



Public Health
England

Protecting and improving the nation's health

Tackling high blood pressure: an update

Developed by the Blood Pressure System Leadership Board, convened by Public Health England

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health, and a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner.

Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
Tel: 020 7654 8000
www.gov.uk/phe
Twitter: [@PHE_uk](https://twitter.com/PHE_uk)
Facebook: www.facebook.com/PublicHealthEngland

Prepared by: NHS Health Checks quality assurance working group
For queries relating to this document, please contact: the cardiovascular disease prevention team on 020 7654 8000 or PHE.enquiries@phe.gov.uk



© Crown copyright 2018

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0. To view this licence, visit [OGL](https://www.ogil.io). Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Published January 2018
PHE publications
gateway number: 2017690

PHE supports the UN
Sustainable Development Goals



Acknowledgments

The Blood Pressure System Leadership Board (membership detail in annex 1) would like to thank all of the partners who have contributed to this updated action plan:

- Association of Directors of Public Health
- Blood Pressure UK
- British Heart Foundation
- British and Irish Hypertension Society
- Department of Health
- Faculty of Public Health
- Health Education England
- Local Government Association
- National Cardiovascular Intelligence Network, Public Health England (NCVIN)
- NHS Choices
- NHS England
- NHS England - Sustainable Improvement Team
- NHS RightCare
- National Institute for Health and Care Excellence (NICE)
- Public Health England
- Stroke Association
- Royal College of General Practitioners
- Royal College of Nursing
- Royal Pharmaceutical Society

Contents

About Public Health England	2
Acknowledgments	3
Foreword	5
Our intention	6
The importance of taking action	8
Tackling high blood pressure	12
Latest achievements	14
Future commitments	22
Call to action	31
How different groups can contribute	32
Annex 1: Board membership	36

Foreword

The Blood Pressure System Leadership Board and their partners published the **Tackling high blood pressure: from evidence into action** in 2014. This publication was an initial plan, set out to highlight the Board's collective ambition and committed actions that the Board and their valued partners were going to carry out to improve the prevention of high blood pressure in England.

Despite recent system wide commitment to tackling high blood pressure, it continues to affect more than 1 in 4 adults in England and is the second largest single risk factor for premature death and disability in the country (and the second largest globally, gaining international focus¹). It is also the principal risk factor for cardiovascular disease (CVD) events in England. A stronger and more focused effort is therefore required to address this, similar to other risk factors such as tobacco. Some international commentators are starting to describe high blood pressure as the new tobacco challenge for the health and care system. What is clear is that both risk factors are important public health challenges and more needs to be done to address the preventable ill health, death and devastation they cause for individuals and communities.

A recent **Public Health England (PHE) analysis** suggests that there is now an opportunity to prevent more than 9,000 heart attacks and at least 14,000 strokes over the next 3 years if we work towards better detection and management of high blood pressure. Therefore, the Blood Pressure System Leadership Board and their partners will seek to outline their key commitments to tackling high blood pressure in this updated action plan.

This revised plan for the next 3 years seeks to go even further than the original 'Evidence into action' publication and also aims to engage new stakeholders. It is also important to consider that whilst this work will significantly contribute to the broader CVD agenda, blood pressure remains a priority and an independent focus for the Blood Pressure System Leadership Board. In turn, tackling high blood pressure must remain a priority in England.

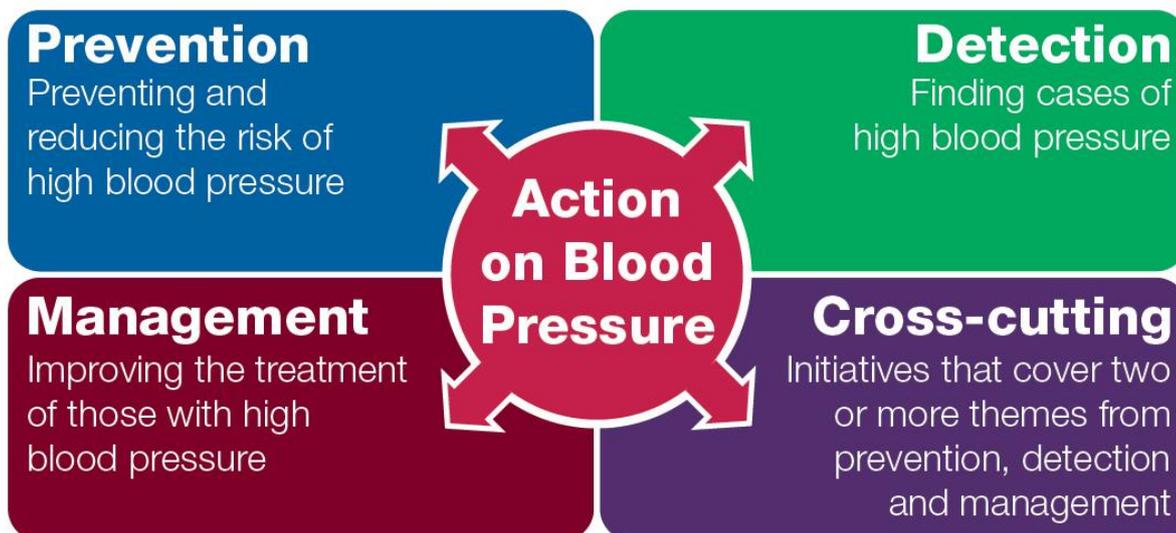
**Associate Professor Jamie Waterall
National Lead for Cardiovascular
Disease Prevention and Associate
Deputy Chief Nurse
Chair of the Blood Pressure System
Leadership Board**



Our intention

This action plan has been updated to outline the collective ambition for the next 3 years and to inspire new partners to join this collaborative action by signposting and supporting professional groups to the most up to date resources. This document will also provide detail of key highlights of progress that have been made by the Board and their partners since the last publication.

The updated commitments that are outlined in the updated action plan have been categorised into the same 4 main headings as the previous publication; prevention; detection and management of high blood pressure, along with those that are cross cutting (covering 2 or more themes).



A wide range of partners have contributed to updating this action plan by identifying commitments that they will seek to achieve over the next 3 years. The actions outlined will continue to be targeted at a national level and hope to provide a strong basis for improvement at a local level. PHE will continue to monitor annual progress of this action plan and provide updates to stakeholders through [the resource hub](#). PHE will also continue to support local health and care systems by providing local data maps to highlight key actions and progress.

