

From Insight to Impact:

An overview of the Midlands Prevention Pathway Toolkit

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Why this matters for strategic commissioning

- **1. Where does this connect?**

- Understand need & inequalities
- Set priorities
- **Design services / pathways**
- **Make resource choices**
- Support change & improvement
- Evaluate outcomes & impact
- Build analytical capability

- **2. What question or decision can this help with?**

How can we use data and evidence across the whole prevention pathway to identify where action or investment will deliver the greatest improvement in population health and value?

- **3. What should analysts / decision makers take away?**

- Take a systems thinking approach: Look beyond individual metrics; combine data on need, activity, outcomes, inequalities, cost and strength of evidence to build a rounded view of performance and opportunity.
- Knowledge to action: Translate analysis into a clear choice; show which interventions offer the greatest value, and what this means for investment, disinvestment or further investigation.

The context

- Premature deaths from CVD increased in recent years - major driver of inequalities in life expectancy and health-related economic inactivity.
- High levels of behavioural risk factors – low physical activity, obesity, smoking – biggest modifiable risk factors
- Significant inequalities: Ethnic minority groups, deprivation
- National ambition of a 25% reduction in CVD-related premature mortality
- Observed variation in CVKM prevention interventions across systems in our region, contributing to variation in morbidity and mortality and the context of increasing financial constraints frequently leading to disinvestment in prevention programmes.
- **System action needed:** CVD pathway approach



The process



Office for Health
Improvement
& Disparities



- T&F group established – multidisciplinary, multiagency
- The project engaged stakeholders from primary care, public health, DHSC/OHID, ICBs and NHSE, including HCPH staff from other regions, ensuring the toolkit was practical and user-focused.
- We conducted a baseline audit of current CVKM resources and the existing health economics evidence base, which highlighted key gaps and informed toolkit content.
- The toolkit included articulating the holistic prevention pathway, prioritised interventions based on attributable risk and developed a robust evidence base for ROI.
- The toolkit was reviewed by the CMO and DCMO and two RDsPH who provided valuable feedback on quality of evidence, useability and application.
- It was piloted in two ICB clusters.
- Engagement with the National team leading the CVD MSF development to identify overlap, opportunities for improvement in content and shared learning

Contributors



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A prevention pathway toolkit

An allocative efficient approach





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Aims & context

This toolkit adopts a systems-thinking approach to the prevention pathway, considering the financial and benefit realisation opportunities.

It aims to support system-wide decision making in times of financial constraints, where there is an increasing need to maximise prevention opportunities to improve population health and reduce the burden on health and care services, through:

❖ Providing clarity

- Understanding and articulating the wider prevention pathway, from wider determinants of health through to tertiary prevention highlighting
 - Key interventions, evidence, toolkits + resources
 - Priority metrics for improving performance
 - System partners: recognising the multiple partners and agencies involved across pathways

❖ Supporting value-based healthcare

- Considering financial planning for care pathways, underpinned by evidence, that focuses on allocative efficiency; highlighting opportunities and risks for (dis)investment by considering the whole care pathway
 - Reducing unwarranted variation
 - Reducing the funding of low value/ineffective interventions
 - Reducing waste
 - Reducing patient harm, over-medicalisation and inequity by disease
- Implementing knowledge to action: efficiency productivity drivers that systems need to consider when planning for prevention

Audience: Staff in ICBs, Trusts and Local Authorities; Directors of Public Health; Finance Leads; Strategy Leads; Commissioners and Clinical Leads.

Issues and challenges facing healthcare

- Ageing populations
- Chronic conditions and multi-morbidity
- Relentless increase in volume and intensity of clinical practice
- New interventions requiring additional resources
- Low value interventions not stopped
- Unwarranted variation in activities (i.e. not explained by variation in need or explicit population choices; note that there may not necessarily be agreement on the ‘right rates’)
- Unwarranted variation in outcomes
- Underuse of effective interventions
- Inequity by disease
- Overuse causing waste (i.e. activity that does not add value or uses resources that could give greater value to another group)
- Overuse causing patient harm (overdiagnosis, anxiety, overtreatment and side effects)

European Commission (2019). [Report of the Expert Panel on effective ways of investing in health \(EXPH\) Opinion on Defining value in “value based healthcare”](#).

