

# **CVD Prevention Optimal Value Pathway**

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# Structure

# Rightcare

- Background
- Why OVP?
- Key elements of the pathway

# CVD Prevention

- Approach
- Impact on outcomes
- Variation

OVP examples

 Walk through examples from the pathway



# **Rightcare**

- Focus on data to compare spend, inputs and outcomes
- Belief that value can be maximised by eradicating unwarranted variation
- Publishes data packs for all CCGs and focus packs on disease areas
- Backed by delivery partners working with every CCG to embed approach



#### 3



# What issues are we looking to address with OVP?'s

- Time lag between adoption of best practice
- Service redesign necessarily slow and does not always capture the benefits intended
- Best practice models being developed in different geographical and clinical areas
- Lack of delivery mechanism for best practice to CCGs
- Wide variation in performance between areas not accounted for by demography



## **Optimal Value Pathways – key components**

- A compelling case for change that demonstrates the potential for improvement in clinical outcomes / value
- A best practice pathway which has been developed with and signed off by all major stakeholders
- High value interventions which parts of the pathway are susceptible to rapid improvement – biggest bang for buck
- Metrics that enable a CCG to understand its current performance, compared with peers and best practice – and help to quantify improvement to develop the business case for change
- Compendium of best practice case studies demonstrating what to change, how to change and a scale of improvement
- A delivery mechanism to ensure that pathways are publicised and considered by CCGs

#### **NHS** RightCare

# **CVD** – getting serious about prevention

#### Why

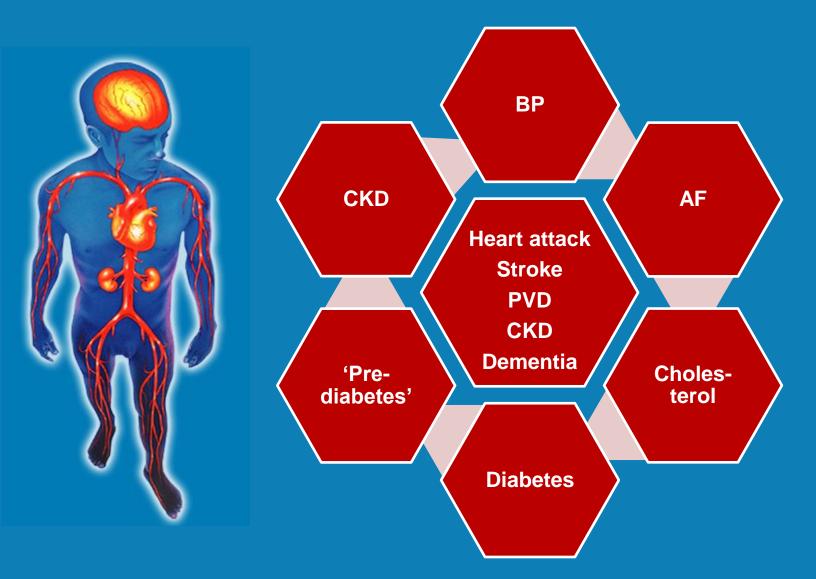
- Relentless rise in preventable illness risks making the NHS unsustainable
- One in four premature deaths is caused by CVD especially heart attacks and strokes.

#### How

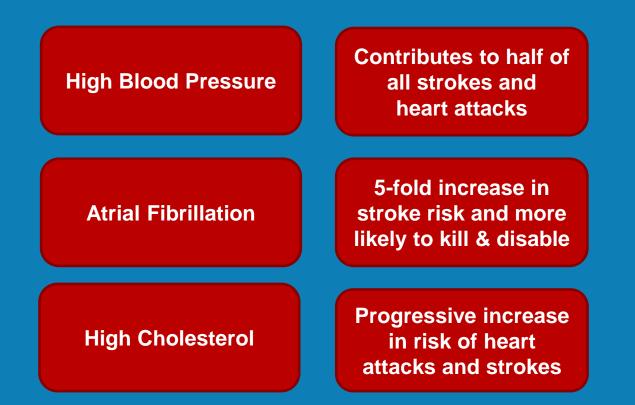
- Population level interventions are key ... but the NHS has critical role to play
  - 1. Advocate/champion for population level interventions
  - 2. Support for individual behaviour change
  - 3. Early diagnosis and optimal treatment of the high risk conditions
    - Eg Hypertension 40% undiagnosed, 40% under treated
       Atrial Fibrillation 2/3 at high risk not anticoagulated
       Cholesterol half those at highest risk not on statins

#### Late diagnosis and under-treatment of these high risk conditions is common This is low hanging fruit for CVD prevention

