagnosed hypertension. This is equal to approximately 24% of the population.

At CCG level, estimated undiagnosed hypertension prevalence ranges from 9.4% to 14%. At GP level, it ranges from 3.8% to 20.4%.

Estimated undiagnosed hypertension prevalence is highest in CCGs in the East of England, but also in the the North East of England and in areas with older populations.

Estimated undiagnosed hypertension prevalence is lowest in CCGs in central London, Bradford and Manchester.

Comparisons with the estimates and the 2014/15 Quality and Outcomes Framework (QOF) suggest that approximately 59% of the expected number of people with hypertension are recorded on GP registers.

Across England, it is estimated that 5.6 million people are living with undiagnosed and untreated hypertension.

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The estimated prevalence of undiagnosed hypertension in GP practices ranges from 3.8% to 20.4% with an interquartile range of 11% to 13%. Figure 1 shows the range of estimated undiagnosed hypertension prevalence in the 7,500 practices for which an estimate could be calculated.

Figure 1. Estimated undiagnosed hypertension prevalence by GP practice in England, 2014/15



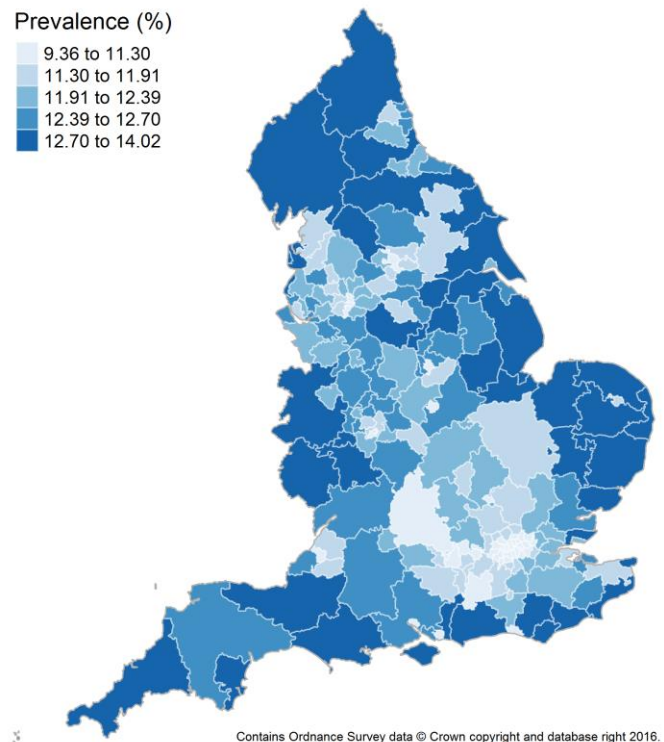
CCG estimated undiagnosed hypertension prevalence estimates

At CCG level, undiagnosed hypertension prevalence ranges from 9.4% to 14% in the 209 CCGs in England. CCGs with the lowest undiagnosed prevalence of hypertension were Tower Hamlets, Camden and Wandsworth (Table 1). CCGs with the highest estimated prevalence were West Norfolk, Lincolnshire East and North Norfolk (Table 2).

The quintiles of estimated undiagnosed prevalence are shown in Map 1, with the highest quintiles mainly situated in the north and along the southern coastal and eastern coastal regions, and lowest quintiles in London and central England.

Hypertension prevalence is driven largely by the age structure of the population and hypertension is highest in CCGs that have high proportions of elderly people. However, other factors such as high BMI and deprivation contribute towards higher levels of hypertension in the population.

Map 1. Estimated undiagnosed hypertension prevalence (16+), 2014/15



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Hypertension prevalence estimates in England

Table 1. CCGs with the lowest estimated undiagnosed hypertension, 2014/15

CCG	QOF register hypertension prevalence (%)	QOF register hypertension cases	Estimated undiagnosed prevalence 16+ (%)	Estimated undiagnosed cases
NHS Tower Hamlets	7.8	22,835	9.4	22,000
NHS Camden	8.5	22,470	9.5	21,400
NHS Bradford City	8.8	10,778	10.0	8,800
NHS Central Manchester	8.7	19,343	10.0	17,900
NHS City And Hackney	9.6	28,164	10.0	23,300
NHS South Reading	10.1	13,924	10.1	11,050
NHS Newham	10.4	38,684	10.1	29,200
NHS Wandsworth	8.4	31,555	10.1	31,300
NHS Nottingham City	10.5	37,714	10.2	30,650
NHS Central London (Westminster)	8.1	16,799	10.3	18,150

Table 2. CCGs with the highest estimated undiagnosed hypertension, 2014/15

CCG	QOF register hypertension prevalence (%)	QOF register hypertension cases	Estimated undiagnosed prevalence 16+ (%)	Estimated undiagnosed cases
NHS North Norfolk	17.5	29,804	14.0	20,300
NHS Lincolnshire East	17.6	43,128	13.7	28,100
NHS West Norfolk	18.4	31,313	13.6	19,450
NHS Scarborough And Ryedale	16.5	19,523	13.5	13,450
NHS Isle Of Wight	17.3	24,565	13.5	16,150
NHS Herefordshire	16.0	29,348	13.5	20,600
NHS Hambleton, Richmondshire And Whitby	16.2	23,024	13.5	16,150
NHS Fylde & Wyre	17.5	26,327	13.4	17,100
NHS Kernow	15.6	86,139	13.4	62,950
NHS Southport And Formby	16.5	20,354	13.3	13,850

Comparison against QOF registers

Comparisons between the estimates and the 2014/15 Quality and Outcomes Framework (QOF) show the ratio of observed to expected hypertension is 0.59 in England. Approximately 59% of the expected number of people with hypertension are recorded. The expected number combines people recorded on QOF registers with the estimated number of people living with undiagnosed hypertension. The CCG variation of this ratio is shown in Map 2.

A number of CCGs with the lowest ratio are located in and around London, including Central London (Westminster), Wandsworth and Islington CCG.

The CCG with the highest ratio of observed to expected hypertension prevalence was NHS Dudley CCG where the ratio was 0.63; approximately 32,600 people undiagnosed.

Map 2. Ratio of observed (QOF) to expected hypertension in 2014/15

