# Hypertension profile 

## Wirral

## Background

This profile compares Wirral with data for England, local authorities in the North West region and the Office for National Statistics (ONS) group of similar local authorities.

High blood pressure (hypertension) is one of the leading risk factors for premature death and disability and can lead to conditions including stroke, heart attack, heart failure, chronic kidney disease and dementia. A blood pressure reading over $140 / 90 \mathrm{mmHg}$ indicates hypertension, which should be confirmed by tests on separate occasions to reach a diagnosis.

Diseases caused by high blood pressure cost the NHS over £2billion every year. By reducing the blood pressure of the nation as a whole, £850million of NHS and social care spend could be avoided over ten years. International comparison shows that improvement is possible and plausible. While around four in ten adults in England with high blood pressure are both diagnosed and controlled to recommended levels, the rate achieved in Canada is seven in ten (achieved with similar resources).

In Wirral the percentage of hypertension detected and controlled to 150/90 is $44.7 \%$. In order to match the achievement of Canada a further 19,300 people would need to receive treatment and have their blood pressure controlled.

Public Health England has published evidencebased advice on how to effectively identify, treat and prevent hypertension; Tackling high blood pressure: from evidence into action ${ }^{1}$.
${ }^{1}$ www.tinyurl.com/prk7drz

Diagnosis and control of hypertension in Wirral*

| 90,400 | $\begin{aligned} & 50,700 \\ & (56.1 \%) \end{aligned}$ | $\begin{aligned} & 40,400 \\ & (44.7 \%) \end{aligned}$ |
| :---: | :---: | :---: |
|  |  |  |
| Estimated number of people with hypertension | Number of people diagnosed with hypertension | Number of people with controlled hypertension |
| Significantly higher than the England value | Similar to the England value | Significantly lower than the England value |


| Chosen <br> local <br> authority | ONS <br> similar <br> local <br> authorities | North <br> West | England |
| :---: | :---: | :---: | :---: | :--- |
| Region |  |  |  |

Proportion diagnosed with hypertension

Proportion with controlled
hypertension
56.1\%
60.1\%
56.1\%
55.8\%
44.7\%
54.4\%
49.1\%
44.9\%

Lifestyle risk factors for hypertension

| $25 \%$ with |
| :--- |
| lowest risk |
| scores |


| $25 \%$ with |
| :---: |
| highest risk |
| scores |

The lifestyle risk factors for hypertension: obesity, lack of exercise and excess alcohol drinking have been combined and weighted to produce an overall lifestyle hypertension ranking for each local authority. The lifestyle risk factors rank score for hypertension in Wirral is 136 out of 326 local authorities.
${ }^{2}$ www.tinyurl.com/q6yrale

## Prevention

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This profile is divided into three sections and mirrors the three chapters prevention, detection and management of Tackling high blood pressure: From evidence into action ${ }^{1}$.

High blood pressure is often preventable. Even individuals with blood pressure currently in the 'normal' range could reduce their future risk of cardiovascular disease by lowering their blood pressure still further down to a threshold of $115 / 75 \mathrm{mmHg}$. There are both modifiable risk factors (such as excess weight, dietary salt or alcohol) and non-modifiable risk factors (such as old age, family history or ethnicity) for high blood pressure. The burden of high blood pressure is greatest among individuals from low-income households and those living in deprived areas.

People from the most deprived areas are 30\% more likely than the least-deprived to have hypertension. In 2015, 30.7\% of the population of Wirral live within the most deprived $30 \%$ of all areas in England using a weighted measure of the population ${ }^{3}$.

## Fixed risk factors for hypertension

In 2014 the proportion of people aged 65 and over in Wirral was 20.6\%, which is higher than England as a whole, where $17.6 \%$ of the population were aged 65 and over.

Hypertension disproportionately affects some ethnic groups including people with a black African or Caribbean heritage. In this local authority an estimated $3.0 \%$ of the population are from black, Asian, mixed or other groups, compared to $14.6 \%$ across England.

