CVD High Impact Interventions

NHS England

Intervention	Summary	Cost of intervention / Return on investment	Impact on demand	Expected outcomes	Resources
Case finding					
Community Pharmacy Hypertension Case Finding Supports the detection and subsequent treatment of hypertension and CVD, improving outcomes, reducing the burden on GP practices (where most case finding takes place) and reaching people who may not attend general practice.	Community pharmacy has a key role in detection and subsequent treatment of hypertension and CVD, improving outcomes and reducing the burden on GPs. A recent evaluation of an NHSE pilot of Community Pharmacy Case Hypertension Case Finding Advanced Service found that a third of patients received high or very high BP readings (n=114) and third of those (n=40) went on to use ABPM. A third of those people who had an ABPM following a high reading in the pharmacy, still had a high reading following ABPM (n=12).	Community Pharmacy case - finding service and ad hoc GP referrals funded until end of March 2024: • £440 for set up • A fee of £15 for each patient receiving a clinic bp check • £45 for each appropriate provision of ABPM. PHE estimates that for a 20% improvement in management of hypertension, to 140/90 mmHg target, system net savings would be estimated to be c£14 p.a. per controlled patient over a 5 year horizon. Of these, c£5.75 would accrue to the NHS and c£7.91 would accrue to local authorities.	Hypertension case finding is a service which is primarily carried out in primary care by GP colleagues. However, the CVD Prevent data (March 2022) showed a reduction in BP recording data and this remains about 10 percentage points below pre-pandemic baseline. (Strategy Unit evaluation, NHSE Pharmacy Integration Fund) Patients in the black (62.2%) and mixed (61.4%) ethnic groups were least likely to be actively monitored.	Community pharmacies could carry out 2.5million blood pressure checks in FY23/24 Increased identification of hypertension Stratification of stage 1 and stage 2 patients with hypertension reduces pressure on general practice Increased treatment of hypertension as a result of directing stage 1 and stage 2 patients to general practice Reduced footfall through general practice of patients who can be diagnosed in the community, reducing pressure Promote healthy behaviours to service users.	NICE Guideline NG136: Hypertension in adults: Diagnosis and Management NICE Clinical Guideline CG181: Cardiovascular disease: risk assessment and reduction, including lipid modification: NHS Community Pharmacy Blood Pressure Check Service Advanced service specification Community pharmacy activity data - the SHAPE atlas Tipping Point – Over two years on, the impact of COVID-19 on Cardiovascular care is still being felt NHS England » Cardiovascular disease (CVD)

Cholesterol search and risk stratification Involves case finding and treatment of hypercholesterolaemia in people with high CVD-risk conditions, post-acute CVD event and in those with familial hypercholesterolaemia.	High cholesterol causes cardiovascular disease and is associated with an increased risk of cardiovascular death. UCLPartners have developed Proactive Care Frameworks which provide a platform for optimising clinical care and self-care for people with these high-risk conditions, supporting primary care teams to do things differently and at scale. The framework is based on NICE guidance.	Tool is free. Key investment is admin time to run the search on a quarterly basis, and clinical time to prioritise and manage patients. This approach enables the redistribution of work across all primary care staff for long-term condition management.	Every 1mmol/l reduction in low-density lipoproteins (LDL) cholesterol reduces risk of a cardiovascular event by 25%. Modelling shows that if 90% of people with CVD were prescribed a statin and 70% were put onto an optimal dose, the Size of the Prize calculations show this could prevent over 800 strokes and heart attacks in five years. This would save many lives, reduce admissions to hospital, and cut costs to the health and social care system. Additional benefit to workforce: In a case study at Lakeside PCN (180,000 patients), by adopting the UCLPartners stratification and prioritisation tool they released sufficient nursing time to perform 650 additional smears.	Increased identification of all patients who need support in lowering their cholesterol. Helps GPs meet QOF and other targets	NICE Clinical Guidelines 181: Cardiovascular disease: risk assessment and reduction, including lipid modification. NICE Clinical guidelines 71: Familial hypercholesterolaemia: identification and management. NICE NG185: Acute coronary symptoms – 1.4 Drug therapy for secondary prevention Protocols to guide consultations for patients identified as having multiple cardiovascular risk factors £3.3m additional funding from NHSE medical directorate LTP CVD-R programme to support CVD leadership role in every ICS NHS England » Cardiovascular disease (CVD)
NHS Health Check Local authority-commissioned service for 40-74-year-olds, delivered in most cases by GPs. 1 in 4 NHSHC attendees are	The NHS Health Check aims to improve the health and wellbeing of adults aged 40-74 years through promotion of early awareness, assessment and management of the major risk factors for CVD – risk	In 2019/20, Local Authorities reported spending £47.6 million on NHSHC (1.5% of the public health grant). This does not include expenditure on clinical management undertaken by the NHS or	1 in 4 NHSHC attendees are identified as at risk of CVD and would benefit from behaviour modification and where that is unsuccessful lipid lowering therapy.	Increased identification of all patients who need support managing CVD risk factors. Increased treatment of hypertension as a result through prescribing statins	Overview | Cardiovascular disease prevention | Guidance | NICE