Courtesy of:

Dr Charlotte Simpson (Healthcare Public Health Consultant, NHSE NW)
Fred Pigott (Head of Productivity, NHSE NW)

Using this toolkit to improve prevention within a system



Contents

Mapping the pathway (using CVKM as an example)



- [Why](#) cardiovascular-renal-metabolic diseases (CVKM) are a priority for prevention
- Understand the full prevention-to-care [pathway](#): from reducing CVKM risk to improving outcomes for those living with CVKM
- Understand the [system](#) partners and [policy context](#)

Are we funding the right interventions?



- Striving for [value-based healthcare](#) and how to get there
- Are we providing the right services for the right people? [Understand your population](#)
- Use the [Interactive Evidence Summary Tool](#) for quick comparison of CVKM interventions by strength of evidence, impact and cost-effectiveness
- Explore further detail on the [key interventions](#) with the strongest evidence and a [wider impact summary](#)
- Understand the key evidence base and cost effectiveness data for each intervention by exploring the [pathway detail](#)

Improving prevention performance



- Use the [Key Lines of Enquiry](#) to guide discussions with relevant system partners for improving prevention; each [intervention](#) has further detailed prompts
- Utilise the key tools and published reports for each [intervention](#) for further insights and guidance on best practice
- Use the supporting [metric spreadsheet](#) to identify the key metrics to focus on for monitoring local performance
- Identify areas for improvement by highlighting service or system challenges

Focusing on CVKM

and looking to the future of prevention

- CVKM: cardiovascular, renal and metabolic diseases (cardiovascular disease, chronic kidney disease, type 2 diabetes, obesity) are the leading causes of death and disability in the Midlands.
- CVKM diseases are inextricably linked – systems must move away from considering these conditions as separate → holistic management.
- Up to 80% of premature CVD deaths are potentially preventable*, as major risk factors are modifiable (e.g. blood pressure, cholesterol, smoking, inactivity).
- CVD care costs the NHS ~£7.4 billion per year, with £15.8 billion in wider economic costs (lost productivity, social care)**. Kidney disease costs another £7 billion^ to the economy.
- A substantial proportion of people with high-risk conditions remain undiagnosed or sub-optimally treated.

Upstream interventions for CVKM will have wide-reaching impact on other diseases
The same methodology can be applied to other prevention areas