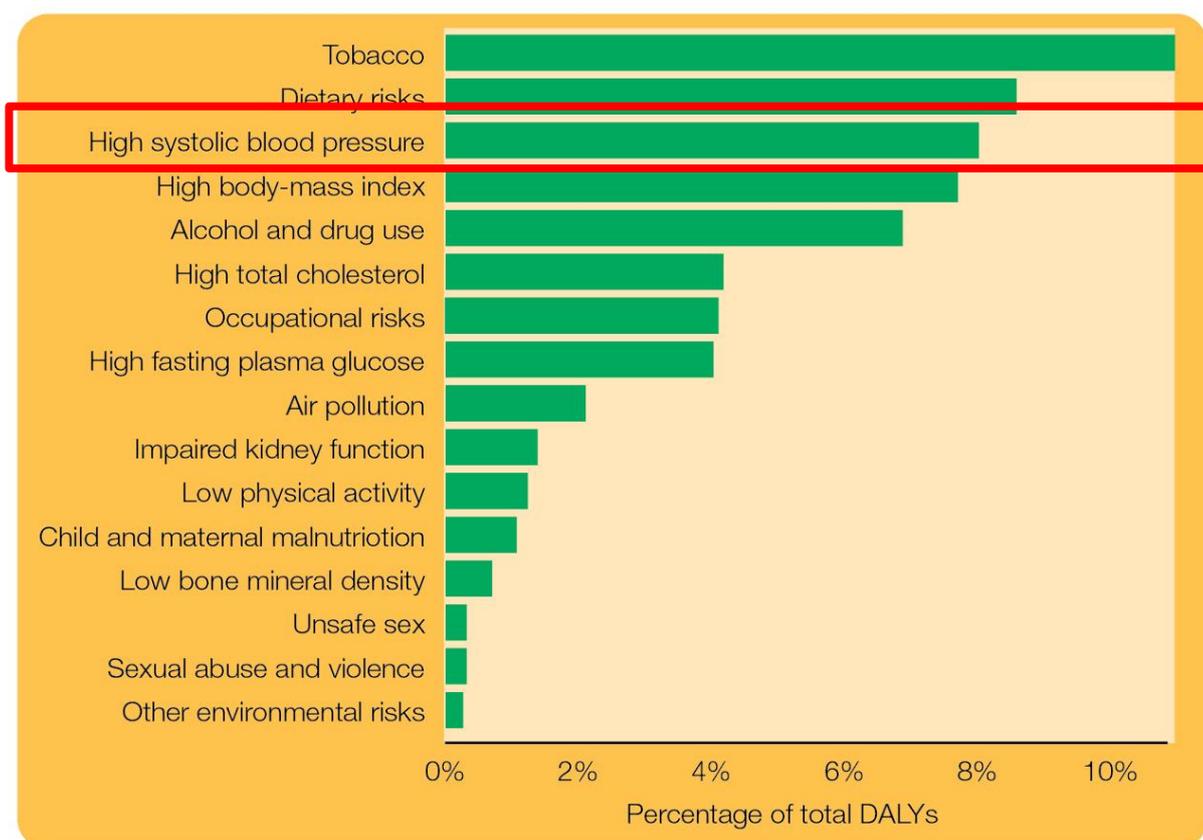
The target audience for this action plan is:

- Local Government
- National Government
- Clinical Commissioning Groups
- Accountable Care Systems

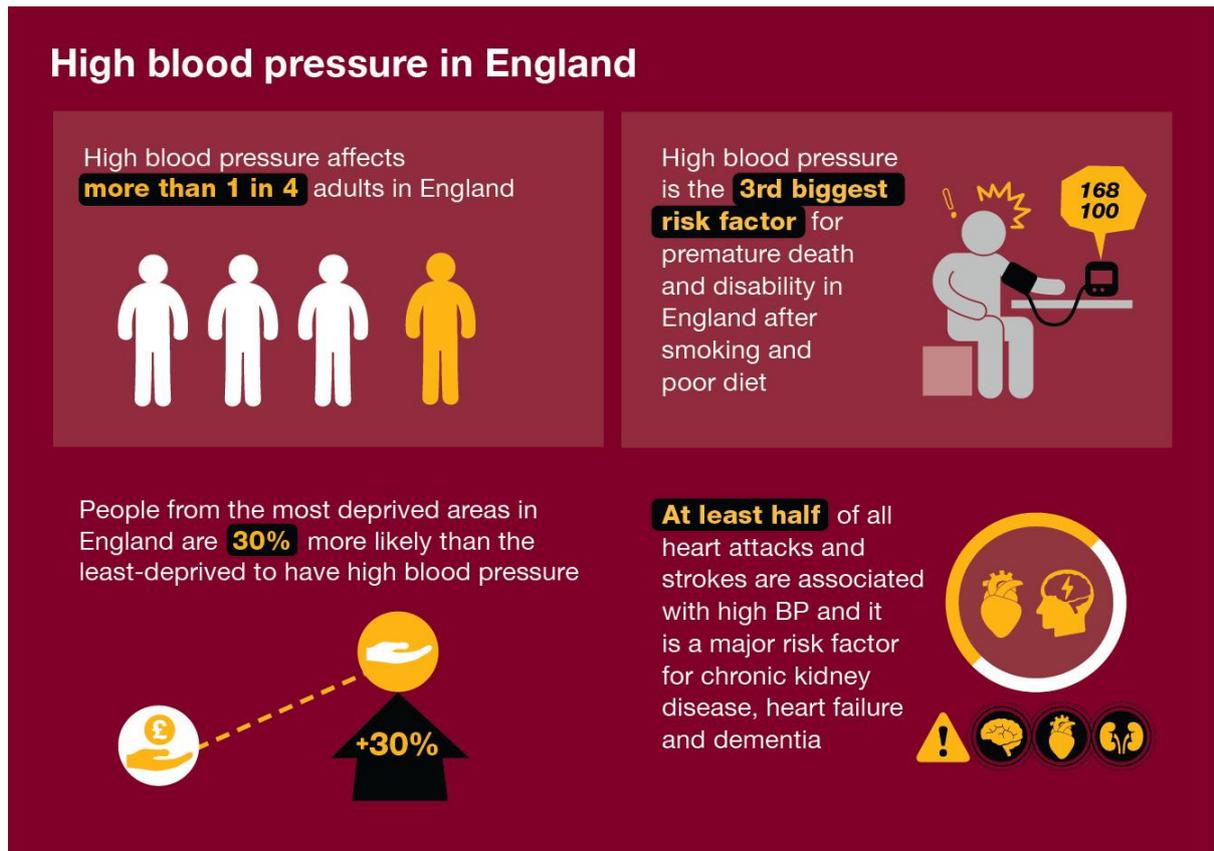
- Academia
- Sustainability and Transformation Partnerships (STPs)
- National Health Service (NHS)
- Voluntary and Third Sector
- Professional bodies

The importance of taking action

In March 2017, NHS England (NHSE) published the [Next Steps on the NHS Five Year Forward View](#), which highlighted their commitment to the early detection and preventative action for people at high risk of CVD. This updated action plan will therefore contribute significantly to this wider agenda, as high blood pressure remains the principle risk factor of CVD. The [Global Burden of Disease Study, 2015](#) highlights the importance of tackling high blood pressure remaining an international priority as it is the second biggest known global risk factor for disease after poor diet. In the UK, high blood pressure is the third biggest risk factor for disease after tobacco smoking and poor diet.



High blood pressure, considered to be **140/90mmHg or higher**, can also increase the risk of developing a number of other conditions such as heart failure, coronary artery disease, stroke, chronic kidney disease, peripheral arterial disease and vascular dementia.



A high number of people that are affected by high blood pressure are not always aware that they have it and it is often referred to as the ‘silent killer’ due to it rarely causing symptoms. However, globally there were 10.7 million deaths worldwide in 2015 which is approximately **1 in 4 adults** and it is projected that this is likely to rise and affect more than 1.5 billion people worldwide by 2025¹.

In England, high blood pressure affects more than 1 in 4 adults amounting to around 13.5 million people and was responsible for around **75,000** deaths. More than 40% of these people remain undiagnosed, accounting for more than 5.5 million people unaware of their risk². NHS Choices have developed **guidance** on high blood pressure to support members of the public to understand their blood pressure.

¹ Olsen M H, Angell S Y et al. A call to action and lifecourse strategy to address the global burden of raised blood pressure on current and future generations: the Lancet Commission on hypertension. Lancet 2016; 388: 2665–712