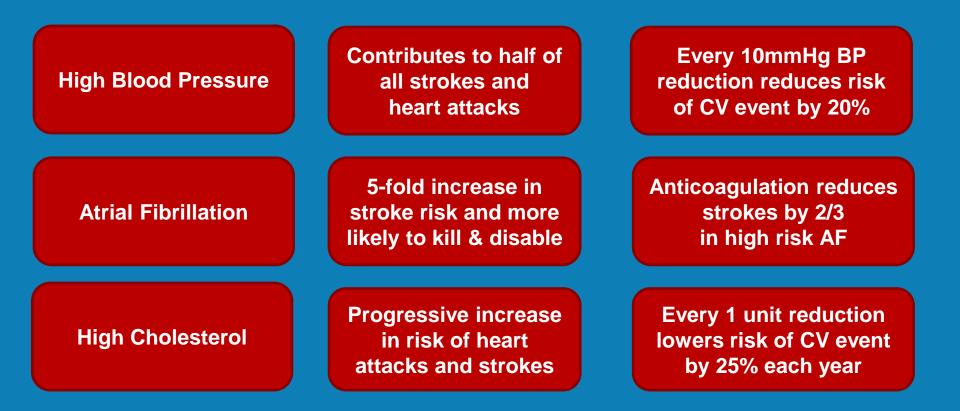
# Secondary Prevention The high risk conditions for CVD



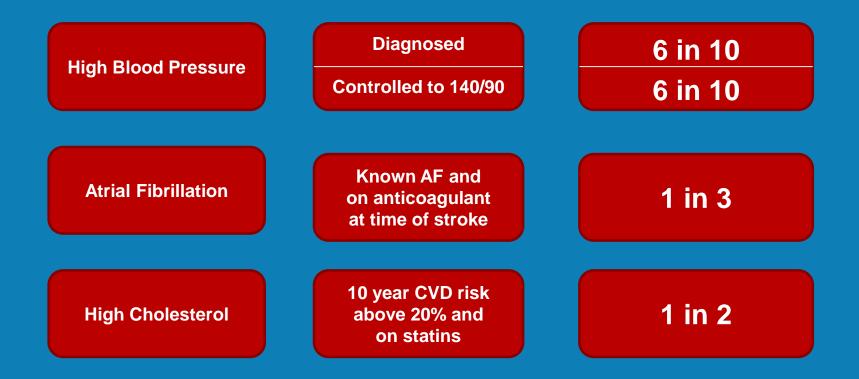
### High risk conditions – the evidence of risk



### High risk conditions – the evidence of treatment benefit



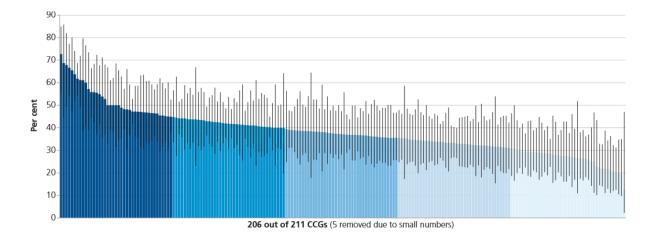
## Secondary prevention high risk conditions Opportunity for improvement





### National variation shows high level of inequality and potential for quality improvement

Eg: Percentage of people <u>known</u> to have AF prescribed anticoagulation before their stroke CCG comparison



Across England only one third of people with <u>known</u> AF who then suffer a stroke have been anticoagulated – despite the dramatic impact of this treatment on outcomes.

But wide variation between CCGs – from 20% to over 70%

#### **Potential for quality improvement**



- 1. Improving secondary prevention in BP, AF and cholesterol would significantly improve outcomes
- For example, NICE has modelled that if all appropriate patients with AF received anticoagulants, there would be 10,000 fewer strokes in England every year
- If we only improved treatment in half the eligible patients, that would still prevent 5,000 strokes per year – that's 25 strokes in every CCG



# Early detection and intervention in the high risk CVD RightCare conditions will prevent strokes and heart attacks

- Hypertension, atrial fibrillation, high cholesterol, diabetes, non-diabetic hyperglycaemia and chronic kidney disease are high risk cardiovascular conditions
- 2. Most of the diagnosis and management of these conditions takes place in primary care
- 3. Late diagnosis and under treatment of these high risk conditions is common, and this substantially increases the incidence of stroke and heart attack
- Systematic quality improvement is likely to have a cumulative impact in reducing incidence of stroke and heart attack