Policy context

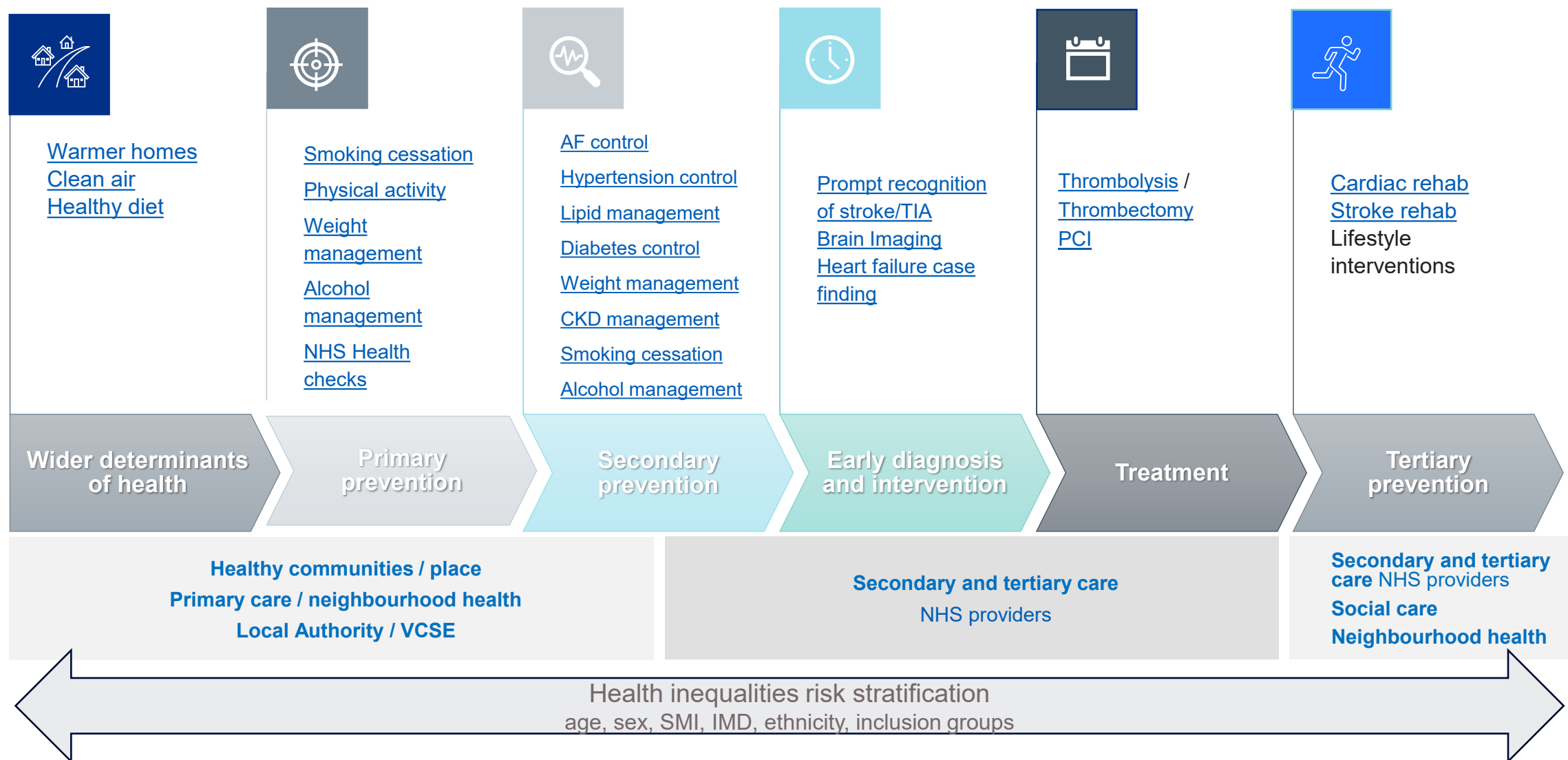
for cardiovascular-renal-metabolic disease management



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- The 2019 NHS Long Term Plan set the ambition for the NHS to help prevent over 150,000 heart attacks, strokes and dementia cases over the next 10 years and outlined how NHS England will meet the ambitions along with partners.
- In February 2019, as part of the Cardiovascular Disease Prevention System Leadership Forum NHS England published new [national ambitions](#) for the detection and management of the high-risk conditions hypertension, atrial fibrillation and raised cholesterol.
- In December 2022 the [2023/24 priorities and operational planning guidance](#) was published. Key metrics for optimal treatment of hypertension and prescription of lipid lowering therapies were included in ambitions for prevention and health inequalities.
- In Nov 2024, the Progress in preventing cardiovascular disease report (DHSC and NHSE) was published. It highlighted gaps in detection and management post-COVID and called for better integration and data use across systems.
- The 10 Year NHS Health Plan published July 2025 commits to reducing premature deaths from heart disease and stroke by 25% over the next decade. The plan also targets obesity and diabetes. It introduced ambitions for a modern service framework for CVD, focusing on prevention, community-based care and digital transformation
- NHS England's Medium Term Planning Framework for 2026-27 to 2028-29, published October 2025, builds on the 10YHP, stating that ICBs must ensure their five year plans have a major focus on tackling obesity, provide eligible access to weight loss drugs, increased access to the NHS Digital Weight Management Programme, work in partnership with local authorities to test the new online NHS Health Check and implement opt-out models of tobacco dependence in routine care
- The Modern Service Framework (MSF) for CVD is currently in production, anticipated in Spring 2026. This Midlands tool development was commenced prior to the MSF work but can be utilised as an adjunct, providing the evidence base and repository for information to support systems with business case development and decision-making processes.