identified as at risk of CVD and would benefit from lifestyle changes and where that is unsuccessful, blood pressure or lipid lowering therapy.	factors that are associated with premature death, disability and health inequalities in England. All Local Authorities are responsible for providing checks and commission the majority from general practice in the NHS. Compared to people who have not attended, attendees have significantly lower likelihood of hospital admissions for CVD and type 2 diabetes, death from CVD, and all causes of death over 1, 3 and 5 years after attending a check.	follow-on interventions to support behaviour change. At a 50% take up rate, every £1 spent on the current NHS Health Check programme achieves a return of £2.93. Increasing take-up to 60% could achieve an additional return on investment of £3.55 for every £1 spent, while improving follow-up could achieve a further return of £5.18 for every £1 spent.	Based on the number of people identified with risk factors through an NHS Health Check, each year the programme has the potential to support 317,000 people with obesity, 21,000 with high blood glucose and 330,000 with high blood pressure.	contributing to reduced major CVD events. Promote healthy behaviours to service users.	Tools for commissioners and providers: NHS Health Check - National guidance Preventing illness and improving health for all: a review of the NHS Health Check programme and recommendations - GOV.UK (www.gov.uk) Gov.uk - Using the world leading NHS Health Check programme to prevent CVD NHS Health Check Best Practice guidance: 20200417 NHS Health Check Best Practice Guidance 2019_update (1).pdf NHS England » Cardiovascular disease (CVD)
Optimising Treatment					
Case finding and direct-acting oral anticoagulation (DOACs) to prevent atrial fibrillation (AF) related strokes National programme to expand DOAC access in	DOACs are medicines that can prevent strokes by preventing blood clots in patients with atrial AF. NHSE has put in place a	£30m allocated in 2022/23 from the Investment and Impact Fund indicators 2022/2023. c.£10m allocated from industry funding for ICB	The DOAC implementation framework anticipates an increase in demand, with a projected potential increase in 400-600k patients detected with AF over a two-year period. To date, there has been less detection of new	Increased detection of atrial fibrillation (“detect”) Increased treatment of AF with DOACs (“prevent”) Increased compliance with NICE guidance on clinical	Recommendations | Atrial fibrillation: diagnosis and management | Guidance | NICE NHS England » Commissioning recommendations for the national procurement of direct

