1.0 Summary

- There are 33,259 (12%) people diagnosed with hypertension registered to Greenwich practices, and an estimated 24,408 (9%) living with undiagnosed hypertension in the same population. The percentage of undiagnosed across Greenwich is 42% and from individual practice registers varies considerably from 15% to 68% of the estimated number with hypertension missing.
- Recorded prevalence has risen steadily since 2005 although the rate of increase has now slowed down, leaving an estimated 9% of the population over 16 years with undiagnosed hypertension.
- Hypertension is currently the second most important preventable risk factor for premature death.
- Each 2 mmHg rise in systolic blood pressure is associated with a 7% increased risk of mortality from ischaemic heart disease and a 10% increased risk of mortality from stroke.
- It is estimated that 61% of people with hypertension have other co-morbidities.
- 21% of patients known to have hypertension in Greenwich have uncontrolled BP (above 150/90 mmHg), and therefore are at greater risk of cardiovascular disease. However, since National Institute for Health and Clinical Excellence (NICE) recommends control to 140/90 mmHg in those less than 80 years, it is likely that a much higher proportion are not optimally controlled to NICE recommended levels. Likewise, those that are undiagnosed are being exposed to greater risk. Reduction in blood pressure of 5mmHg from any starting point reduces risk of stroke by 34% and ischaemic heart disease by 21%.
- Whilst 21% of people with uncontrolled hypertension shows there is still a lot of progress to be made Greenwich now lies second in the South East London cluster with levels of blood pressure control higher than London and just 0.5% lower than England levels.
- Health inequalities exist in the distribution of hypertension. Whilst men have an increased risk of hypertension overall, national data has shown that women have lower blood pressures at a lower age, but after 65 years they tend to have a higher systolic blood pressure than men.
- There is a well established inverse link between socioeconomic status and blood pressure.
- Hypertension prevalence varies between ethnic groups with Black Caribbean men/women, Black African men/women, Chinese women, Irish men, Indian men/women and Pakistani women having a greater risk of hypertension. However, as a result of high levels of deprivation within Greenwich estimated prevalence rates are the highest within the white population.
- Blood pressure can be reduced by dietary approaches that result in 4-5 mmHg reduction in systolic blood pressure in the general population and up 14-15 mmHg reduction in motivated individuals with good adherence to the DASH (Dietary Approaches to Stop Hypertension) diet.
- Blood pressure reduction by drug therapy has been shown to be highly cost effective using the 4 main types of drugs ACE; ARBs; CCB; and thiazides (see text for fuller description).
- Blood pressure management in Greenwich has been improving at a faster rate than in London and England but there is still considerable variation between practices in how well blood pressure is controlled (lowest was 64% controlled and highest 90%) and how many patients are excepted (i.e no longer followed up) varying from 1% to 22% in BP5 (control of BP).
2.0 What do we know about it?

2.1 Introduction

Hypertension is blood pressure that is persistently raised above a designated threshold (140/90 mm Hg). It is estimated that around 27% (approximately 58,000) of people in Greenwich have hypertension, half of whom are under 65 (HSE, 2009), and if Greenwich were the same as England we would expect more than half to be undiagnosed. In fact in Greenwich there are an estimated 24,408 people undiagnosed (42%) - still a large number but moving in the right direction (see section 2.3.2 below).

Blood pressure measures how strongly blood pushes through the arteries (large blood vessels) and is necessary for maintaining circulation. If the pressure is too high it puts a strain on the arteries and heart. If left untreated, high blood pressure increases a person’s risk of a heart attack, stroke, kidney disease and other disease.

The increase in risk is gradual and continuous therefore there is much debate about what is ‘normal’ and what is ‘too high’. The thresholds identified in current clinical guidelines identify hypertension as a persistent raised blood pressure of 140/90mmHg or above. However, each 2 mmHg rise in systolic blood pressure is associated with a 7% increased risk of mortality from ischaemic heart disease and a 10% increased risk of mortality from stroke. Hypertension is currently the second most important preventable risk factor for premature death (He et al., 2007; WHO, 2002). There is a reduction in risk of stroke or heart disease from reductions in blood pressure whatever the starting point: lowering blood pressure by 5 mmHg diastolic reduces the risk of stroke by an estimated 34% and ischaemic heart disease by 21% (Law et al 2003).