Prevention pathway an allocative efficient approach



Key Lines of Enquiry for a system approach



Are you engaged with all the agencies/ organisations identified on the pathway? (See the [Understanding the system](#) map)



Is there a system approach to pathway development for your population and are robust partnerships in place with collaborative strategic planning discussions occurring?



Does each of the agencies know and understand the allocative efficient interventions at each part of the pathway that they have responsibility for/ ability to influence?



Are finance leaders adopting a value-based approach to healthcare as per the HFMA guidelines?



Are health inequalities being considered in all approaches to service design and delivery?



How are you utilising a population health management approach to improving health outcomes?

Understanding the system map

Focusing on CVD

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National healthcare systems

Department of Health & Social Care

Sets overall policy for CVD prevention.
Has oversight of CVD prevention and the NHS Health Check programme largely through the Office for Health Improvement and Disparities.

NHS England

The NHS Long Term Plan aims to prevent up to 150,000 heart attacks, strokes and dementia cases by 2028-29.
Incentivises general practice to meet CVD-related targets through the Quality and Outcomes Framework.

Ministry of Housing, Communities & Local Government

Is responsible for the financial framework within which local authorities operate, and distributes public health grant funding to local authorities.

Local healthcare systems

Integrated Care Boards

Composed of local NHS bodies including Primary Care Networks, GP practices and pharmacies.

Integrated Care Partnerships

Combine NHS, local government and other stakeholders.
Provide oversight of prevention in local health systems.

Local authorities

Have statutory responsibility for public health in their local area.
Commission NHS Health Checks in their local area.

General Practices

GP Practices are the main providers of NHS Health Checks, and identify patients at risk as part of their routine work.

Pharmacies

Opportunistic blood pressure testing.
Some are commissioned to do NHS Health Checks.

Other Health Check provision and outreach settings

Community outreach provision in settings such as workplaces, supermarkets and places of worship.



Understanding your population

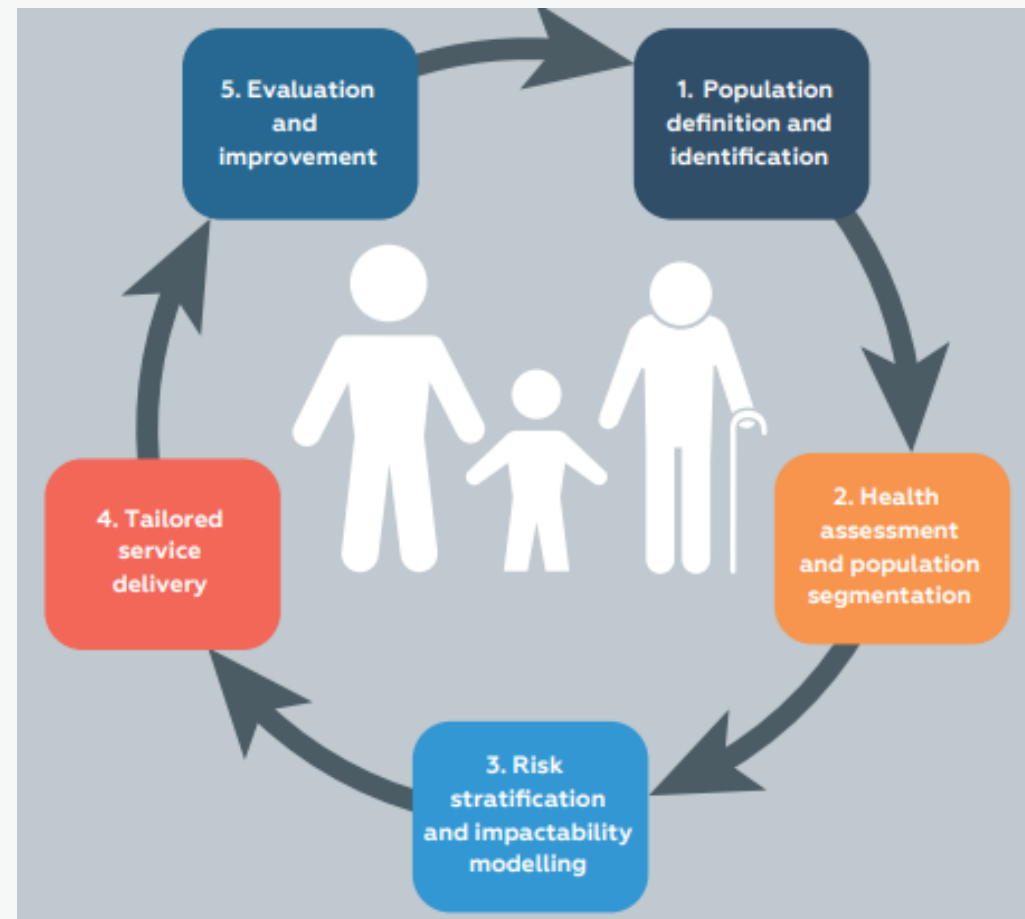
CVKM risk varies by age, deprivation, ethnicity, geography and comorbidity. Population health management (PHM) helps decision makers:

- Target interventions to the right people
- Deliver them at the right time (early, primary, secondary prevention)
- Focus resources where need is greatest

PHM improves health outcomes by using data to plan proactive care. Shifting from **reactive** (treating illness) to **proactive** (preventing illness, reducing hospitalisation, tackling inequalities).

This improves impact, equity and value for money.

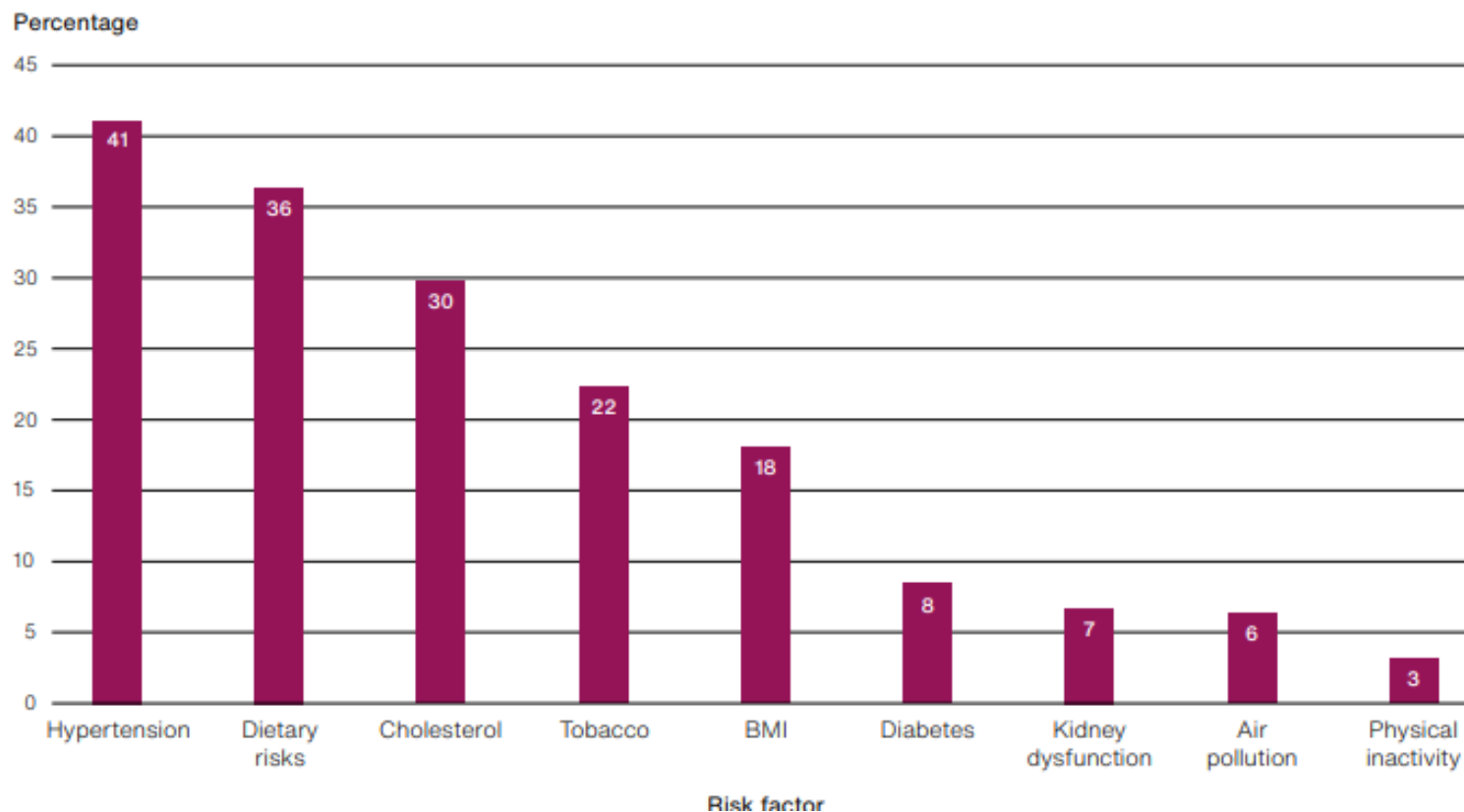
See NHSE's [guide on PHM](#) for further details, tools, templates and training on how to use PHM