line with increased case finding.	programme, including procurement agreements, to expand DOAC access. All DOACs are deemed to be equivalent by NICE. Not enough certainty in the evidence base to recommend specific drug(s) over others.	detection and prevention implementation projects. Health and social care costs avoided August 2022: £33,458,954	patients than anticipated. Demand for health and social care costs is expected to decrease as a result of stroke prevention. There may be a reduction in general practice primary care appointments for DOACs that require less frequent clinical review.	review of DOAC medication ("protect")	acting oral anticoagulants (DOACs) DOAC Infographic (england.nhs.uk) Microsoft PowerPoint - FINAL Guidance on DOAC prescribing July 22 v2 (evessio.s3.amazonaws.com) Atrial fibrillation prevalence estimates for local populations - GOV.UK (www.gov.uk) Network Contract DES (MI) - 2022/23 - NHS Digital CVDPrevent Audit — NHS Benchmarking Network New Medicine Service (NMS) - NHS (www.nhs.uk) NHS England » Cardiovascular disease (CVD)
Cardiac rehabilitation for patients post ACS and diagnosis of heart failure Supporting patients with chronic or post-acute cardiovascular disease to lead an active life and reduce	Activities that ensure that patients with chronic or post-acute cardiovascular disease may, by their own efforts, lead an active life. It has been shown to cardiac rehabilitation significantly reduces both relative mortality	NICE has estimated the annual cost/ (saving) of implementing cardiac rehabilitation for those diagnosed with heart failure. In 2022/23 the estimates uptake of people with heart failure receiving cardiac rehabilitation was £26.1%	CR contributes to reduced demand on the health system primarily through reduced readmissions. It has been estimated that it can reduce readmissions by 31% over 6-12 months.	Reduces all causes of mortality by 18% over 6-12 months and 13% over 12 months Reduces readmissions by 31% (6-12 months)	9387-2900853-CVD-Outcomes_web1.pdf (publishing.service.gov.uk) Exercise-based cardiac rehabilitation for coronary heart disease - PubMed (nih.gov).

their risk of further acute illness	and morbidity. National Audit for Cardiac Rehabilitation (NACR) demonstrates improved health behaviours and health related quality of life from UK CR programmes.	which equates to a £4.7 total budget impact.	Aiming to move from 50% to 85% of patients accessing CR post MI and from 8 to 33% post diagnosis of heart failure	Heart failure Prevention of 50k early deaths and 140k admissions over 10 years	Cardiac Rehabilitation The RAMIT trial: its results in the context of 2012 Cochrane review | Heart (bmj.com) MI – secondary prevention: Secondary prevention in primary and secondary care for patients following a myocardial infarction | Guidance | NICE Home | BACPR The RAMIT trial, a pragmatic RCT of cardiac rehabilitation versus usual care: what does it tell us? - PubMed (nih.gov) New Medicine Service (NMS) - NHS (www.nhs.uk) NHS England » Cardiovascular disease (CVD) £7m additional funding to systems from NHSE medical directorate LTP CVD-R programme via cardiac networks to support increase in access Clinical and professional leadership support from cardiac networks