## Lifestyle risk factors for hypertension

| Lifestyle risk factors (per cent) | Local authority rank for risk factor | Local authority | ONS similar local authorities | North West Region | England (as year) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Excess weight in adults (2012-14) | $\begin{gathered} 177 \\ \text { out of } 326 \end{gathered}$ | 66.2 | 68.2 | 66.1 | 64.6 |
| Physical inactivity (2014) | $\begin{gathered} 97 \\ \text { out of } 326 \end{gathered}$ | 24.6 | 32.3 | 30.3 | 27.7 |
| Increasing and high risk drinking (2007-08) | $\begin{gathered} 72 \\ \text { out of } 326 \end{gathered}$ | 20.8 | 26.0 | 23.4 | 20.1 |

Key approaches to consider to reduce hypertension (more detailed guidance in action plan ${ }^{4}$ )

- reducing salt consumption and improving overall nutrition at population-level
- improving calorie balance to reduce excess body weight at population-level
- personal behaviour change on diet, physical activity, alcohol and smoking, particularly prompted through individuals' regular contacts with healthcare and other institutions
${ }^{3}$ http://tinyurl.com/op9k35j
${ }^{4}$ www.tinyurl.com/prk7drz


## Detection

## Wirral

Adults should have their blood pressure measured at least once every five years. Once tested, NICE recommends that adults are re-measured within five years and more frequently for people with highnormal blood pressure or in high risk groups. Blood pressure can be highly variable, so a diagnosis of hypertension should never be based on a single test and should normally be confirmed by ambulatory ( 24 hour monitoring) or home testing. The majority of diagnoses currently occur in General Practice. However, NHS Health Check, pharmacy, voluntary sector and home are also important testing venues and potential growth areas to maximise detection.

## Prevalence of hypertension (per cent)

$\square$ Diagnosed hypertension prevalence $\quad \square$ Expected hypertension


Source - Quality and Outcomes Framework 2014/15, ERPHO (HSE and Imperial College London) 2011
Diagnosed hypertension is taken from the Quality and Outcomes Framework and represents all adults who have been diagnosed with hypertension and included on GP registers. The expected prevalence estimates of hypertension are modelled from the Health Survey for England data. This model has some known limitations: for example diagnosis of hypertension was based on three blood pressure readings in a single sitting rather than the ambulatory monitoring recommended by NICE; and the model was developed from 2003/04 survey data. Nevertheless the model is accepted as a reasonable indicative estimate of hypertension, and this suggests that in England there may be in excess of five million people living with undiagnosed hypertension.

## Comorbidities

Prevalence of comorbidites in which hypertension contributes to outcomes in Wirral, QOF 2014/15 (per cent)

$\square$ Local authority $\square$ England



## Detection

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## Percentage of patients aged 45+ who have a record of blood pressure in last five years.



In Wirral $8.5 \%$ of patients have not had a record of their blood pressure in the last five years. The levels of blood pressure recording varies between $86.0 \%$ and $96.5 \%$ at practice level.

## NHS Health Checks

The NHS Health Check programme aims to help prevent heart disease, stroke, diabetes, kidney disease and certain types of dementia. Everyone between the ages of 40 and 74, who has not already been diagnosed with one of these conditions, will be invited once every five years to assess their risk of developing these conditions. They are given support and advice to help them reduce or manage that risk. During a health check a blood pressure check is made.

In Wirral in 2014/15 an estimated 101,000 residents were eligible to be offered a Health Check.

The percentage of people who were eligible for a health check in 2014/15 who were offered a health check was $22.7 \%$, up $5.0 \%$ from 2013/14. The percentage for England was 19.7\%.


The percentage of people who were offered a health check who took up the offer was $44.4 \%$, down by $8.7 \%$ from 2013/14. The England percentage was $48.8 \%$.


## Key approaches to consider to increase detection (more detailed guidance in action plan) ${ }^{5}$

- more frequent opportunistic testing in primary care, achieved through using a wider range of staff (nurses, pharmacy, etc) and integrating testing into the management of long term conditions
- improving take-up of the NHS Health Check, a systematic testing and risk assessment offer for 40-74 year olds
- targeting high-risk and deprived groups, particularly through general practice records audit and outreach testing
${ }^{5}$ www.tinyurl.com/prk7drz