# **Developing the pathway**

- Clinical consensus
- National working groups utilised outputs
- Support and buy in from current and previous National Clinical Directors for Stroke, Heart Disease and Chronic Kidney Disease
- Co-developed with major voluntary sector groups (British Heart Foundation / Diabetes UK / AF Association / Stroke Association etc)
- Public Health England and NICE input
- Insight from Delivery Partners re usability with CCGs



# **Cardiovascular Disease Prevention:** Risk Detection and Management in Primary Care



The Interventions	Cross Cutting:1. NHS Health Check - systematic detection of high BP, AF, NDH, T2DM, CKD, high cholesterol, CVD risk2. System level action to support guideline implementation by clinicians3. Support for patient activation, individual behaviour change and self management					
	High BP detection and treatment	AF detection & anticoagulation	Detection, CVD risk assessment, treatment	<u>Type 2</u> Diabetes preventive intervention	Diabetes detection and treatment	CKD detection and management
<u>The</u> Opportunities	5 million un-diagnosed. 40% poorly controlled	30% undiagnosed. Over half untreated or poorly controlled	85% of FH undiagnosed. Most peopleat high CVD risk don't receive statins	5 million with NDH. Most do not receive intervention	940k undiagnosed. 40% do not receive all 8 care processes	1.2m undiagnosed. Many have poor BP & proteinuria control
The Evidence	BP lowering prevents strokes and heart attacks	Anticoagulation prevents 2/3 of strokes in AF	Behaviour change and statins reduce lifetime risk of CVD	Intensive behaviour change (eg NHS DPP) reduces T2DM risk 30-60%	Control of BP, HbA1c and lipids improves CVD outcomes	Control of BP, CVD risk and proteinuria improves outcomes
The Risk Condition	<u>Blood</u> <u>Pressure</u>	<u>Atrial</u> <u>Fibrillation</u>	High CVD risk & Familial H/ cholesterol	<u>Non Diabetic</u> <u>Hyperglycemia</u> ('pre-diabetes')	<u>Type 1 and 2</u> <u>Diabetes</u>	<u>Chronic Kidney</u> <u>Disease</u>

# Detection and 2°/3° Prevention 🤎

The Outcomes50% of all strokes & heart attacks, plus CKD & dementia5-fold increase in strokes, often of greater severity	Marked increase in	Marked increase	Marked increase in	Increase in CVD,
	premature death	in Type 2 DM and	heart attack,	acute kidney
	and disability from	CVD at an earlier	stroke, kidney, eye,	injury & renal
	CVD	age	nerve damage	replacement

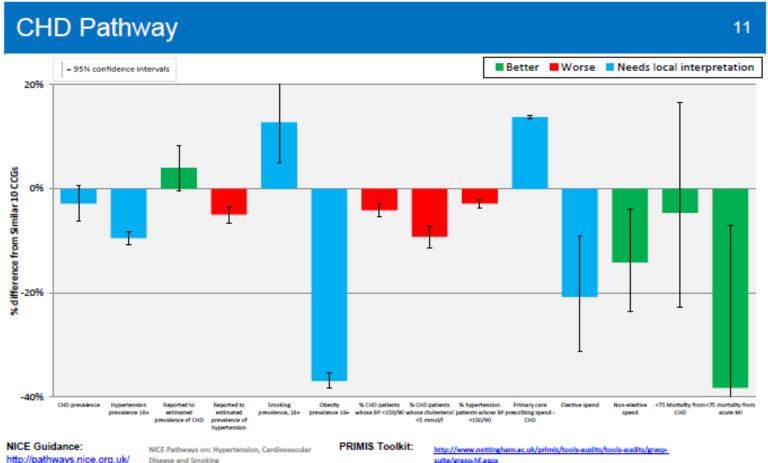


- Systematic audit to identify undiagnosed and under-treated patients

   using the GRASP suite of tools, national audits and other local data solutions.
- 2. Maximise NHS Health Check uptake and follow up as systematic approach to detecting undiagnosed high risk CVD conditions.
- 3. Commission new models of diagnosis and management eg
  - Pharmacist
    - $_{\odot}\,\text{Diagnosis}$  of AF and high BP
    - $_{\odot}$  Monitoring and titration BP and anticoagulant control
    - $\circ$  Adherence support BP, statins, anticoagulants
  - New technologies eg AliveCor, WatchBP Home, Health Stations
  - Self monitoring and self titration BP and anticoagulant control
- 4. Build local primary care leadership to challenge unwarranted variation and drive quality improvement in high risk conditions