2.2 National strategies

In August 2011, the National Institute of Health and Clinical Excellence (NICE) issued clinical guidance that updated guidelines 34 (published in 2006). This sets out the treatment and management of hypertension.

However, with the growing evidence base of the risk factors associated with high blood pressure e.g. obesity and physical activity, many other NICE guidance have an impact on blood pressure.

2.3 Facts and Figures

2.3.1 Mortality Data

Figure 1 shows the trends in directly standardised hypertension mortality per 100,000 people in Greenwich compared to London and England. In 2010, there were approximately 5 deaths per 100,000 with hypertension stated as the underlying cause (hypertension as a direct cause of death is quite rare – most hypertension related deaths are from coronary heart disease and stroke). The rate of deaths from hypertension is higher than England but less than London. However, the trend over time indicates death rates due to hypertension have decreased since 1993, although these are beginning to increase slightly over last few years.

Figure 1: Hypertension mortality DSR rolling 3 year average
2.3.2 Morbidity Data

a) Recorded Prevalence & Trends

Figure 2 shows the recorded prevalence rates within SE London, London and nationally between 2005/6-2011/12 as identified on GP registers. In 2011/12 there were 33,259 people identified as having hypertension in Greenwich, this equates to a prevalence rate of 12.1% based on registered all age populations and this is 1% higher than London. Greenwich has the 3rd highest hypertension recorded prevalence in South East London. Prevalence rates have been increasing steadily since 2005/6.

Figure 2: Trends in recorded prevalence rates 2005/6-2011/12. South East London Boroughs 2005/6 – 2011/12

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1 This total excludes Clover Practice, to ensure consistency in comparing actual to estimated data later due to no APHO estimated comparison being available.
b) Estimated prevalence

In England, variations in CHD (Coronary Heart Disease) mortality are predominantly explained by population characteristics; however, a greater detection of hypertension is associated with lower CHD mortality (Levene et al., 2010). As a result, accurate and timely diagnosis is important to ensure access to effective care and treatment. Estimating the expected numbers of people with hypertension plays a key part in understanding undiagnosed hypertension levels.

Figure 3 shows the estimated rates of hypertension across South East London. Greenwich has the third highest estimated prevalence rates in South East London; 3.76% lower than in England and similar to London rates. Within the borough of Greenwich there are an estimated 47,878 (26.9%) people living with hypertension, 57,754 (20.86%) if based on practice populations. As a result, compared to a recorded total practice prevalence of 33,259 (12.11%) this is a difference of 24,408 people (i.e. 8.76% of the practice population). This means there are over 24,408 (8.76%) people registered to Greenwich practices that are living with undiagnosed hypertension.

Figure 3: Estimated prevalence of hypertension in SE London, London and England

Source: APHO (using data from the 2001 Health Survey for England, adjusting for age, sex, ethnicity, smoking status, rurality and deprivation score. Population data: ONS 2009 mid population estimates.

Furthermore, there is variation in relation to the distribution of these “missing” people from hypertension registers across practices as illustrated in Figure 4 and 5. Figure 4 shows the QoF (Quality Outcomes Framework) recorded numbers of people with hypertension and estimated numbers of people missing from registers and figure 5 illustrates the percentage missing per practice from hypertension registers. The variation is from 68% missing in Greenwich Peninsula to 19% missing in Sherard Road Practice.

\[\text{SEL Cluster} \quad \text{London} \quad \text{England}\]

\[% \text{ prevalence}\]

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\[\text{SEL Cluster} \quad \text{London} \quad \text{England}\]

\[% \text{ prevalence}\]
Figure 4: Estimated missing and recorded numbers of people with hypertension in 2011/2 by practice

![Graph showing QoF reported & APHO estimated missing nos of people with hypertension](image)

**Source:** APHO Estimated Prevalence and QoF 10-11 Reported prevalence

Figure 5: Estimated percentage people missing from hypertension register by practice based on Association Public Health Observatory (APHO) estimates and QoF recorded numbers in 2011/2

![Graph showing % Missing nos from hypertension registers per practice](image)
2.3.3 Living with Co-Morbidities

Whilst there is no Greenwich information on numbers of people living with co-morbidities, the Scottish Primary Care Research Study (2012) undertook a study that identified the multiple conditions that people live with. They found that only 39% of people have hypertension as their only condition (see figure 6). Since the Scottish population is different to that in Greenwich, we cannot draw firm conclusions on the levels of co-morbidity in Greenwich. However, it provides some insight into levels of co-morbidity generally. Co-morbidity is important since patients with co-morbidities have a worse quality of life and poorer clinical outcomes, are more costly and have longer length of stays in hospital with more complications post-operatively (Fortin et al., 2007).