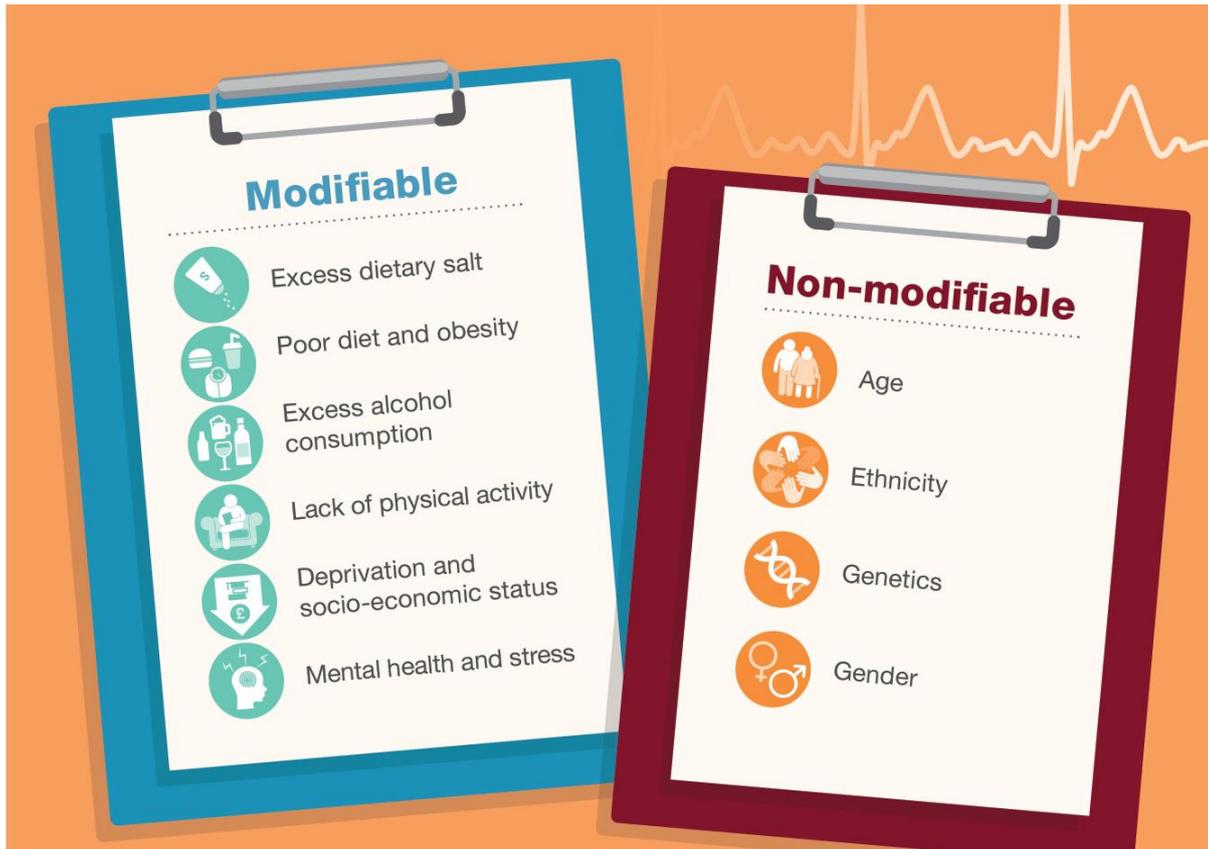
² Public Health England (2016). Hypertension prevalence estimates for local populations.

<https://www.gov.uk/government/publications/hypertension-prevalence-estimates-for-local-populations>



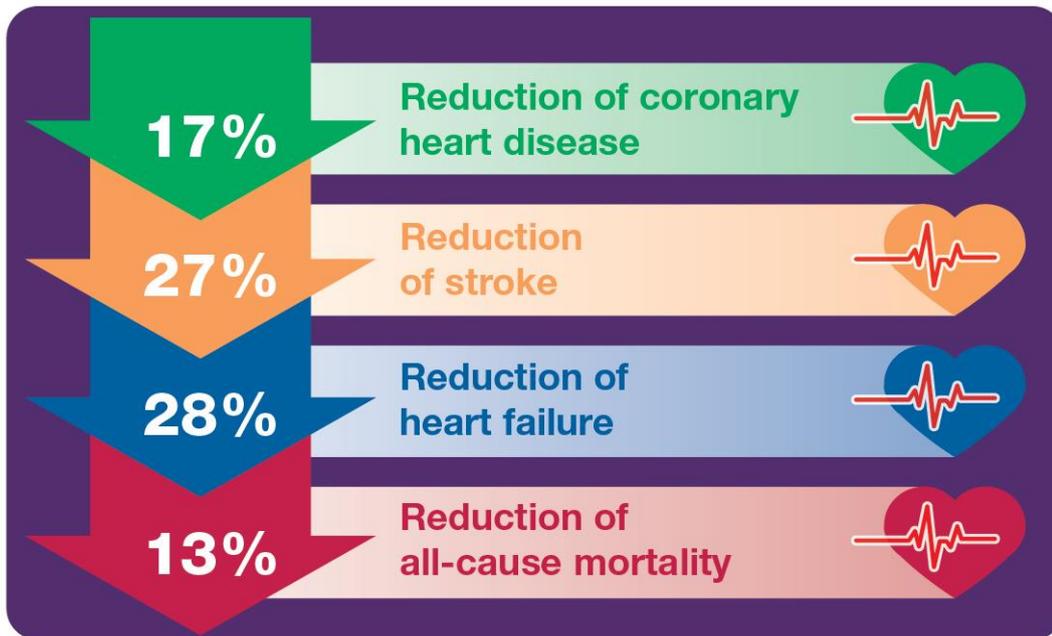
Whilst age is a non-modifiable risk factor of high blood pressure, it is ever more important that people of all age groups are aware of their blood pressure, as an estimated 1.8 million people under the age of 45 had high blood pressure in England between 2014 and 2015³.

³ <http://www.content.digital.nhs.uk/catalogue/PUB22616>



Tackling high blood pressure

There is robust evidence that taking action to lower blood pressure can reduce the risk it poses to health. A major **systematic review** found that in the populations studied, every 10mmHg reduction in blood pressure resulted in the following reductions.



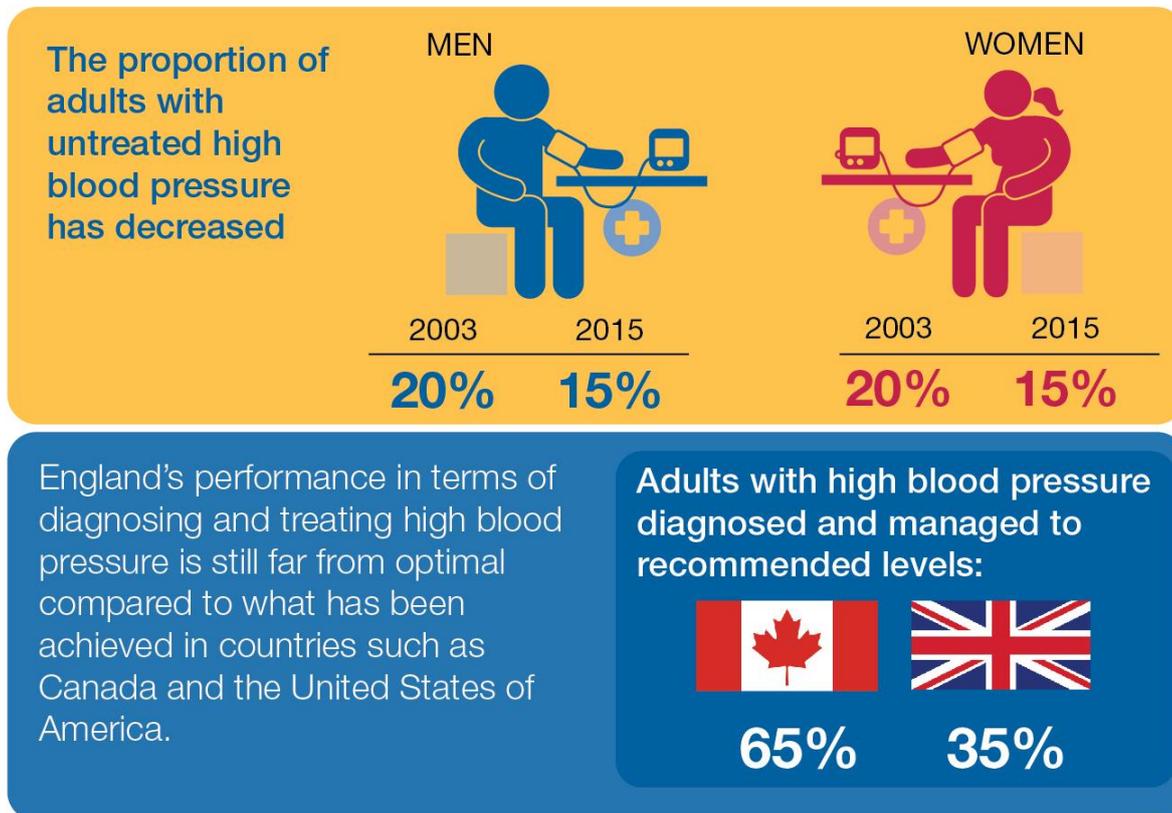
Some progress has already been made in reducing the population's levels of high blood pressure. Between 2003 and 2014 the average blood pressure in all adults aged 16+ reduced from 129/74 mmHg to 125/72 mmHg. For men, systolic blood pressure dropped just over 2.5 mmHg and for women, systolic blood pressure dropped 4.5 mmHg⁴. However, there has been little change in population blood pressure levels from 2011 to 2014.