Optimisation of hypertension treatment Improving diagnosis and ensuring those with an existing diagnosis are receiving and adhering to the right medication to control their hypertension.	Systematic review of high BP on patient records: to achieve at least 73% control according to QoF, or 3% greater than pre-pandemic levels (whichever is greater) by March 2024. The clinical management of hypertension accounts for 12% of visits to primary care and up to £2.1 billion of healthcare expenditure. Lowering blood pressure reduces the incidence of stroke by 35%–40%, heart attacks by 20%–25% and heart failure by 50%.	Over 10 years a reduction in the population average blood pressure by 5mmHg through improved prevention, detection and management could save an estimated 45,000 quality adjusted life years (QALYs) and save £850m on related health and social care costs.	There are around 12.5m people in England with hypertension. Of those, around 4 million do not have a diagnosis. Of those that are diagnosed 30% are not managed optimally. If we increased both the diagnosis and the proportion of those managed optimally by just 10%, in one year we are likely to prevent around 7,500 CVD events.	Improvement in diagnosis and accurate treatment of hypertension reduces the risk of cardiovascular disease and associated problems including heart attacks and strokes.	New Medicine Service (NMS) - NHS (www.nhs.uk) Overview | Hypertension in adults: diagnosis and management | Guidance | NICE NHS England » Cardiovascular disease (CVD) Clinical and professional leadership support from cardiac networks £3.3m additional funding from NHSE medical directorate LTP CVD-R programme to support CVD leadership role in every ICS
Optimisation of Heart Failure treatment through annual reviews Managing blood pressure, atrial fibrillation, cholesterol and anticoagulant use to identify and address deterioration early.	Heart failure represents the only major cardiovascular disease with increasing prevalence and carries a poor prognosis for patients Heart failure has a poor prognosis 30-40% of people diagnosed with Heart failure will die within 1 year QOF- HF007 The percentage of patients with a diagnosis of heart failure on the register, who have had a review in the	Evidence suggests early detection of deteriorating health in heart failure patients reduce absolute hospitalisations by 45%. To the NHS 80,000 patients hospitalised with HF, this could save approximately £50m per year. (NHS @home Test Bed Site using FLO text messaging service). In newly diagnosed patients, remotely monitoring patients to optimise patients has a	It is estimated that heart failure accounts for a total of 1 million inpatient bed days (2% of all NHS inpatient bed days), 5% of all emergency medical admissions to hospital, and costs around £2bn (2% of the total NHS budget) (Ref - All Party Parliamentary Group on Heart Disease Inquiry into Living with Heart Failure 2016). With around 200,000 diagnoses of heart failure every year in the UK, it	Reduced non elective admissions and reduced mortality reviews.	NICE Guidance for Chronic heart failure does recommend monitoring 6 monthly for people with proven heart failure QOF- Heart Failure Update on Quality Outcomes Framework changes for 2022-23 New Medicine Service (NMS) - NHS (www.nhs.uk)

	preceding 12 months, including an assessment of functional capacity and a review of medication to ensure medicines optimisation at maximal tolerated doses. Reviews are associated with a reduction in non-elective readmission and mortality in those diagnosed with HF	potential saving of up to 20% per patients (saving of approx. £88 per patient). Cost includes the average number of appointments, the duration of appointments and the cost of staff time, including travel (NHS @home Test Bed Site). Identifying high-risk patients with recurrent admissions for heart failure (due to social vulnerability) using a population health management approach in primary care, saves around £7,500 per person per year in non-elective admissions.	suggests around 160,000 people end up in A&E either because symptoms have worsened or from an urgent referral from a GP or outpatient clinic. The average length of hospital stay for a heart failure admission is 11 days at a cost of approximately £3000 per admission		NG106 Full guideline (nice.org.uk) NHS England » Cardiovascular disease (CVD) £3.3m additional funding from NHSE medical directorate LTP CVD-R programme to support CVD leadership role in every ICS
Optimising management post ACS, including lipid management Regular monitoring within primary care for patients who have had a high-risk cardiovascular event to ensure they are on the right medication to reduce their risk of further acute illness	QOF right medication post Heart attack at 12 months and review at 3-8 weeks after acute event Reviews are associated with a reduction in associated morbidity and mortality in people who have had a Myocardial infarction.	Regular monitoring by a general practitioner for patients who have had a high-risk cardiovascular event can support the management of secondary prevention measures which in turn will reduce mortality and risk of recurrent MI. Secondary prevention can reduce healthcare costs increase economic productivity and improve quality of life. These	Lipid management in England must improve to drive better CVD outcomes – every 1 mmol/L reduction in LDL-C is tied to a 22% reduction in major vascular events after 1 year.	Reduced non elective admissions, morbidity and mortality	NM-79 indicator guidance NM80 -Indicator guidance These indicators aim to reduce associated morbidity and mortality in people who have had a myocardial infarction (MI). Cardiovascular risk in post-myocardial infarction patients: nationwide real world data demonstrate the importance of a long-term perspective |

		interventions are highly cost effective.			European Heart Journal | Oxford Academic (oup.com) New Medicine Service (NMS) - NHS (www.nhs.uk) World Heart Federation Roadmap: Reducing Premature Cardiovascular Morbidity and Mortality in People With Atherosclerotic Vascular Disease Clinical and professional leadership support from cardiac networks