# Works with Commissioning for Value focus packs



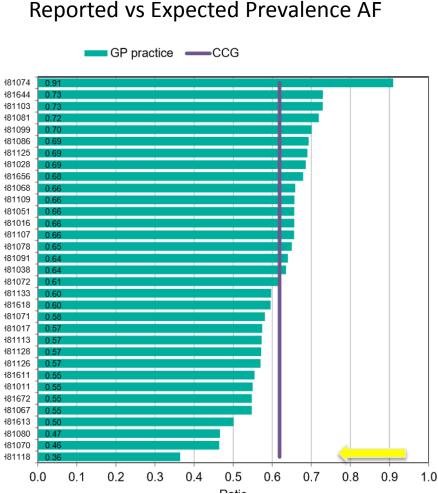


NHS RightCare CFV Cardiovascular disease focus pack

NHS Hammersmith and Fulham CCG

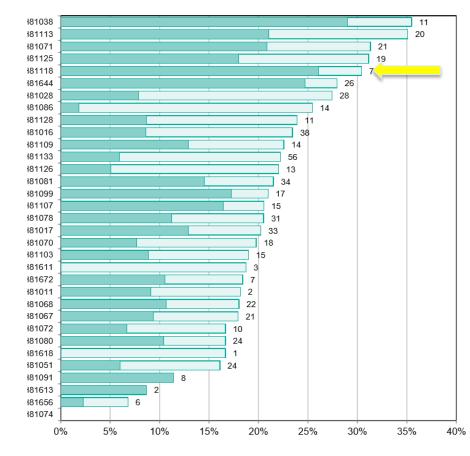


# Links to CVIN practice level data



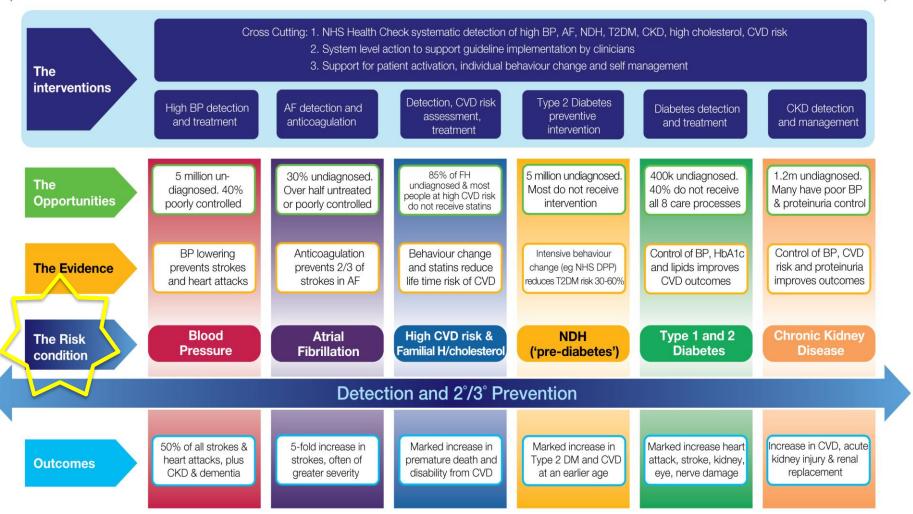
#### AF AF Diagnosis / No anticoagulation

No treatment Exceptions reported





#### Cardiovascular Disease Prevention – Risk Detection and Management in Primary Care





# Links to overarching national strategies



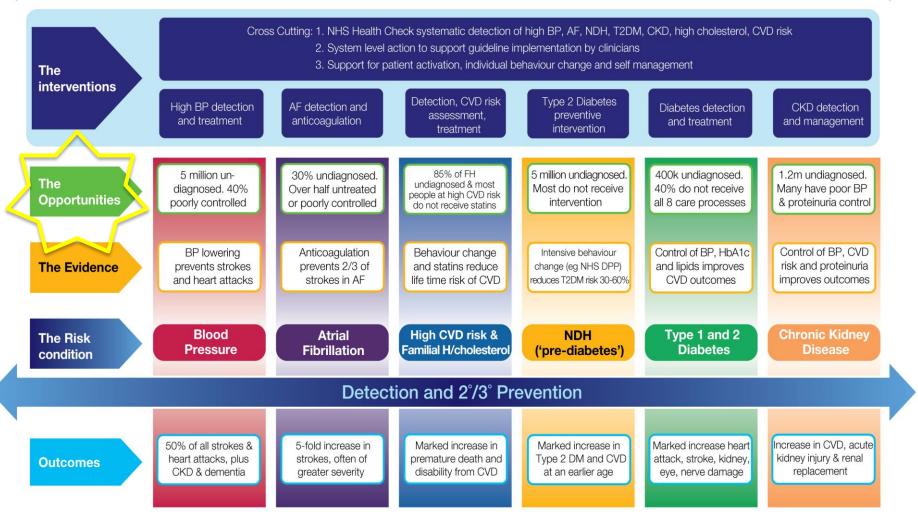
Protecting and improving the nation's health

# Tackling high blood pressure From evidence into action

Developed together by the 12 member organisations of the Blood Pressure System Leadership Board



#### Cardiovascular Disease Prevention - Risk Detection and Management in Primary Care



# **Improvement opportunity**



#### Blood pressure control in people with cardiovascular disease

#### **NHS Greenwich CCG**

Improvements can be made by managing hypertension in adults diagnosed with diabetes or stroke. This assumes that patients control their blood pressure consistently in order to reduce adverse disease events over a period of time.