The proportion of adults with untreated high blood pressure has also decreased from 2003 to 2015 for both sexes (from 20% to 15% among men and from 16% to 10% among women)⁵. However, England's performance in terms of diagnosing and

4 National Centre for Social Research and University College London. Department of Epidemiology and Public Health, Health Survey for England, 2003 to 2014 [computer files]. Colchester, Essex: UK Data Archive

5 Ettehad, D, Emdin CA, Kiran A, Anderson SG, Callender T, Emberson J, Chalmers J, Rodgers A, and Rahimi K. Blood Pressure Lowering for Prevention of Cardiovascular Disease and Death: A Systematic Review and Meta-Analysis. *The Lancet* 387, no. 10022 (11 March 2016): 957–67

treating high blood pressure is still far from optimal compared to what has been achieved in countries such as Canada and the United States of America. In Canada, 65% of adults with high blood pressure are both diagnosed and managed to recommended levels, compared with only 35% in England⁶.



It is estimated that up to 80% of premature deaths from CVD can be prevented through better public health⁷. All current blood pressure guidelines agree that support for behaviour change to address modifiable risk factors (smoking, alcohol, inactivity, obesity and poor diet) should be the first step in preventing high blood pressure⁷.

⁶ Health Survey for England 2015: Trend tables. <http://www.content.digital.nhs.uk/catalogue/PUB22616>

⁷ Barton P, Andronis L, Briggs A, McPherson K, Capewell S. (2011) Effectiveness and cost effectiveness of cardiovascular disease prevention in whole populations: modelling study. *BMJ* 343: d4044

Latest achievements

Since the initial action plan was set out in 2014, there have been a number of notable successes from members of the Blood Pressure System Leadership Board and their partners which makes significant contribution to the early detection, prevention and management of high blood pressure. Some notable achievements are outlined in the table below.

Detection and management

Organisation	Achievement
<p>Public Health England</p>	<p>PHE provides national oversight of the NHS Health Check programme, helping to identify people at risk of CVD and manage diagnosed conditions. Since 2013, a total of 12,796,252 people, 82.5%, of the 5-year eligible population, have been offered an NHS Health Check. Of these 6,192,271 people, 39.9% of the 5-year eligible population has had a check.</p> <p>PHE continue to provide support commissioners and providers of the NHS Health Check by producing national guidance. Most recently, in January 2017 PHE published new Health Equity Audit Guidance for the NHS Health Check programme, intended to help commissioners and providers better understand equity of access to checks and equity of outcomes from them.</p>
<p>British Heart Foundation</p>	<p>In October 2016, the British Heart Foundation (BHF) launched an innovative ‘Blood Pressure funding Award Programme’ which entitled community approaches to the detection and management of high blood pressure in the UK. This programme is committing £1.5m to launch a UK wide funding programme to enable grant recipients to develop and implement into practice community approaches to the testing and detection of high blood pressure and ensure an agreed pathway is in place to facilitate appropriate and timely medical and behaviour change support. The aims of the programme are to:</p> <ul style="list-style-type: none"> • increase the detection and management of people who have undiagnosed hypertension • increase access to blood pressure testing in wider community settings • increase support for patient self-management and self-testing to

	<p>become routine practice</p> <ul style="list-style-type: none"> • add to the evidence base and implementation into practice <p>£700k has already been awarded to 7 sites across the UK (6 in England and one in Scotland), with a second round of funding planned for later this year.</p> <p>Successful Award Sites are due to start delivering their projects in early Autumn 2017. The 2-year funding for projects is supporting innovative partnerships with organisations such as Community Trusts collaborating with Clinical Commissioning Groups and Primary Care organisations (for example, GP surgeries), offering blood pressure testing in a range of non-traditional settings and venues, such as via Fire & Rescue Safe & Well programmes, community centres and football clubs. Each project has defined patient pathways for diagnosis and treatment, behavioural change interventions and all are targeting hard to reach groups. Most of the projects also include new approaches for supporting patients to self-manage and self-monitor their blood pressure.</p> <p>An external evaluation company will work closely with the successful sites over the next 2 years to collate, analyse and synthesise the qualitative and quantitative activity data required to identify evidence based best practice. The evaluation will explore the approaches and service models which will most effectively and efficiently enhance the identification of people with hypertension via new approaches to blood pressure testing.</p>
	<p>The BHF has also partnered with PHE on the development and relaunch of the Heart Age Tool, which supported the 'Know your heart age' campaign in September 2017.</p>
<p>The Stroke Association</p>	<p>The Stroke Association led on the annual Know your Blood Pressure (KYBP) campaign (KYBP) which seeks to help people to understand the link between high blood pressure and stroke, other risk factors and what they can do to reduce their risk of having a stroke. In 2016 the programme measured the blood pressure of 54,854 people across the UK at 1997 KYBP events. A quarter of those checked were referred to their GP due to high blood pressure, 2,839 of whom were referred urgently due to a very high reading.</p>

Prevention

Organisation	Achievement
Public Health England	<p>PHE have done a range of campaigns to engage the population including:</p> <ul style="list-style-type: none"> • One You How Are You quiz, between 1 April 2016 and 31 March 2017 there were 1.34 million completions. • In 2017 a new Food Smart App launched, which includes information about saturated fat and salt • PHE updated the Heart Age tool, which helps people work out their heart age and risk of heart attack and stroke. By June 2017, the tool has been viewed by 2.9 million people, with 1.2 million completions. The new version of the tool includes interventions and advice for improving heart health • PHE extended its campaign for a truly Smoke Free NHS
	<p>In 2016 the Government published its plan to tackle childhood obesity. While the focus of this is to help reduce the high rates of childhood obesity, ultimately this is likely to impact on adult rates of obesity and related health outcomes including CVD. One of the key commitments in the Childhood obesity: a plan for action is a sugar reduction and wider product reformulation programme covering calories, salt and saturated fat.</p>
	<p>PHE have published a number of documents to support commissioners tackle associated risk factors of high blood pressure including but not exclusive to:</p> <ul style="list-style-type: none"> • In 2014 PHE published the Healthier and more sustainable catering to support with practical advice on how to make catering affordable, healthier and more sustainable. This guidance has since been reviewed and updated in 2017. • Publication of Public health burden of alcohol: evidence review in December 2016. This comprehensive review examines the impact of alcohol on public health, including CVD, and the effectiveness of alcohol control policies • Publication of Everybody Active Every Day: Two years on • Established a new national Moving healthcare Professionals programme with Sport England. • PHE was also a critical partner in the development and publication of the Pharmacy Voice report, Tackling high blood through community pharmacy. • In October 2016, PHE published Homelessness: applying All Our