Figure 6: The co-morbidities of people living with hypertension

![Figure 6: The co-morbidities of people living with hypertension]

Source: Adapted (with permission) from Scottish Primary Care Research Study, 2012

2.3.4 Health Inequalities

a) Hypertension and age/sex

Blood pressure (particularly systolic) rises with age and this association is thought to be linked to the length of time people are exposed to the modifiable risk factors described earlier. This relationship between age, sex and systolic blood pressure is shown in Figure 7. Gender is seen to influence blood pressure differently according to age with women tending to have lower blood pressures at a lower age but after 65 women tending to have a higher systolic blood pressure than men. Diastolic blood pressure is similar across both sexes across all ages. Currently we only have estimated prevalence data specific to Greenwich for age and sex. This is shown in figure 8 and figure 9. These graphs indicate that hypertension increases with age and is 3% more likely in men overall. It is estimated that over 73% of people over 75 years have hypertension in Greenwich (Figure 8).
Figure 7: The rise in systolic blood pressure with age

Source: Health Survey for England, 2011

Figure 8: Estimated prevalence of hypertension by age group in Greenwich


Figure 9: Estimated proportion of people with hypertension in Greenwich by gender

b) Hypertension and Ethnicity

Figure 10 highlights the estimated prevalence of hypertension between different ethnic groups in Greenwich. These figures take into account the age of the populations and their levels of deprivation within Greenwich.

**Figure 10: Estimated prevalence of hypertension in Greenwich by ethnicity**

<table>
<thead>
<tr>
<th>Estimated prevalence of hypertension by ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="chart.png" alt="Bar chart showing estimated prevalence by ethnicity" /></td>
</tr>
</tbody>
</table>


The above masks differences within different ethnic groups and these are highlighted in Table 1. The differences seen in prevalence rates across different ethnic groups may be explained, in part, by inherited differences in the way the body reacts to salt (salt-sensitivity) (Stewart et al., 1999) and differences in the way hormones control blood pressure (vasoactive neuropeptides) in the blood. Hypertension is also linked to diabetes which is more prevalent in certain ethnic groups such as South Asian, black African and black Caribbean communities.

**Table 1 Hypertension in ethnic groups in England**

<table>
<thead>
<tr>
<th>Hypertension is MORE COMMON in</th>
<th>Hypertension is LESS COMMON in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Caribbean men and women</td>
<td>Bangladeshi men and women</td>
</tr>
<tr>
<td>Black African men and women</td>
<td>Chinese men</td>
</tr>
<tr>
<td>Chinese women</td>
<td>Irish women</td>
</tr>
<tr>
<td>Irish men</td>
<td>Pakistani men</td>
</tr>
<tr>
<td>Indian men and women</td>
<td></td>
</tr>
<tr>
<td>Pakistani women</td>
<td></td>
</tr>
</tbody>
</table>

Source: Health Survey for England The Health of Ethnic Minority Groups ’99

C) Hypertension and socio-economic deprivation

There is a well established inverse link between socioeconomic status and blood pressure, although there is recent evidence that the risk of hypertension associated with low parental social status can be modified by social status later in life (Högberg, 2012).

The prevalence of hypertension is highest in the lower supervisory and technical group in both men and women, and the differences between this group and the managerial and professional group are statistically significant in both sexes (Health Survey for England, 2011).
2.4 Risk Factors

There are a number of risk factors for high blood pressure, many of which can be modified (summarised in section 2.4.1 below) and a few such as age that cannot be modified (see section 2.4.2 below).