The number of 'events avoided' is calculated by comparison to one of the best performing practices in this CCG.

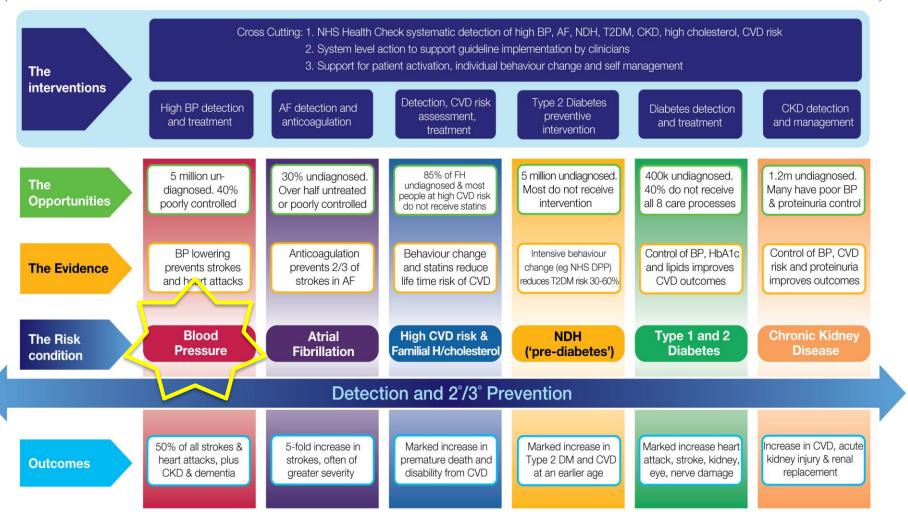
CCG comparator: GP practice at the 75th centile

	Hypertensive adults with diabetes	Hypertensive adults with stroke
Treatment	Blood pressure control to 140/80	Blood pressure control to 150/90
Current estimated number of patients treated with intervention	6,220	1,780
Additional patients CCG needs to treat to meet comparator intervention levels	644	81

Condition	Disease event and NNT	Events avoided (opportunity)	Opportunities avoided over (NNT time frame)	One-year savings from events avoided - NHS	One-year savings from events avoided - social care
Diabetes	Stroke: 1 in 59	10	9 years	£109,445	£39,652
	Heart attack: 1 in 204	3	9 years	£26,181	-
	Chronic kidney disease: 1 in 51	12	4 years	£3,018	-
	Heart failure: 1 in 42	15	4 years	£20,677	-
Previous stroke	Recurrent stroke: 1 in 27	3	4 years	£109,445	-



#### Cardiovascular Disease Prevention - Risk Detection and Management in Primary Care



# Links to high value interventions

# CVD prevention - high value intervention in...

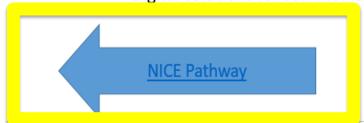
#### High blood pressure

- 1. Undertake systematic audit across practices
  - Identify people with possible undiagnosed hypertension
  - Identify people who are not treated to target
- 2. Work with practices and local authorities to maximise NHS Health Check uptake and follow up