	<p>Health, which provides information and links to the latest resources to help commissioners and providers better understand homelessness and suitable interventions for the homeless and at-risk population</p> <ul style="list-style-type: none"> Continued provision of intelligence and data through National Cardiovascular Intelligence Network (NCVIN), including updates and additions to CVD profiles, prevalence models and intelligence packs and a new digital platform providing CVD data and analysis guidance for health professionals and commissioners Commissioned and published the NHS Health Check rapid evidence synthesis.
British Heart Foundation	<p>The BHF has updated the suite of Blood Pressure Health Information pages and free print resources, and continues to provide information and support via our Helpline. From May 2016 to 2017 over 2 million prevention-related booklets were dispatched, these included 167,000 Blood Pressure health information booklets. The BHF also provided information on healthy eating, being physically active and managing risk factors.</p>
NHS RightCare	<p>The CVD prevention pathway has been produced by NHS RightCare and aims to provide local health economies with:</p> <ul style="list-style-type: none"> a high-level overarching national case for change a best practice pathway for individual conditions; and best practice case studies for elements of the pathway demonstrating what to change, how to change and a scale of improvement

Cross Cutting

Organisation	Achievement
Public Health England	<p>The 2016, PHE published Action on cardiovascular disease: getting serious about prevention which provided an overview of the impact of CVD and PHE's role in CVD prevention. The 2017 to 2018 CVD Action Plan which has since been published is the follow-up publication to this, and showcases some of PHE's recent achievements, as well as some of the agency's key CVD prevention initiatives for the 2017 to 2018 tax year.</p>

	<p>In September 2017, PHE launched the ‘size of the prize’ resources, developed in conjunction with NHS England. These resources provide information on local and national opportunities to reduce cardiovascular events and make savings in the health system through better detection and treatment of people with key cardiovascular risk factors, including hypertension.</p>
	<p>In January and February 2017, PHE launched a series of blogs on tackling high blood pressure in Health Matters. The blog series includes a set of invaluable blood pressure resources for commissioners and service providers. The online launch demonstrated the ongoing interest in blood pressure, having the highest attendance for a Health Matters event to date.</p>
	<p>A series of 5 workshops called ‘Action Learning Events’ were held in different regions of England in 2015-2016. The events considered new opportunities to tackle high blood pressure in the specific regions where they occurred. The events provided a forum for a broad range of stakeholders, clinical and non-clinical professionals, to come together to map out optimal care pathways for their patient population. The workshops proved very successful, with an average of 96.7% of respondents rating the events as ‘good’ or ‘very good’, and an indication that stakeholders would be committing to further collective action.</p>
	<p>PHE have contributed to key new resources, including:</p> <ul style="list-style-type: none"> • the NHS RightCare CVD prevention pathway and made commitments to CVD prevention made in Next steps on the NHS five year forward view • developed Local health and care planning: Menu of preventative interventions to inform those involved in health planning and commissioning, including Sustainability and Transformation Partnerships (STPs). The Menu of Interventions outlines evidence-based, preventative public health interventions that can help improve the health of the population and reduce health and care service demand in the short to medium term. This includes a section on CVD secondary prevention outlining steps that can be taken to improve management of atrial fibrillation, hypertension (high blood pressure) and raised cholesterol and familial hypercholesterolaemia.
	<p>PHE work in partnership with stakeholders including participation in forums such as the CVD Collaborative and hosting the Blood Pressure System Leadership Board. These forums provide</p>

	<p>opportunities for organisations to discuss relevant work, including new project and collaborative opportunities, the objectives of initiatives and how they will be implemented.</p>
<p>National Institute for Health and Care Excellence (NICE)</p>	<p>NICE has published a number of resources to support professionals including:</p> <ul style="list-style-type: none"> • updated guidance and quality standard on hypertension detection and management for adults • statements on blood pressure in several new or updated quality standards, including chronic kidney disease in adults, cardiovascular risk assessment and lipid modification • NICE hypertension indicators pack to support electronic measurement of the NICE quality standard for hypertension (QS28). The pack can be used to support electronic data extraction from general practice clinical IT systems. • Several shared learning examples including an example for improving blood pressure management in primary care, an example of a programme to introduce an annual GP review for patients on warfarin with atrial fibrillation who display poor anticoagulation control, and an example on the management of hypertension in pregnancy which was subsequently shortlisted for NICE's Shared Learning Awards.
<p>British Heart Foundation</p>	<p>In collaboration with PHE, NHSE, NCVIN, Stroke Association and BPUK, BIHS and RCGP, the BHF produced series on resources 'Blood Pressure: How Can We Do Better' series, which include key messages aimed at Commissioners and GPs across England. This suite of resources for clinical commissioning groups includes 210 information sets that highlight facts and opportunities for improvement in the detection and management of hypertension in their local level, along with one overarching one for England.</p>
<p>Royal Pharmaceutical Society</p>	<p>In February 2017 Pharmacy Voice, with the support of PHE, released Tackling High Blood Pressure through Community Pharmacy, a new report on how the community pharmacy sector can expand and enhance its contribution to the national agenda around preventing, detecting and managing hypertension.</p> <p>The Royal Pharmaceutical Society, the professional body for pharmacists are now leading on taking forward the recommendations of the Pharmacy Voice report, supported by PHE and collaborating with other organisations.</p> <p>With 1.2 million people visiting a community pharmacy every day, pharmacy teams have an enormous opportunity to promote health at a local level. For some people, the local pharmacy will be their first</p>

	<p>point of contact, or their only contact, with a health care professional.</p> <p>Community pharmacist-led interventions can significantly reduce systolic and diastolic blood pressure. In one meta-analysis compared with usual care for blood pressure management, pharmacist interventions showed greater reduction in systolic BP (7.6 mm Hg) and diastolic BP (3.9 mm Hg). The effect was larger if the intervention was pharmacist led and done at least monthly⁸.</p>
<p>Local System Leadership</p>	<p>Cheshire and Merseyside’s systems leadership approach to high blood pressure aims to tackle this priority issue by embedding a widespread culture of integrated cross-sector working in which responsibility for action is distributed beyond health partners.</p> <p>Using a systems leadership approach, public health, health, NICE, local authority, voluntary sector and other partners formed a sub-regional Partnership Board to co-craft and oversee implementation of a cross-sector blood pressure strategy.</p> <p>The 5 year cross sector strategy Saving lives: Reducing the pressure, for the prevention, detection and management of high blood pressure, underpins the joint understanding and trust that enables unprecedented pooling of capacity and assets needed for a sustainable and effective approach. The strategy was launched in May 2016 and sets out 10 inter-related objectives that together deliver primary, secondary and tertiary blood pressure prevention.</p> <p>Through BHF funding, several innovative ways to detect high blood pressure are being developed, including Cheshire and Merseyside Fire & Rescue Services’ Safe and Well checks, community-based digital technologies and the piloting of a ‘conversational tool’ in community pharmacies and by health trainers.</p> <p>Work is underway with primary care to support improved and consistent performance against the NICE hypertension quality standard (QS28) through practice-level data, IT and education. Another key area currently being explored is how to maximise opportunities in community pharmacy around medicines optimisation.</p> <p>A data and outcomes group monitor progress on key strategic deliverables as well as short, medium and long term outcomes.</p>

⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4187511/>

A cultural change is underway across Cheshire and Merseyside, with engagement from a wide range of health and non-health partners. The Board has a shared vision and common goals and are committed to shift the emphasis away from the medical workforce towards a more prevention-focused, 'fully engaged' scenario.

High blood pressure is now a key workstream embedded within the [Cheshire & Merseyside Five Year Forward View](#) and this cross-sector approach to working and data collection offers an innovative, high value, sustainable model that can be applied to many long term conditions in other regions.

Future commitments

This updated plan intends to display the collective ambition of the Blood Pressure System Leadership Board and their partners for 2017 to 2020. It seeks to go further than before and aims to significantly contribute to the reduction of high blood pressure in England, with an overarching aim of improving the early detection and prevention of CVD.