Methods: How we identified priority interventions and supporting evidence

Percentage of deaths in the under-70s from cardiovascular disease (CVD) which were attributed to modifiable risk factors in England, 2021

High blood pressure (hypertension) and dietary risks were the largest contributory factors to CVD deaths in England in 2021



- Topic experts were consulted to select the highest evidenced interventions in the system with a focus on CVD
- The top risk factors for CVD were considered
- The evidence base was provided by topic experts and rapid evidence review (focusing on high quality systematic reviews, grey literature, and national audits)
- NHSE & LKIS analysts were consulted to provide the key metrics for prevention performance

Toolkit documents: Interactive Evidence Summary Tool



This toolkit includes an interactive evidence summary tool. Access this interactive tool from the toolkit package.

- Visual summary of evidence base for CVKM prevention across the pathway
- Enables quick comparison of interventions by strength of evidence and impact
- Interactive sliders to filter by cost-effectiveness and effectiveness ratings
- Star ratings show quality of evidence
- Helps decision-makers identify interventions with the strongest evidence base and impact



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Who is it for:

- Decision-makers and analysts working together to focus on the key metrics for exploring performance and outcomes for CVKM prevention interventions in their area.

How it was developed:

- Metrics were collected by topic experts, clinicians, analysts, and programme managers to collate knowledge on the best data sources, caveats, limitations and access information.

How to use:

- Select the intervention you wish to understand further for outcomes and performance.
- Analysts should apply appropriate methods to metrics for appropriate interpretation and informed decision making (e.g. age standardisation, see [population health management](#) slide for principles).
- Understand caveats and data limitations for enhanced interpretation of metrics.

[illegible]

The need for a value-based healthcare approach

Slides to support financial decision makers



What is value-based healthcare?