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**Return to pathway** 

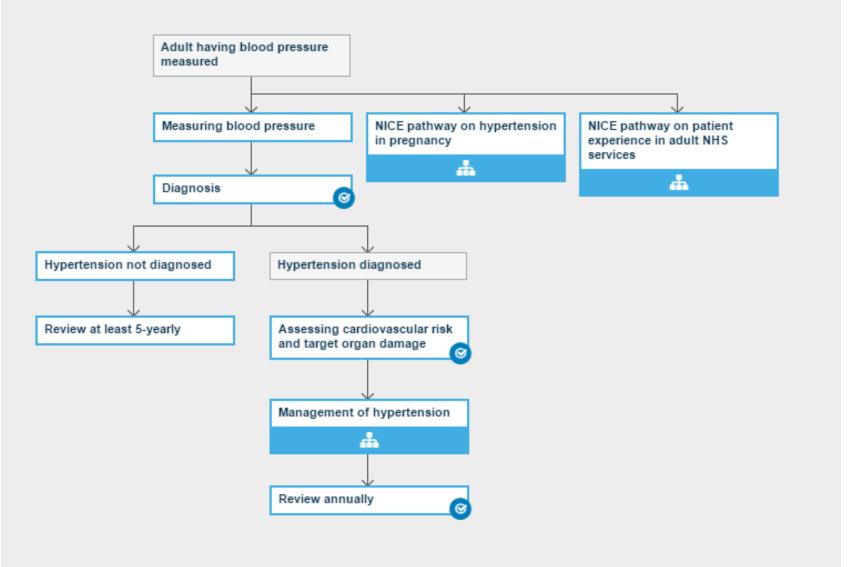
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- 4. Use practice based pharmacists to optimise management of hypertension
- 5. Commission ambulatory blood pressure monitoring service for diagnosis
- 6. Consider commissioning:
  - Systematic support for adherence from community pharmacists through MURs
  - BP self-test units eg surgery waiting rooms, community pharmacies, leisure centres
  - Digital solutions for self-monitoring and treatment optimisation



# Links to NICE Pathway -



### Hypertension overview





### CVD prevention - high value intervention in...

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**NICE Pathway** 

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p <u>Case Study</u> Case Study

Return to pathway



## Systematic audit across practices - Blackpool

A project to identify and treat people with existing but undiagnosed hypertension.



Project included:

- working with local general practice to identify people with a high blood pressure recording who have not received follow up intervention
- following up those people known by general practice to have hypertension who are not accessing medication or effectively managed
- holding community blood pressure awareness and testing events
- running an awareness-raising publicity and media campaign

The project resulted in 2,679 patients being added to GP hypertension registers (which will potentially prevent around 70 cardiovascular events per year). The size of GP hypertension registers rose by an average of 9.95%.

2,000 more people aged 45 years and over had a recent blood pressure reading entered onto their records, and there was an increase of 5% in the prescribing of anti-hypertensive drugs.



# CVD prevention - high value intervention in...

#### **Chronic Kidney Disease**

- Undertake systematic audit across practices to improve detection and management of C D, and use audit data to focus quality improvement initiatives.
- 2. Consider commissioning CKD graphical surveillance to detect progression of CKD
- Work with practices and local authorities to maximise NHS Health Check uptake and follow up.
- 4. Build local primary care leadership to challenge unwarranted variation and drive quality improvement in detection and management.
- 5. Support people to self-manage their condition and make decisions about their own health to improve their quality of life
- 6. Use practice based pharmacists to optimise management and risk reduction.



Return to pathway

Think Kidr



#### Identifying and monitoring people at greater risk of progressive chronic kidney disease (CKD).

We are leading a UK-wide project, supported by the Health Foundation, which involves around 20 renal units, pathology laboratories, their surrounding GP practices and clinical commissioning groups. The project is known as ASSIST-CKD. Our aim is to provide better and safer patient care by identifying people with CKD who are most at risk of disease progression. We want to ensure they are referred to secondary care at the right time, for the right treatment in the right care setting, to potentially reduce the rate of decline and so delay or avoid the need for dialysis or a kidney transplant.

Nearly 2 million people in the UK have been diagnosed with moderatesevere CKD by their GP but it is estimated that a further one million people remain undiagnosed as people with CKD often have little or no symptoms until the later stages of the disease. Patients also have an increased risk of cardiovascular disease and acute kidney injury (AKI).

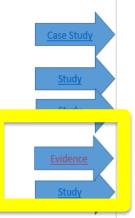
We have based the project on a successful system that has been running at the Heart of England Foundation Trust (HEFT) in Birmingham for the past 10 years. It uses software to map data from routine blood tests (eGFR), creating graphs of kidney function over time. For patients with deteriorating kidney function, the participating laboratories send a report, including the graph, to the GP with a prompt that specialist advice may be needed. Another benefit is that patients with more stable CKD can be discharged back into primary care confident that their kidney function will continue to be monitored via these graphs. Assist CKD Since 2005 16% decrease in people starting dialysis against 8% increase nationally Lowest rate of late presentation for dialysis More people managed safely in primary care with eGFR surveillance