2.4.1 Risk Factors that can be modified

**Physical Inactivity:** People who do not take enough aerobic exercise (such as brisk walking, running, cycling, swimming or dancing) are more likely to have or to develop hypertension (Paffenbarger et al., 1991)

**Overweight/Obesity:** Blood pressure rises with increasing body mass index (BMI) (Dyer et al., 1989). However, the relationship between blood pressure and obesity is not always clear-cut; when reductions in blood pressure arise from a fall in BMI, these may be a product of changing dietary intake and physical activity (He et al., 2007).

**Excess Alcohol Intake:** Whilst a low-to-moderate habitual consumption of alcohol is associated with a lower risk of cardiovascular disease, heavy alcohol use is a well-established risk factor for hypertension and stroke (Hart, 1999).

**Excess Dietary salt:** A review of the evidence linking salt intake and blood pressure was undertaken in 2003, which reiterated the recommendation of a maximum of 6g per day (SACN, 2013). 70% of the adult population still consume in excess of recommended amounts (Sadler et al., 2012).

**Low Dietary Potassium:** Low dietary potassium has been found to be related to raised systolic and diastolic blood pressure. Consuming fruit and vegetables may lower blood pressure due to their potassium content. People in the UK on average eat only half the recommended level of at least five portions of fruit and vegetables a day (Henderson et al., 2002).

**Low dietary calcium** is related to risk of hypertension and increased calcium from dietary sources has been shown to reduce risk of a heart attack but use of calcium supplements actually increased it (Li K et al, 2012).

**Low dietary magnesium** is also related to hypertension (Ma J et al 1995). Dietary sources include green leafy vegetables such as spinach and chard but magnesium is also present in whole grains and high in some nuts such as almonds.

**Excess coffee or caffeine based drinks:** Caffeine consumption has long being associated with raised blood pressure. A dose-related increase of 5–15 mmHg systolic and 5–10 mmHg diastolic for several hours following consumption has been demonstrated. The most likely mode of action of caffeine is as an adenosine receptor antagonist, which results in vasoconstriction and raises blood pressure. The half life of caffeine in the body is typically about five hours (James, 1997).

**Psychosocial stressors:** Blood pressure also rises in response to stress as part of the ‘fight-or-flight’ mechanism (Jansen et al., 1995). Although findings from individual studies vary, there is an indication that persistent activation of the fight-or-flight mechanism influences the development of negative cardiovascular outcomes, increasing the risk of hypertension, atherosclerosis (‘furring’ of the arteries), and obesity (Chida et al., 2010; Logan et al., 2008; Mckewan, 2000; Treiber et al., 2003).

**Cold Homes:** A large proportion of excess winter deaths are caused by cardiovascular disease (See JSNA section: excess winter deaths) In older people, blood pressure rises after two hours’ exposure to temperatures of 12ºC and below, and this effect may contribute to these excess deaths.

**Socioeconomic status:** The prevalence of hypertension is highest in the lower supervisory and technical group in both men and women, and the differences between this group and the managerial and professional group are statistically significant in both sexes (Joint Health Surveys Unit, 2004).

**Diabetes:** Hypertension is more prevalent, irrespective of weight, in people with Type 1 diabetes (as a result of kidney damage (Nishimura et al., 2001)) and in Type 2 diabetes (possibly due to insulin
resistance or ‘metabolic syndrome’ (Lender, 1997). In England, it has been shown that 70% of people with diabetes have Type 2 diabetes (Colhoun et al., 1999). People who have both hypertension and Type 2 diabetes have double the risk of a cardiovascular event (Grossman et al., 2000). The UKPDS 36 study found that the risk of diabetic complications for patients with Type 2 diabetes was strongly associated with blood pressure (UKPDS, 1998).

**Low birth weight:** There is some evidence of a direct association between adult hypertension and low birth weight and poor growth and development in the first year of life (Barker, 1996). Fast catch-up growth (where small babies grow quickly in the first months of life) may also contribute to later hypertension (Williams et al., 2002; Huxley et al., 2000). However, in comparison to the contribution of later lifestyle risk factors these influences are small.

**Being formula fed as a baby:** Babies who are exclusively formula-fed tend to have higher systolic blood pressures than breastfed babies and this difference extends into adult life (Wilson et al., 1998).

