HIGH BLOOD PRESSURE

How can we do better?
Why improve detection and management of high blood pressure (BP)?

The challenges:
1. One in five adults in Wales report being treated for high blood pressure (hypertension) – there are many more undiagnosed and untreated.
2. High BP is one of the leading risk factors for premature death and disability in Wales, according to the Global Burden of Disease study.
3. At least half of all heart attacks and strokes are associated with high BP. This includes thousands of acute events in Wales, and is a major risk factor for chronic kidney disease, heart failure and cognitive decline.

The opportunities:
1. Nearly one in five people diagnosed with high BP in Wales are not treated to target levels.
2. Treatment for high BP significantly reduces the risk of heart attack, stroke, heart failure and all-cause mortality.
3. Every 10mmHg reduction in systolic BP reduces the risk of major cardiovascular events by 20%.
4. Treatment is very effective at lowering BP and at improving outcomes.
There is an opportunity to improve detection of high BP in Wales.

More than 500,000 people are diagnosed and living with high BP in Wales.

However, analysis elsewhere in the UK suggests that for every 10 people diagnosed with high blood pressure, 7 others remain undiagnosed and untreated.

There could therefore be hundreds of thousands of people in Wales with high BP who are undiagnosed and untreated.

Are you capturing everyone?
Key messages on detection

What do we need to know?

1. High blood pressure rarely causes symptoms – detection generally relies on opportunistic testing or late presentation by individuals with conditions or complications related to high BP.

2. Diagnosis of high blood pressure depends on accurate measurement, but measurement technique could be improved amongst health care professionals and the public.

What can be done to improve detection?

Practices

1. Audit practice records to identify people with high BP recordings who do not have a hypertension code. To prioritise, consider starting with those with readings above 150/90mmHg.

2. Increase opportunistic blood pressure testing in the practice:
   - Think BP in routine consultations.
   - Make blood pressure testing routine in all nurse led-clinics such as asthma, COPD, diabetes, weight management, smoking cessation, as well as other local enhanced service clinics – prompt by adding to templates.

3. Take the opportunity to promote community BP campaigns. Please note patient may present with a BP record from these events.

4. If a reading is high, always offer ambulatory or, when appropriate, home blood pressure monitoring in order to confirm a diagnosis of high BP and always include assessment of lifetime cardiovascular risk as part of the diagnosis.

5. Promote high standards in BP measurement, including machine calibration, signposting patients and staff to resources on high blood pressure and self-testing through NHS Choices (see final page).

Health Boards and GP Clusters

1. Examine the level of variation in the numbers of people with high blood pressure between GP clusters and practices.

2. Adopt quality improvement methods to support all practices to identify people with high blood pressure.

3. Work with partners to promote public awareness of blood pressure and opportunities for testing and self-testing.

4. Promote access to ambulatory blood pressure monitoring.

5. Consider partnership opportunities with community pharmacists and community BP campaigns to offer blood pressure checking.

6. Consider supporting practices to have self-test BP stations in the waiting room.
There is an opportunity to improve management of high BP in Wales.

82% of patients in Wales are treated to target, however the variation between practices ranges from 37% to 98%.

<table>
<thead>
<tr>
<th>HEALTH BOARD</th>
<th>PATIENTS NOT TREATED TO TARGET</th>
<th>VARIATIONS WITHIN HEALTH BOARD AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LOWEST</td>
</tr>
<tr>
<td>ABM UHB</td>
<td>14,245</td>
<td>68%</td>
</tr>
<tr>
<td>ANEURIN BEVAN UHB</td>
<td>17,286</td>
<td>37%*</td>
</tr>
<tr>
<td>BETSI CADWALADR UHB</td>
<td>21,107</td>
<td>58%</td>
</tr>
<tr>
<td>CARDIFF &amp; VALE UHB</td>
<td>10,300</td>
<td>65%</td>
</tr>
<tr>
<td>CWM TAF UHB</td>
<td>8,566</td>
<td>68%</td>
</tr>
<tr>
<td>HYWEL DDA UHB</td>
<td>11,212</td>
<td>72%</td>
</tr>
<tr>
<td>POWYS TEACHING HB</td>
<td>4,300</td>
<td>69%</td>
</tr>
<tr>
<td>WALES</td>
<td>87,016</td>
<td>37%*</td>
</tr>
</tbody>
</table>

*Please note this data includes a practice now managed by the Health Board

Variation in BP control in people with comorbidities shows scope for improving optimisation of treatment.