# CVD prevention - high value intervention in...

#### High Cholesterol/CVD risk

- 1. Maintain & Improve systematic collection and audit of data on cholesterol levels, high CVD risk and possible FH in practices to support detection and management
- 2. Achieve local clinical consensus and establish an integrated pathway for detection and management of raised cholesterol and CVD risk, which includes FH
  - 1. Identify & investigate possible undiagnosed hypercholesterolaemia and/or FH
  - 2. Identify and address suboptimal lipid management
- 3. Commission local service for FH investigation and cascade testing
- 4. Work with practices and local authorities to maximise NHS Health Check uptake
- 5. Build local primary care leadership to address unwarranted variation and drive quality improvement in detection and management
- 6. Strengthen risk assessment, detection and management through greater use of practice based and community pharmacies and consider commissioning systematic support specifically for statin adherence from community pharmacists through Medicine Use Reviews (MURs)



NICE Pathway



# Do health checks improve risk factor detection in primary care? Matched cohort study using electronic health records

# Alice S. Forster<sup>1</sup>, Caroline Burgess<sup>1</sup>, Hiten Dodhia<sup>2</sup>, Frances Fuller<sup>3</sup>, Jane Miller<sup>3</sup>, Lisa McDermott<sup>1</sup>, Martin C. Gulliford<sup>1</sup>

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#### ABSTRACT

Background To evaluate the effect of NHS Health Checks on cardiovascular risk factor detection and inequalities.

Methods Matched cohort study in the Clinical Practice Research Datalink, including participants who received a health check in England between 1 April 2010 and 31 March 2013, together with matched control participants, with linked deprivation scores.

**Results** There were 91 618 eligible participants who received a health check, of whom 75 123 (82%) were matched with 182 245 controls. After the health check, 90% of men and 92% of women had complete data for blood pressure, total cholesterol, smoking and body mass index; a net 51% increase (P < 0.001) over controls. After the check, gender and deprivation inequalities in recording of all risk factors were lower than for controls. Net increase in risk factor detection was greater for hypercholesterolaemia (men +33%; women +32%) than for obesity (men +8%; women +4%) and hypertension in men only (+5%) (all P < 0.001). Detection of smoking was 5% lower in health check participants than controls (P < 0.001). Over 4 years, statins were prescribed to 11% of health -check participants and 7.6% controls (hazard ratio 1.58, 95% confidence interval 1.53–1.63, P < 0.001).

Conclusion NHS Health Checks are associated with increased detection of hypercholesterolaemia, and to a lesser extent obesity and hypertension, but smokers may be under-represented.

Keywords cardiovascular diseases, cardiovascular risk, deprivation, electronic health records, gender, health inequalities, primary care, screening



# Links to guidance and appraisals

# CVD prevention - high value intervention in...

#### **Atrial Fibrillation**

- 1. Undertake systematic audit across practices (GRASP-AF audit tool)
  - Identify people with possible undiagnosed AF
  - Identify people with AF at high risk of stroke who are not anticoagulated or not maintained in the therapeutic range.
- 2. Work with practices and local authorities to maximise NHS Health Check uptake and follow up.
- Build local primary care leadership to challenge unwarranted variation and drive quality improvement in detection and management.
- 4. Add pulse checking to existing GP and pharmacy enhanced services for people over 65.
- 5. Agree local clinical consensus and pathway for anticoagulation including the place of NOACs.
- 6. Consider commissioning:
  - Technologies such as WatchBP Home A and AliveCor to support AF detection in routine care
  - New models of anticoagulation control eg self-monitoring and community pharmacy monitoring
  - Systematic support for adherence from community pharmacists





Return to pathway

NICE Pathway



Share

# NICE recommends blood pressure device that can help prevent stroke

A new device that allows GPs and practice nurses to detect pulse irregularities and pick up cases of atrial fibrillation whilst measuring blood pressure has been recommended by NICE.

A new device that allows GPs and practice nurses to detect pulse irregularities and pick up cases of atrial fibrillation whilst measuring blood pressure has been recommended by NICE.

Atrial fibrillation (AF) causes the heart to beat with an irregular rhythm. It can be difficult to detect and subsequently diagnose as it is often asymptomatic and can be intermittent.

People with AF are at increased risk of developing blood clots and subsequent stroke, with 423,000 people aged 65 and over expected to have AF, of whom some will be will living with the condition yet are undiagnosed.

In its **medical technology guidance** on WatchBP Home A, NICE says the device reliably detects AF and may increase the rate of detection when used in primary care. This will consequently allow for preventative treatment to be given and to reduce the incidence of AF-related stroke.

NICE also says the WatchBP Home A device should be considered for use in people with hypertension or those being screened for hypertension in primary care. People with suspected AF should have an electrocardiogram (ECG) in line with current AF guidance from **NICE**.

NICE estimates that around 74,000 people with AF will be detected nationally, who can then receive treatment if the device is used.