- The Centre for Evidence-Based Medicine defines **value-based healthcare** as *‘the equitable, sustainable and transparent use of the available resources to achieve better outcomes and experiences for every person.’*
- **Allocative value** or **allocative efficiency** describes the aim of allocating healthcare resources across the system to maximise outcomes for the whole population in the system.
- **Personal value** uses measures of patient opinion, taking into account both patient experience and their ability to make a preference-based informed decision.
- **Social (or societal) value** builds on this by aiming to quantify the relative importance that people place on the changes they experience in their lives. The principles of social value provide the basic building blocks for anyone who wants to make decisions that take this wider definition of value into account, in order to increase equality, improve wellbeing and increase environmental sustainability.

How to increase value in the system

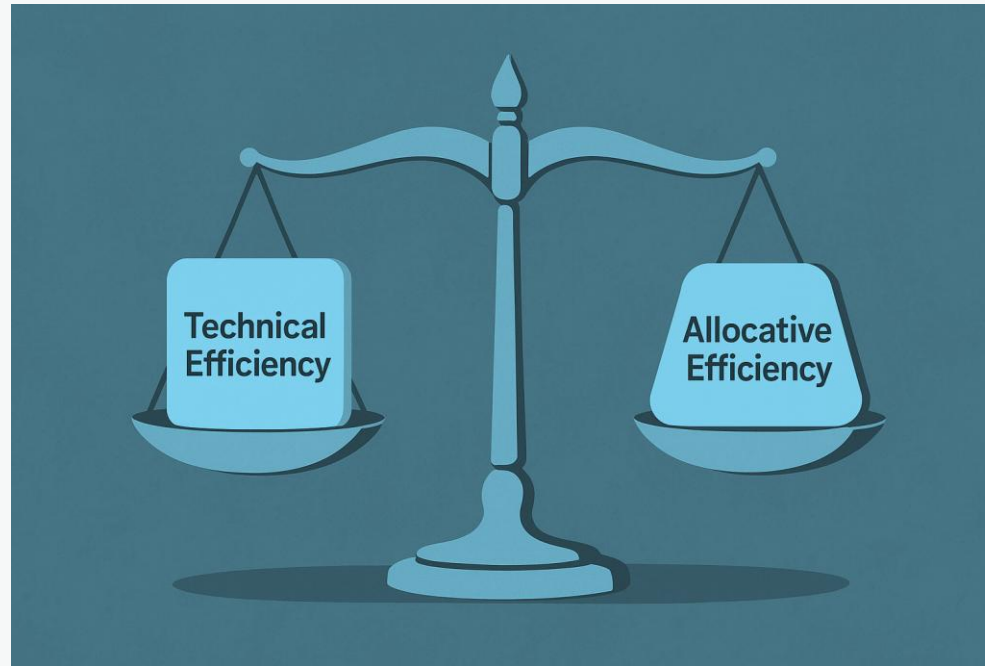


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Balance 'Doing things right' v 'doing the right things'

Technical efficiency:

- Operational excellence
- Increase quality and safety of processes
- Increase productivity
- Identify waste
- Treat the right people at the right time in the right place



Allocative efficiency

- Resources are used for greatest population health impact
- Prevention – do more
- Focus on cost effective interventions
- Upstream pathway interventions offer greatest co-benefits and long-term impact but have less cost effectiveness data

Find balance between improved outcomes that matter for individual patients vs supporting underlying value of solidarity

Or: Stop doing things that do not bring value and swap when equivalent, but less pricy, alternatives of equal value exist

OECD (2017) [Tackling Wasteful Spending on Health](#) | OECD

Tools for increasing value:

Programme Budgeting and Marginal Analysis (PBMA)

PBMA helps decision-makers assess the impact of and optimise the reallocation of resources to improve outcomes

- Mapping current spending (programme budgeting),
- then using marginal analysis to compare the added value (benefits) of new investments against savings from scaling back or stopping other activities, balancing health needs with economic reality.

Empowers leaders to:

- Assess prevention services for inequities
- Examine financial resource allocations to population segments
- Measure patient-centred outcomes
- Benchmark spending against similar populations
- Evaluate intervention rates
- Assess carbon footprint of services

Supports NHS leaders to embrace **allocative efficiency** and avoid the three icebergs that could sink the NHS: *unwarranted variation, over-medicalisation and unsustainability*.