Prevention

Organisation	Commitment
Blood pressure UK	<p>Relaunching the FoodSwitch app with partners CASH, to make it easier for people to make healthier choices with less salt via the ‘SaltSwitch’ filter. Promote the app and the concept of ‘healthy food switches’ to our 5,000 members and supporters via social media, our magazine and e-newsletter throughout 2017 to 2018.</p>
	<p>Redesigned and updated by specialist hypertension nurses, our 13 leaflets will be available by the end of 2017, including ‘introduction to high blood pressure’ which will be translated into the 32 most common non-English languages in the UK. Leaflets will be available for free to the public, and to healthcare practitioners to order for their patients. Redesign of the website to make it current, clearer and more user-friendly, expected to launch early 2018 reaching over 1million users (800,000 unique) per month.</p>
	<p>Launch of a new campaign STOP Stroke to highlight that high blood pressure accounts for up to 60% of all stroke, and how to lower your risk, including practical steps. Includes ‘eat less salt to prevent stroke’ campaign during Salt Awareness Week, a radio broadcast to raise awareness, and a large media campaigning Sept 2017 as part of Know Your Numbers! Week.</p>
	<p>Ongoing campaign to increase awareness to the general public of high blood pressure and lifestyle changes people can make to reduce their risk by contributing articles and case studies to local and national media (broadcast and print) and trade and healthcare magazines. Examples include the launch of an infographic with MyTherapy and numerous news stories in the national press.</p>

	Working with PHE to develop the salt reduction campaign beyond the targets set to be achieved for 2017. Campaigning for the current targets to be met, and new targets to be set to be achieved by 2020.
British Heart Foundation	Funding a feasibility study of a national primary care audit of CVD Prevention. This will include generating a business rule set for data extracts related to the high risk conditions, including high blood pressure.
	Provision of lifestyle and behaviour change information to members of the public in print and online.
Health Education England (HEE)	Continue input into the national Making Every Contact Count (MECC) advisory group.
	Maintain the Making Every Contact Count website, signposting to useful national resources.
	Developing links between educational resources to support MECC and All Our Health.
	Continuing support for roll out of MECC through support for regional events.
	Developing framework/guidance for all education and training for prevention and population health in curricula.
NHS Choices, BHF and BCS/JBS3	Continue to promote the Heart Age Tool to increase awareness of CVD using a digital risk assessment through the Know your heart age campaign.
Local Government Association	Promote the opportunity for local government procurement in helping to reduce high blood pressure, in particular through adoption of Government Buying Standards for Food and Catering Services .
Stroke Association	Promote the recently published ' How to reduce your risk of a stroke ' publication, which sets out easy steps everyone can take to reduce their risk. It is evidenced based and has been reviewed by clinical experts and our panel of lay reviewers. It sign posts to existing behaviour change programmes such as One You.
Public Health England	The Be Food Smart marketing campaign, launched in January 2017, aiming to reduce the amount of sugar consumed by children through promotion of the Be Food Smart mobile app.

	<p>Businesses across all sectors such as retailers, manufacturers and those that provide food for consumption out of home to continue to work towards meeting the 2017 salt targets as part of PHE’s sugar reduction and wider product reformulation programme. These targets, which were previously developed through the Public Health Responsibility Deal, were re-published by PHE in March 2017. PHE will begin analysis of industry progress in late 2017 and commence any next steps in 2018.</p>
	<p>The One You campaign, aimed at helping mid-life adults make changes to improve their health, launched in March 2016. Subsequent campaigns will largely focus on individual behaviours including physical activity, nutrition, alcohol, smoking and health checks. So far in 17/18 there have been 1.75 million campaign engagements via the One You online health appraisal tool (How are You?), resulting in 450,000 downloads of One You support tools. In September 2017 there will be a campaign launching to support adults to ‘Know their heart age’ which will sign post individuals to the appropriate follow up.</p>
	<p>Pursue Everybody Active Every Day physical activity programme, leading action with national and local partners across 4 strands to:</p> <ol style="list-style-type: none"> 1. Create a social movement. 2. Activate networks of expertise. 3. Create environments for active lives. 4. Scale-up interventions that make us active.
	<p>Prevent and reduce the harmful effects of alcohol through a work programme, including:</p> <ol style="list-style-type: none"> 1. Set out evidence-based policies. 2. Prevention and treatment interventions for government, local authorities and the NHS. 3. Enable partners to invest with confidence.
	<p>Support the quality of stop smoking services through commissioned free to access training and support.</p>
	<p>Provide support and advice to the NHS on implementation of high impact interventions on tobacco related harm.</p>

Detection

Organisation	Commitment
<p>Blood Pressure UK</p>	<p>Provide continued support for May Measurement Month (MMM) and continue with previous successes:</p> <ul style="list-style-type: none"> • Case study on BBC Breakfast • Blood pressure testing station • Successful twitter campaign • Promotion of campaign via e-newsletter and Positive pressure magazine
	<p>Know your Numbers! Week 2017.</p> <ol style="list-style-type: none"> 1. Promoted the campaign amongst mainstream media (national and regional) healthcare professionals and health press to encourage participation. 2. Worked with PHE to increase uptake of free blood pressure tests. 3. Over 650 pressure Stations took part, aiming to test over 50,000 blood pressures 4. Planning campaigns for 2018, 2019 and 2020.
	<p>Worked with Public Health England to help deliver their HeartAge message, through supported media appearances, social media and on the Blood Pressure UK website. Planning for this to be an ongoing piece of work.</p>
	<p>Consulting and providing specialist hypertension advice to regional health system leaders to support their blood pressure testing as part of their own programmes of work, or as part of the BHF's blood pressure award programme.</p>
<p>British Heart Foundation</p>	<p>Delivery of Blood Pressure award programme.</p>
	<p>Delivery of national events in collaboration with partners.</p>
	<p>Development of tools for primary care professionals, health system leaders and health providers.</p>
	<p>Continue to develop clinical Communities of Practice across the health system in partnership with PHE and NHS RightCare focused on CVD Medical Risk Factors.</p>
	<p>Development of a partnership Blood Pressure Health information hub for Healthcare Professionals, Providers and</p>

	Commissioners.
Stroke Association	Continue to increase the reach of the 'Know Your Blood Pressure' events, which provide community based blood pressure checks. Stroke Association will increase outreach at events and increase the number of blood pressure taken from high risk audiences, as well as piloting more effective ways of following up with attendees to support them to take action to lower their blood pressure.
Local Government Association	Highlight blood pressure as part of ongoing programme promoting good practice and supporting local authorities in their public health function.
The Royal Pharmaceutical Society	Take forward work previously started by Pharmacy Voice to support the delivery of the recommendations in the report Tackling High Blood Pressure through Community Pharmacy.
	The Royal Pharmaceutical Society facilitated a meeting of other national pharmacy bodies and leaders to move this report into an implementation phase and looks forward to demonstrating the benefits the pharmacy profession can bring.

Management

Organisation	Commitment
NHSE Sustainable Improvement Team	Following the completion of work such as the Dudley CCG hypertension Case Study , the team are beginning to now work with other NHS RightCare Delivery partners to replicate this practice across every Sustainable Transformation Partnership (STP) patch in England by March 2018. This work aims to enable better management of hypertension pending release of the CVD audit tool which hopefully will also help with further case finding.
Blood Pressure UK	Providing free specialist hypertension expert advice, through our leaflets, website and our helpline service to those with high blood pressure to help them manage their condition and adhere to their medication.
	Responding to media enquiries about new treatments, side effects and other stories that may act as deterrents for

	people effectively managing their condition. Providing a balanced and expert voice on the most effective ways to managing blood pressure.
	Regular communication via 2 magazines and 4 e-newsletters goes out to ~5,000 members and supporters with high blood pressure a year; on the barriers and problems they have with managing their condition, and finding suitable solutions to overcome them.

Cross cutting

Organisation	Commitment
NHS Choices	Review and refresh site blood pressure content , informed by evidence of user needs and the themes in this document.
	Provide support for programme activity via social media channels as appropriate.
Stroke Association	Pilot Atrial Fibrillation (AF) detection at our public facing 'Know Your Blood Pressure' events across the UK. A full evaluation will be carried out, which will detail key recommendations for future integration.
	Review the current Know Your Blood Pressure delivery model and make changes that will better enable us to reach high risk audiences.
	Work closely with Well Pharmacies to offer free blood pressure testing. This aims to encourage the general public to visit their local pharmacy to get their blood pressure checked. Some pharmacy stores will also display stroke prevention information and guidance literature.
Royal College of General Practitioners	Co-host a conference in October 2017 with NHS RightCare to generate professional leadership for quality improvement in detection and management of the high risk conditions for CVD in primary care. This will be supported by the Primary Care CVD Leadership Forum and the Primary Care Cardiovascular Society.