### 2.4.2 Risk Factors that cannot be modified:

**Age:** blood pressure increases with age

**Gender:** men are at greater risk of high blood pressure.

**Ethnicity:** People of African or Caribbean descent have a greater risk of having high blood pressure.

**Family History:** people with a close relative with high blood pressure are more likely to have hypertension.

### 3.0 What works?

### 3.1 Life Style Interventions

Life style interventions are both important in the prevention of hypertension and also in the treatment of hypertension.

Figure 11 provides an overview by NICE in 2011 that included 98 trials including 7,993 participants. These were combined to provide principal findings on lifestyle interventions. NICE reported that “statistically significant reductions in blood pressure were found, in the short term, for improved diet and exercise, relaxation therapies, and sodium and alcohol reduction”. They estimated that a multiple intervention addressing diet and exercise may reduce systolic and diastolic blood pressure in a cohort of patients, on average, by about 5 mmHg (UCI: 9mm Hg; LCI 2mm Hg) with about quarter achieving a reduction in systolic blood pressure of at least 10 mmHg.
Figure 11: Lifestyle Interventions and their impact on systolic and diastolic blood pressure

<table>
<thead>
<tr>
<th>Trial</th>
<th>F/U</th>
<th>n</th>
<th>N+</th>
<th>Systolic BP</th>
<th>Diastolic BP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diet</td>
<td>6m</td>
<td>14</td>
<td>1474</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise</td>
<td>4m</td>
<td>17</td>
<td>1357</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relaxation</td>
<td>4m</td>
<td>23</td>
<td>1481</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple intervention</td>
<td>6m</td>
<td>6</td>
<td>413</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol reduction</td>
<td>1.2y</td>
<td>4</td>
<td>865</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcium</td>
<td>2m</td>
<td>11</td>
<td>414</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magnesium</td>
<td>3m</td>
<td>11</td>
<td>504</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potassium</td>
<td>3m</td>
<td>5</td>
<td>410</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium</td>
<td>3m</td>
<td>5</td>
<td>420</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All estimates are DerSimonian-Laird Weighted Mean Differences, see individual meta-analyses for details.

+ F/U: Median duration of follow up in months or years; n: number of studies; and, N: subjects randomised.

Source: NICE Hypertension guidelines 2011

A review of the health consequences of smoking and benefit of smoking cessation was not included in the guideline, since there is no direct link to raised blood pressure. However recommendations did include smoking cessation as smoking is known to reduce life expectancy and is associated with poor cardiovascular and pulmonary outcomes.

An approach to combining effective dietary interventions to reduce blood pressure is called the DASH diet (Dietary Approaches to Stop Hypertension). This way of eating emphasises portion size and consumption of fruit (4-5 portions per day) and vegetables (4-5 portions) with low-fat dairy products, whole grains, poultry, fish and nuts. The diet is low in fats, red meat, sweets and drinks with added sugar. The diet has been shown to result in increased levels of potassium, magnesium, fibre and protein and reduced levels of total fat, saturated fat and cholesterol. The PREMIER clinical trial established that the diet reduced systolic blood pressure by an average of 4.3 mm Hg and was more effective than an "increased fruit and vegetables" diet alone (PREMIER authors 2003). A further study showed that those in the highest quartile for adherence to the DASH diet achieved on average systolic blood pressure reduction of 15.6 mmHg and 9.4 mmHg reduction in diastolic blood pressure (Epstein et al 2012). For motivated individuals this is on par with results from combination drug therapy for hypertension. The addition of weight loss and increased physical activity leads to improvement in blood lipids and insulin sensitivity (reported in Epstein et al 2012).

Table 2 indicates the NICE recommended best evidenced approaches to lifestyle interventions:

**Table 2: NICE recommendations for lifestyle practices**

<table>
<thead>
<tr>
<th>NICE Clinical Guidance (Hypertension CG127), 2011: Lifestyle Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifestyle advice should be offered initially and then periodically to people undergoing assessment or treatment for hypertension.</td>
</tr>
<tr>
<td>To ascertain people's diet and exercise patterns because a healthy diet and regular exercise can reduce blood pressure.</td>
</tr>
<tr>
<td>Relaxation therapies can reduce blood pressure and people may wish to pursue these as part of their treatment. However, routine provision by primary care teams is not currently recommended.</td>
</tr>
<tr>
<td>To ascertain people's alcohol consumption and encourage a reduced intake if they drink excessively, because this can reduce blood pressure and has broader health benefits.</td>
</tr>
</tbody>
</table>
Discourage excessive consumption of coffee and other caffeine-rich products.