Cost savings are expected to reach £26.7 million per year, once a steady state of use is reached. Savings will mainly be achieved through avoiding stroke and through a reduction in the number of ECGs needed to check false-positive results, which occur when the pulse is taken by hand.

# Links to audit tools

# CVD prevention - high value intervention in...

#### Diabetes

- 1. Ensure 100% practice participation in National Diabetes Audit, and use audit data to focus quarty improvement initiatives to improve achievement of the 8 key processes and 3 treatment target.
- 2. Work with practices and local authorities to maximise NHS Health Check uptake and follow up
- 3. Build local primary care leadership to challenge unwarranted variation and drive quality improvement in detection and management.
- 4. Ensure all patients with diabetes have access to routine care by a trained diabetes nurse.
- 5. Work with practices and education providers to maximise referral, uptake and retention in patient education programmes.
- 6. Consider commissioning systematic support for adherence from community pharmacists through medicines use reviews.









Return to pathway



#### National Diabetes Audit

The National Diabetes Audit (NDA) is the one of the largest annual clinical audits in the world, integrating data from both primary and secondary care sources, making it the most comprehensive audit of its kind.

To find out more about the NDA Programme check out this short presentation.

#### 2015 - 2016 Audit Collection

The National Diabetes Audit 2015-16 is **NOW** CLOSED. The last date for data submission was **Friday 19 August 2016**. The audit team would like to thank you for your continued support of this audit and all your hard work.

You can still register your contact details with the NDA team and we will keep you up to date with the latest information about the audit and how to participate. Please include the following in your email:- name, email address, practice name, practice code, clinical system.

#### Guidance for patients



#### Access the audit reports

National Diabetes Audits
Patient Friendly Reports

#### Guidance for GP Practices



**Return to pathway** 

# The answers aren't just with GP's

### CVD prevention - high value intervention in...

#### High blood pressure

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**NICE Pathway** 

Build local primary care leadership to challenge unwarranted variation and drive quality improvement in detection and management



# Using practice based pharmacists to manage hypertension in Dudley

#### KEY LEARNING

- GPs were engaged through a practice engagement scheme and the hypertension action plans.
- A three year CCG Local Quality Premium for hypertension provided a funding incentive.
- Hypertension was made a clinical priority for CCG.

#### INTRODUCTION

- In 2002, statistics for Dudley PCT showed that the standardised mortality rate from hypertensive disease was double the England average.
- Further local audit in 2013 identified there were 11,000 patients diagnosed with hypertension whose blood pressure was not managed to 150/90mmHg, and an estimated 27,800 patients missing from hypertension registers

Dudley CCG has the highest recorded prevalence of hypertension in England at 17.7%, or 54,606 people, compared with an average of 13.7% (QOF 2013/14).

RightCare

#### WHY WAS A PROJECT TO TARGET HIGH BLOOD PRESSURE DEVELOPED?

A pharmacist-led audit in Dudley identified several underlying issues:

- Difficulty identifying patients with hypertension
- Practices only treating patients to the QOF target, not the evidence-base
- High levels of exception reporting
- Patients both being not recalled and not attending follow-up appointments after diagnosis
- Patients perceiving hypertension as not important, probably because this is silent and not a visible condition.

# Or always with health professionals

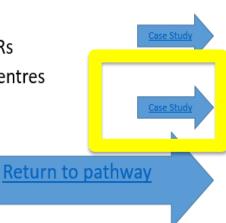
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**RightCare** 





NICE Pathway

### Case study Stoke-on-Trent: telehealth helps patients manage their own conditions



The Advice and Interactive text Messaging (AIM) for Health programme began across England in March 2013.

The programme included:

- lead clinician developing 4 protocols to support diagnosis or managment of high blood pressure (hypertension) in different circumstances
- registering nearly 300 patients in 10 months to follow the protocols through their primary carer team (GPs) and take part in the programme
- patients submitting their blood pressure (BP) readings regularly by text
- telehealth system, 'Flo', sending automated text messages back to patients with advice, instructions or other messages based on their readings
- clinicians checking their submitted readings (at least weekly review on Florence website) and contacting patients if necessary with further instructions



# **Summary slide**

- First in a series of pathways designed to speed adoption of best practice and reduce variation
- CVD Prevention can be greatly increased through systematic, resourced quality improvement within primary care
- Great benefits in terms of patient outcomes and cost avoidance
- Pathway has all the tools required for commissioners to understand the benefits and implement change
- Has been endorsed by all major stakeholders
- Launched September 29<sup>th</sup> 2016 World Heart Health Day
- Available here: <u>https://www.england.nhs.uk/rightcare/intel/cfv/cvd-pathway</u>