## Management

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Latest NICE guidelines recommend lifestyle interventions for all patients with hypertension and with good adherence significant blood pressure reduction can be achieved. Where it is appropriate, drug therapy for all over $160 / 90 \mathrm{mmHg}$ and over $140 / 90 \mathrm{mmHg}$ when other risks are present, are recommended.
A four step approach to incremental drug treatment is set out by NICE. Around $80 \%$ of people require two or more anti-hypertensive agents to achieve blood pressure control and some need up to four agents. For adults under 80 years with treated high blood pressure, NICE set a treatment target of $140 / 90 \mathrm{mmHg}$. High blood pressure frequently accompanies other conditions and $78 \%$ of patients with hypertension have one or more other conditions. Common multi-morbidities include diabetes, coronary heart disease, heart failure and stroke. This can make management more challenging but offers additional opportunities for monitoring and improving outcomes.

Variation at practice level of the QOF target for the treatment for hypertension in whom the last blood pressure reading is $150 / 90 \mathrm{mmHg}$ or less (per cent).


In Wirral the QOF target for blood pressure at practice level varies between $68.4 \%$ and $89.5 \%$. There are 25 out of 56 practices which exceed the England QOF target for hypertension percentage of $80.4 \%$. There are around 10,200 people with hypertension not controlled to 150/90.

Management of hypertension in people with comorbidities (per cent)

| QOF Measure | The range of BP control at practice <br> (Number of practices equal or higher than England average) | Local <br> (Previous years per cent, 2013/14) | ONS similar local authorities | North <br> West <br> Region | England |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Blood pressure control to $\leq 140 / 80$ in people with diabetes | $\begin{gathered} \text { 47.0-89.1 } \\ \text { (39 out of } 56 \text { practices) } \end{gathered}$ | $74.2$ <br> (74.1) | 72.9 | 73.7 | 71.2 |
| Blood pressure control to $\leq 150 / 90$ in people with coronary heart disease | 76.3-96.5 <br> (35 out of 56 practices) | 88.3 <br> (88.2) | 88.5 | 88.9 | 88.4 |
| Blood pressure control to $\leq 140 / 85$ in people with chronic kidney disease | 60.0-88.3 <br> (38 out of 56 practices) | $75.6$ <br> not used | 76.1 | 76.8 | 74.4 |
| Blood pressure control to $\leq 150 / 90$ in people with a history of stroke or TIA | $54.5-93.8$ <br> (32 out of 56 practices) | $\begin{aligned} & 84.1 \\ & (85.2) \end{aligned}$ | 84.9 | 84.9 | 84.3 |

## Management

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Outcome versus expenditure - people whose last blood pressure reading was 150/90 (QOF) versus the spend per item on hypertension prescriptions, 2014/15
Quadrant analysis charts (shown below) plot spending against an outcome measure. The cost and outcome measures have been standardised to allow direct comparisons across different scales. The cost data is the average spend per item in the local authority on all prescriptions for hypertension (section 2.5 BNF). The outcome measure is the percentage of people with hypertension whose blood pressure which had been controlled to provide a reading of 150/90 in the last 12 months. Local authorities within the dotted box do not have a statistically significant different level of spending and outcomes from England.

The total spend on prescriptions for hypertension in Wirral was $£ 1,072,000$ which gave a cost of $£ 2.42$ per item. The cost per item is $£ 0.06$ lower than the average cost per item in England.


Please note hypertensive drugs can also be prescribed for a number of conditions such as diabetes mellitus, chronic kidney disease and heart failure. The outcome in the chart is only for hypertension control of 150/90.

## Key approaches to consider managing hypertension (more detailed guidance in action plan) ${ }^{6}$

- local leadership and action planning for system change, to tackle particular areas of local variation, and achieve models of person-centric care
- health professional support (communication, tools \& incentives) to bring professional practice nearer to treatment guidelines where this falls short
- support adherence to drug therapy and lifestyle change, particularly through self-monitoring of blood pressure and pharmacy medicine support


## Wider resources

${ }^{6}$ Tackling high blood pressure: From evidence into action. www.gov.uk/government/publications/high-blood-pressure-action-plan Blood pressure resource hub www.gov.uk/high-blood-pressure-plan-and-deliver-effective-services-and-treatment Interactive blood pressure data maps http://healthierlives.phe.org.uk/topic/hypertension
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