Encourage people to keep their dietary sodium intake low, either by reducing or substituting sodium salt, as this can reduce blood pressure.

Do not offer calcium, magnesium or potassium supplements as a method for reducing blood pressure. The best current evidence does not show that combinations of potassium, magnesium and calcium supplements reduce blood pressure.

Offer advice and help to smokers to stop smoking.

A common aspect of studies for motivating lifestyle change is the use of group working. Inform people about local initiatives by, for example, healthcare teams or patient organisations that provide support and promote healthy lifestyle change.

### 3.2 Pharmacological Interventions

In most hypertensive patients, pharmacological intervention becomes necessary if blood pressure lowering is to be substantial and sustainable. Published epidemiological studies and trials together conclusively demonstrate that a sustained reduction in blood pressure by drugs reduces the incidence of stroke, coronary heart disease, heart failure and mortality. The size of benefit in any period (for example the next 10 years) generally depends on an individual’s overall cardiovascular risk (Collins et al., 1990). For an individual at any age, the greater the cardiovascular risk the greater the potential to benefit from treatment.

NICE analysis found that treating hypertension is highly cost-effective. Treatment resulted in improved health outcomes (higher QALYs) with all of the drug classes including angiotensin-converting enzyme (ACE) inhibitor, angiotensin II receptor blocker (ARB), calcium-channel blocker (CCB) and thiazide-like diuretics actually resulted in overall cost savings compared to no treatment as the reduction in cardiovascular events led to savings that offset the relatively low cost of antihypertensive medication; although it should be noted that this is based on low cost generic drugs. In most people CCBs were found to be the most cost-effective treatment option for initial treatment of essential hypertension.

For further information/guidance please see NICE clinical guidance on:


### 4.0 What do we know about local services?

The diagnosis and treatment of hypertension rests, in the main, with primary care with specialist input from acute services for complex cases only.

#### 4.1 Primary Care Services

##### 4.1.1 Early identification and Diagnosis of Hypertension

Identifying people with high blood pressure early is key to reducing risk of cardiovascular disease, yet, as indicated earlier many remain undiagnosed. Opportunistic monitoring of blood pressure and programmes such as the health checks programme is helping to find those undiagnosed.

In 2011, new NICE guidance requires the use of ambulatory BP monitoring (ABPM) to confirm diagnosis and prevent over diagnosis as in the case of “white coat” hypertension. However in practice this has not yet been implemented.
4.1.2 Achieving Blood Pressure Targets

The GP, through Quality and Outcomes Framework (QoF) is incentivised to manage patients with hypertension as follows:

<table>
<thead>
<tr>
<th>2012-13 QoF indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BP1.</strong> The practice can produce a register of patients with established hypertension.</td>
</tr>
<tr>
<td><strong>BP4.</strong> The percentage of patients with hypertension in whom there is a record of the blood pressure in the preceding 9 months.</td>
</tr>
<tr>
<td><strong>BP5.</strong> The percentage of patients with hypertension in whom the last blood pressure (measured in the preceding 9 months) is 150/90 or less.</td>
</tr>
<tr>
<td><strong>PP1.</strong> In those patients with a new diagnosis of hypertension (excluding those with pre-existing CHD, diabetes, stroke and/or TIA) recorded between the preceding 1 April to 31 March: the percentage of patients aged 30 to 74 years who have had a face to face cardiovascular risk assessment at the outset of diagnosis (within 3 months of the initial diagnosis) using an agreed risk assessment tool.</td>
</tr>
<tr>
<td><strong>PP2.</strong> The percentage of patients diagnosed with hypertension (diagnosed after 1 April 2009) who are given lifestyle advice in the preceding 15 months for: increasing physical activity, smoking cessation, safe alcohol consumption and healthy diet.</td>
</tr>
</tbody>
</table>

All practices in Greenwich can produce a register of patients with hypertension.