<table>
<thead>
<tr>
<th>TREATED TO TARGET IN WALES</th>
<th>VARIATIONS WITHIN HEALTH BOARD AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOWEST</td>
</tr>
<tr>
<td>Managing high BP in CHD* patients</td>
<td>92%</td>
</tr>
<tr>
<td>Managing high BP in stroke/TIA survivors</td>
<td>89%</td>
</tr>
<tr>
<td>Managing high BP in adults with diabetes</td>
<td>92%</td>
</tr>
</tbody>
</table>

*CHD = coronary (ischaemic) heart disease (myocardial infarction (MI; heart attack) or angina)

Nearly one in five people diagnosed with high BP in Wales are not treated to target.

QOF indicator HYP006. The percentage of patients with hypertension in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less.
Key messages on management

➔ What do we need to know?

1. Support for behaviour change, targeting modifiable risk factors – such as dietary salt intake, physical inactivity, being overweight, smoking and excess alcohol consumption – is a core element of treatment for hypertension, and can be as effective as adding another drug.

2. Most people with high BP require combination treatment with two or more anti-hypertensives in order to achieve satisfactory blood pressure control.

3. Across the long term conditions more than half of all patients do not take their medication as prescribed. Patients may also take some over-the-counter medication that can raise BP.

4. Evidence from the large SPRINT study suggests that more intensive treatment with a target systolic blood pressure of 120mmHg is associated with improved survival and fewer cardiovascular events.

5. A recent meta-analysis by Ettehad et al (2016) found that every 10mmHg drop in BP was associated with a 20% reduction in cardiovascular events.

6. Drug treatment should be tailored to the individual taking into account cardiovascular risk, co-morbidity, adverse effects of medication and patient preference.

➔ What can be done to improve treatment?

Practices

1. Audit practice records to identify individuals with poor control of high BP - focus first on people under 85 years with BP above 140/90 who are not on a three-drug combination.

2. Use shared decision making resources to help the individual make informed decisions about behaviour change and drug treatment.

3. Agree BP treatment targets with patients as part of shared management plan, taking account of comorbidity, adverse effects and patient preference.

4. Offer therapy according to NICE/BIHS guidelines and have a clear protocol to ensure regular review and intensification of therapy to maintain BP targets.

5. Make BP testing routine in nurse-led clinics and ensure that identification of poor BP control is the responsibility of all clinicians.

6. When blood pressure is above target always ask about adherence to treatment.

7. Advise patients of the option to buy clinically validated blood pressure machines advised by the British and Irish Hypertension Society and provide advice on how they can monitor their own blood pressure.

8. Explore use of remote monitoring via telehealth or blood pressure apps.
Health Boards and GP Clusters

1. Use local data where it is available to estimate how many people with high BP are controlled to the NICE/BIHS Guidelines.

2. Examine the level of variation in achievement rates between practices.

3. Adopt quality improvement methods to support all practices to perform as well as the top quartile in high BP.

4. Expand adherence support by community pharmacists as part of medicine review service.

5. Consider the role of community pharmacists to support BP monitoring and treatment optimisation.

6. Support practices to evaluate emerging technologies that can help patients and clinicians to monitor and manage high BP.

7. Promote and support opportunities for educational activities for GPs, nurses, health care assistants and patients.

Glossary
TIA: Transient Ischaemic Attack
COPD: Chronic Obstructive Pulmonary Disorder
NICE: National Institute for Health and Care Excellence
BIHS: British Hypertension Society
QOF: Quality and Outcomes Framework
ONS: Office for National Statistics

Sources
StatsWales, Quality and Outcomes Framework 2015/16, published October 2016 (prevalence, diabetes treatment)
StatsWales, Quality and Outcomes Framework 2014/15, published October 2015 (CHD, stroke treatment)
Please note that treatment figures only include eligible patients
Welsh Health Survey 2015 Results, published summer 2016
Links for further background:
NHS Choices resources: nhs.uk/Tools/Pages/High-blood-pressure-video-wall.aspx
Shared decision making tools: sdm.rightcare.nhs.uk/pda/high-blood-pressure
Clinically validated blood pressure machines: bhsoc.org/index.php?cID=246

References
The SPRINT Research Group, N Engl J Med 2015; 373; 2103-2116
Ettahed et al, The Lancet 2016; 387; 957-967

This publication has been developed with
For over 50 years our research has saved lives. We’ve broken new ground, revolutionised treatments and transformed care.

But heart and circulatory disease still kills one in four people in the UK.

That’s why we need you.

With your support, your time, your donations, our research will beat heart disease for good.