<p>British and Irish Hypertension Society</p>	<p>Develop a hypertension diploma covering latest developments in clinical practice, and the science underpinning current guidelines.</p>
<p>NICE</p>	<p>Support system partners in the implementation of the related NICE guidance and quality standards through development and endorsement of implementation tools and resources, including collecting and disseminating NICE shared learning examples.</p>
	<p>Work towards collating and publishing information on the uptake of guideline recommendations and quality standard statements.</p>
	<p>Develop, review and update related NICE guidelines, quality standards and indicators in line with NICE's policy.</p>
<p>Department of Health</p>	<p>Promote and advocate for improvement in performance across high blood pressure as part of strategic leadership on reducing avoidable mortality.</p>
	<p>Consider any opportunities to take forward areas for further research and innovation, including behavioural insights approaches).</p>
<p>NHS England</p>	<p>The NHS RightCare CVD prevention pathway was published in September 2016. This identifies high blood pressure as one of the high risk conditions for CVD.</p>
	<p>The Next Steps on the NHS Five Year Forward View has committed NHS RightCare to work with every CCG in England to implement the CVD Prevention Pathway and drive improved detection and management of high risk conditions for CVD, including high Blood pressure.</p>
	<p>NHS RightCare is now developing detailed improvement resources for atrial fibrillation and high blood pressure. Delivery partners will use these with every CCG to support improved detection and management of these conditions.</p>

	<p>NHS RightCare is working with a range of partners including PHE, the NHS England mental health programme and the patient organisations on a project focussing on what the RightCare CVD prevention pathway means for people with serious mental illness, aligning with a the twin priorities in the Next Steps on the NHS Five Year Forward View.</p>
<p>NHS England Sustainable Improvement Team</p>	<p>Sustained work with NHS RightCare and the West Midlands Academic Health Science Network (AHSN) Atrial Fibrillation (AF) Collaborative to promote further rollout of GRASP-AF as part of wider AF pathways, with links therefore to Blood Pressure. This will be rolled out to at least 3 more Clinical Commissioning Groups (CCG's) (approximately 180 practices) planned by the end of 2017, with others identified via RightCare for potential rollout early in 2018.</p>
	<p>Corresponding work with Yorkshire and Humberside and pan-London AHSNs which again will cross the rest of 2017 to 2018. Plans to have identified a further 1,500 AF patients across England in this period.</p>
	<p>Increase the profile of the GRASP Heart Failure tool to increase rollout of this during the remainder of 2017 to 2018, to highlight other key conditions with links to the blood pressure agenda. We are currently refocusing on a target outcome in terms of new Heart Failure patients.</p>
<p>Royal College of Nursing</p>	<p>Provide continued commitment and support to Royal College of Nursing (RCN) members of the Blood Pressure System Leadership board by attending quarterly meetings.</p>
	<p>Support campaigns by disseminating messages to RCN members via the RCN website and bulletins.</p>
	<p>Cascade information on training opportunities including the Public Health England National Annual Cardiovascular Disease Prevention conference, to RCN members.</p>
<p>Public Health England</p>	<p>Work with the One You PHE marketing campaign team and other partners to deliver a blood pressure awareness campaign 'Know your heart age' in September 2017 and engage one million users of the tool. Carry out a full evaluation in November 2017 to ensure all lessons can be</p>

	<p>applied to future blood pressure awareness campaigns.</p>
	<p>Support with the creation of practical resources that will aid planners, commissioners and providers of services with the detection and management of high blood pressure. For example, update the Healthier Lives: High blood pressure atlas of variation according to the latest data.</p>
	<p>Work with the British Heart Foundation (BHF) on the continued development of local leadership networks to improve cardiovascular disease prevention and management, including better blood pressure detection and management. This work includes support with blood pressure events in 2018, support and advise the blood pressure pilot programme, ongoing in 2017 to 2018.</p>
	<p>Partner with and support Blood Pressure System Leadership Board (BPSLB) stakeholders in improving the detection and management of high blood pressure and support them to achieve commitments as outlined in this action plan. Work with partners to review progress against the new 'Evidence into action' commitments; bi-annual reviews, ongoing in 2017 to 2018.</p>
	<p>Continue to make the case for effective blood pressure interventions that will improve population health by commissioning and developing scope of cardiovascular disease return on investment (ROI) tool that include blood pressure as a key risk factor, completed by March 2018.</p>
	<p>Support partners in developing effective models of delivery that will result in better detection and management of high blood pressure for example, support and advise the work of NHS RightCare, ongoing; publish PHE's commitment to CVD prevention in an updated action plan in September 2017 and implement programme of activities to deliver on Next steps on the five year forward view, ongoing.</p>
	<p>Develop and implement programme of activities to work with pharmacy and allied health professionals to improve the prevention, early detection and management of high blood pressure.</p>

	<p>Continue supporting and dedicating resource to the Blood Pressure System Leadership board to deliver the next phase of our ambition on blood pressure by 2019 by; providing secretariat, hosting and chairmanship for the quarterly meetings; publishing this update action plan to engage with new and existing partners who are working to tackle high blood pressure.</p>
--	---

Call to action

This action plan requires a whole system response if we are going to reduce the burden of this important risk factor. It requires continued support and collective action from all levels in order to make a significant impact on the reduction of high blood pressure in England. It is clear that a lot more can be and needs to be done. The Blood Pressure System Leadership Board hopes that by setting out their updated ambitions within this action plan, it will inspire a wider range of partners to join this collective action and to consider how they can also collaborate to take action to tackle high blood pressure.