**BP4. The percentage of patients with hypertension in whom there is a record of the blood pressure in the preceding 9 months**

Figure 12 and 13 illustrate the percentage of people who have had their BP recorded in 11/12 with exceptions excluded and included in the denominator respectively. For this indicator, Greenwich has a below national exception rate in the country (0.6% compared to England 1.2%, rank 18 out of 152 PCTs). If we take into account exception rates then, Greenwich is the highest performing Borough in the sector and performs better than London but slightly less than England. Performance should be understood within the context of exception rates (potentially those not followed up).
BP5. The percentage of patients with hypertension in whom the last blood pressure (measured in the preceding 9 months) is 150/90 or less

Figure 14 and 15 illustrate the percentage of people in whom the last blood pressure is 150/90 or less in 11/12 with exceptions excluded and included in the denominator respectively. For this indicator, including or excluding exceptions makes little difference to performance position in comparison to the other Boroughs. 76.7% of people within Greenwich have their blood pressure controlled (inc. exceptions in denominator) to 150/90mmHg; this rate is the second highest in the sector and is 1.0% higher than in London and England respectively. Greenwich has a below national exception rate in the country (3.1% compared to England 3.7%, rank 42 out of 152 PCTs). However, despite Greenwich doing comparatively well, this data indicates that 23.3% of patients still have uncontrolled BP to 150/90mmHg, and therefore at greater risk of cardiovascular disease.

Figure 14: BP04: % BP Recorded (exceptions exc. from denominator)  Figure 15: BP04: % BP Recorded (exceptions inc. in denominator)

% BP Control (exc. exceptions in denominator)  % BP Control inc. exceptions in denominator

Source: QoF Data 2011/12  Source: QoF Data 2011/12

However, one difficulty with QoF targets are they are out of line with evidenced based NICE targets. For example, NICE recommends for those under 80 years of age BP should be controlled to 140/90 and only in those above 80 years is150/90 the recommended level. Thus, the proportion uncontrolled to optimal levels may be higher.

Figure 16 illustrates the trend in BP achievement from 2008/9 to 2011/12. Since 2008/9 Greenwich has increased at a greater rate than London and now has BP control to 150/90mmHg at higher levels than in London. It’s position of second in the sector has been sustained since 2008/9, and where all but one PCT, in the sector are now showing a no change or a decline in the proportion of people with their blood pressure controlled, and Greenwich is continuing to make improvements year on year.
Figure 16: Sector BP Control from 2008/9 to 2011/12 (excluding exceptions in denominator)

![BP control to 150/90mmHg achievement chart](chart16.png)

Source: QoF Data 2008/9 - 2011/12

Figure 14 breakdowns blood pressure control by individual practice and includes exception rates. The Greenwich exception rate for BP5 control of blood pressure is 3.48%, this is lower than London (3.80%) and England (3.89%). The variation in exception reporting ranges from 1.1% to 22%. The two new practices, Clover health centre and Thamesmead NHS health centre, have particularly high rates of exceptions. The variation of blood pressure control by practice ranges from 64.4% to 89.9%. The top 3 practices for control are Valentine Plus; Dr Lal’s practice and Nightingale PMS.

Figure 17: Control of blood pressure by practice 2011/12

![Control of blood pressure (BP5) 2011/12 practice achievement rates](chart17.png)

Source: QoF data 2011-12
PP1. The percentage of patients recently diagnosed with hypertension and aged 30 to 74 years who have been a face to face cardiovascular risk assessment at the outset of diagnosis

Figure 18 highlights the percentage of patients (recently diagnosed with hypertension, aged 30 to 74 years) who have had a face to face cardiovascular risk assessment at the outset of diagnosis. In Greenwich, there is little difference in the comparative performance borough position if exceptions are included or excluded. NHS Greenwich achieved performance rates of 74.3% and 61.1% excluding and including exceptions respectively ranking it 4th in the sector and below the London and England average. This is a new indicator and, as a result exception rates are higher than other hypertensive indicators. The Greenwich exception rate (17.8%) is higher than in London (16.0%) and in England (15.4%).

The variation in implementation by practice also varies widely from 0% to 100% (net of exceptions) and 0% to 88.57% (inclusive of exceptions).

Figure 18: Control of blood pressure by practice 2011/12 (excluding exceptions)

Source: QoF data 2011-12

5.0 Bibliography


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