CVD: high risk conditions

High risk conditions like high blood pressure, atrial fibrillation and high cholesterol are major causes of heart attack and stroke (CVD events). In the high risk conditions, preventive treatment is very effective, but late diagnosis and under-treatment is common.

What the evidence tells us

- Reducing blood pressure in all adults with diagnosed and undiagnosed hypertension by 5 mmHg: reduces risk of CVD events by 10%
- Statin therapy to reduce cholesterol by 1 mmol in people with a 10 year risk of CVD risk greater than 10%: reduces risk of CVD events by 20-24%
- Anti-coagulation of high risk AF patients: averts one stroke in every 25 treated

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In Bradford Districts Clinical Commissioning Group: Over 24 months, more than 21,000 people had an intervention in lipid management, anti-coagulation or antihypertensive treatment to improve their health. Resulting in 137 fewer heart attacks and 74 fewer strokes compared to baseline.

Footnotes:

Potential events calculated with NNT (theNNT.com). For blood pressure, anti-hypertensive medicine: for five years to prevent death, heart attacks, and strokes: 1 in 100 for heart attack, 1 in 67 for stroke. For AF, warfarin over 1.5 years: 1 in 25 for stroke. Numbers may be lower, as some patients may be on prior treatment.

References:
Hypertension and AF populations and treatment estimates: QOF 2015/16.
CVD high risk estimate numbers: http://www.bmj.com/content/344/bmj.e4181.
CVD high risk statin treatment: http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002169
The graphic overleaf shows the size of the prize for CVD prevention in Staffordshire.

The estimates of impact are indicative but they show the scale of the opportunity to prevent heart attacks and strokes by improving the detection and management of high risk conditions like atrial fibrillation, high blood pressure and high cholesterol. Achieving this at scale would deliver substantial savings in health and social care spend.

The NHS RightCare programme is now rolling out the CVD Prevention Pathway with a series of high impact interventions that will support your CCGs to deliver this improvement. And increasing uptake of the NHS Health Check offers a systematic approach to detecting people with undiagnosed high risk conditions.