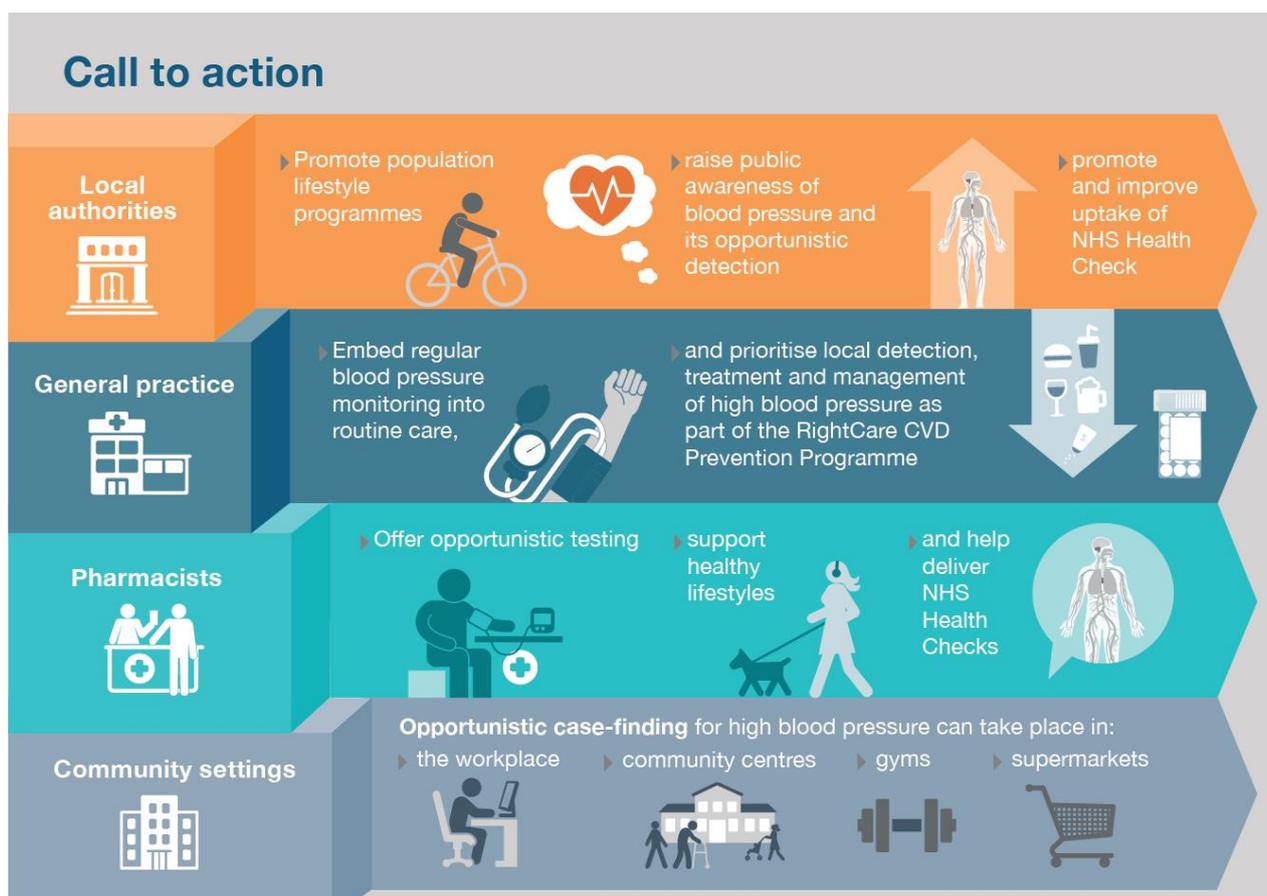
Promotion of this plan

The Blood Pressure System Leadership Board and partners will disseminate and promote the plan among our networks, and we invite colleagues from across the health and care system to do the same.

The Board and partners will also look for other opportunities (including via professional and public media, social media platforms and through events) to share messages and insights from this work.

How different groups can contribute

In a recent [Health Matters blog](#), it was outlined how Local Authorities, General Practices, Pharmacists and Community settings all have a role in tackling high blood pressure.



Further to this, the below table outlines key roles and activities that different groups are encouraged to take up, based on evidence and the experience of those who developed this plan.

<p>Cross-cutting</p>	<ul style="list-style-type: none"> ensure services and interventions are accessible and appropriate to those at higher risk and those living in low income households and in deprived areas consider building blood pressure into joint strategies (such as Joint Strategic Needs Assessments and Health and Wellbeing Strategies) develop collaborative local leadership and action planning for improvement in the (detection and) management of high blood pressure
----------------------	---

<p>Local government (officers and elected members)</p>	<ul style="list-style-type: none"> • commission services to support risk assessment, awareness and management – including weight management, healthy eating and alcohol services • public health teams work directly with local communities, neighbourhoods, and primary care to ensure that initiatives are accessible to those who need them most, and deliver sustainable programmes that work with community assets to deliver effective long-term results • also relevant are the population-level health improvement actions set out in the prevention chapter
<p>Healthcare commissioners</p>	<ul style="list-style-type: none"> • promote and support clinical leadership for improvement by GPs, nurses and pharmacists • support whole system action planning for the primary care system to implement NICE guidance particularly in terms of step-wise treatment increasing number of agents and lifestyle changes to reach control with regular review of hypertensive patients. Ensure in particular a catch-up plan for full assessment and initiation of blood pressure treatment in those at high CVD risk • CCGs to consider the case for local investment in enhanced community pharmacy services to provide better information and support about blood pressure management; to use the Medicine Use Review and New Medicines Service to support blood pressure management; and to introduce opportunistic screening in some areas • embed management of high blood pressure within communications about long term conditions given its prevalence in these groups • support use of the Patient Activation Measure, and commission services in response to findings to raise activation • support spread of good practice in primary care of minimising exception reporting for people with high blood pressure, and optimising access to care of people from marginalised or disadvantaged groups
<p>Healthcare providers, practitioners and</p>	<ul style="list-style-type: none"> • undertake regular practice-level audit of blood pressure control levels and supporting metrics (for example, prescription data), in order to ensure consistent and effective treatment.

<p>professional organisations</p>	<ul style="list-style-type: none"> • pharmacy to maximise opportunities to provide ancillary support to general practice in supporting effective management (including monitoring, medicine and adherence review, lifestyle advice) • give patients opportunities to participate in decision-making on treatment and provide information and explanation to support compliance • professional organisations: promote clinical leadership, education and training in primary care for the (detection and) optimal treatment of high blood pressure
<p>Individuals and families</p>	<ul style="list-style-type: none"> • self-monitor blood pressure levels regularly to assess success in managing the condition, raising any major changes or difficulties with a clinician • discuss with their clinician any barriers encountered to adherence with drug therapy or lifestyle changes (from side effects or difficulty maintaining routines) so that these can be addressed
<p>Voluntary and community sector</p>	<ul style="list-style-type: none"> • provide high-quality patient information materials and sources of advice and support to those managing/monitoring their own high blood pressure, particularly ensuring these are accessible and comprehensible to a diverse audience
<p>National government, agencies and public bodies</p>	<ul style="list-style-type: none"> • PHE: support and coordinate system leaders to improve performance in management of high blood pressure • PHE: provide performance data and analysis tools • NHS England: consider in leadership of performance measures and incentives for clinical practice, how to best support effective management of high blood pressure
<p>Employers</p>	<ul style="list-style-type: none"> • offer high-quality workplace blood pressure testing to staff (options might be as part of a health check or induction, self-service machines or kiosk, or sign-posting to other providers)
<p>Other</p>	<ul style="list-style-type: none"> • cross-cutting: all local partners to come together to support action planning for a coherent approach to reduce variation and improve outcomes • cross-cutting: identify champions who can spread clear information and training – a well-informed leadership group (may be GPs, CCG leaders...) • clinical software firms and system providers to integrate support for effective management of high

	blood pressure into clinical systems and decision support tools
<p>NB: Categories are taken to include representative/umbrella organisations. Healthcare sections will often also apply beyond primary medical care (for example to pharmacy and the allied health professions). Many actions would best be carried out through a partnership of bodies, and are not restricted to the main group identified.</p>	

Annex 1: Board membership

Dr Adrian Brady	British and Irish Hypertension Society
Alexis Kolodziej	Stroke Association
Dr Allison Streetly	Public Health England
Professor Anthony Heagerty	British and Irish Hypertension Society
Amanda Taylor	Public Health England
Amy Bowen	NHS RightCare
Andrew Hughes	Public Health England
Esmee Russell	Stroke Association
Dr George Kassianos	Royal College of General Practitioners
Professor Graham MacGregor	Queen Mary's University London
Professor Huon Gray	NHS England
Gul Root	Public Health England
Gunjit Bandesha	Public Health England
Helen Donovan	Royal College of Nursing
Jason Yiannikou	Department of Health
Jenny Hargrave	British Heart Foundation
Councillor Jonathan McShane	London Borough of Hackney
Katharine Jenner	Blood Pressure UK
Dr Kathryn Griffith	Royal College of General Practitioners
Mary O'Brien	NHS RightCare
Dr Matt Kearney	Public Health England and NHS England
Professor Matthew Cripps	NHS England
Dr Mike Gogarty	Association of Directors of Public Health
Professor Neil Poulter	International Society of Hypertension
Naomi Stetson	Peart Rose Hypertension Clinic, Hammersmith Hospital
Nicholas Hodgetts	NHS England
Professor Paul Johnstone	Public Health England
Paul Ogden,	Local Government Association
Dr Paul Robinson	British and Irish Hypertension Society
Professor Peter Kelly	Public Health England
Dr Richard Healicon	NHS England
Robbie Turner	Royal Pharmaceutical Society
Dr Shahed Ahmad	NHS England
Professor Simon Capewell	The University of Liverpool
Associate Professor Jamie Waterall	Public Health England
Slade Carter	Public Health England
Eleanor Wilkinson	Public Health England