The cost of doing nothing:

Economic Burden of Cancer, Coronary Heart Disease, Dementia, and Stroke in England in 2018, with projection to 2050



Contents

Condition	2018 Costs (£b)	2050 Costs (£b)	Increased Cost (£b)
Cancer	18.9	26.5	7.6
CHD	12.7	19.6	6.9
Dementia	11.7	23.5	11.8
Stroke	8.6	16	7.4
Total	51.9	85.6	33.7

Economic costs (include health-care, social care, and informal care costs, as well as productivity losses)

Source: [https://www.thelancet.com/journals/lanhl/article/PIIS2666-7568\(24\)00108-9/fulltext](https://www.thelancet.com/journals/lanhl/article/PIIS2666-7568(24)00108-9/fulltext) Lancet 2024

The importance of treating the right people at the right time: the financial case for tackling inequality

“Michael Marmot’s work calculated the treatment costs of health inequalities to be in the region of £5.5bn a year.

Productivity losses in the economy due to health inequalities amount to £33bn, while a further £32bn a year is spent on higher welfare payments.

Those from the most deprived areas with lower life expectancy also exhibit the highest healthcare costs.”

Healthcare Finance June 2023 | HFMA



HFMA Call to action for finance leaders



Contents

A call to action for finance leaders

NHS England national policy makers

- Support the collection of **outcome measures**, both clinical and patient reported. Many clinical outcome measures already exist in national registries, however, they are not widely collected.
- Support the development of **payment systems** built around the fundamental goals of improving outcomes that matter to patients.

NHS England regional teams

- Advocate for the use of the **value wheel** complementing the **waste wheel** in planning and business cases.

Integrated care boards

- Build trust and confidence in **service integration and redesign**, adoption an approach such as socio-technical allocation of resources (STAR) developed by the Health Economics Unit.
- Encourage the **collaboration of costing teams** across providers to gain understanding of clinical variation and value across pathways.

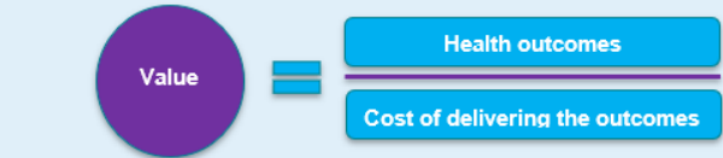
NHS provider organisations

- Use the **value wheel** to inform productivity improvement.
- Use available technology to take part in **registries** at minimum cost, providing recognition where departments seek to contribute to outcome registries in their annual plans.
- Use **patient level cost data** to understand value.
- Encourage business cases which **use patient reported outcome measures**, for example in reducing demand for outpatient activity.
- Encourage a **value-based procurement** approach in service and product assessments.

All senior leaders

- Support staff to gain an understanding of value-based healthcare through professional qualifications and continued **professional development**.
- Encourage adoption of **improvement methodologies** and seek associated accreditation.

The value equation



Outcomes are the health results that matter for a patient's condition over the complete pathway of care

Costs are the total costs of care for a patient's condition over the complete pathway of care

Source: Porter, Value-based health care delivery (2012)

8 Wastes: DOWNTIME



Usage

- Overall, feedback was very positive, highlighting the toolkit as an articulate and visual pathway to support a health economics approach to prevention.
- Feedback from pilot sites was also positive, with Chief Medical Officers, Chief Strategy Officers, Chief Finance Officers, DsPH and Consultants in HCPH reporting increased understanding and confidence in decision making to support an allocative efficient approach to CVKM.
- Subsequently the National team adopted its use as part of the Prevention Accelerator programme.
- Further review and evaluation starting now to refine and explore next steps for other long term condition pathway development – interest in adapting for mental health.

Thank You

[Midlands Prevention Toolkit -
Midlands Public & Population
Health Hub - Futures](#)

Questions can be sent to
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Prevention pathway detail:

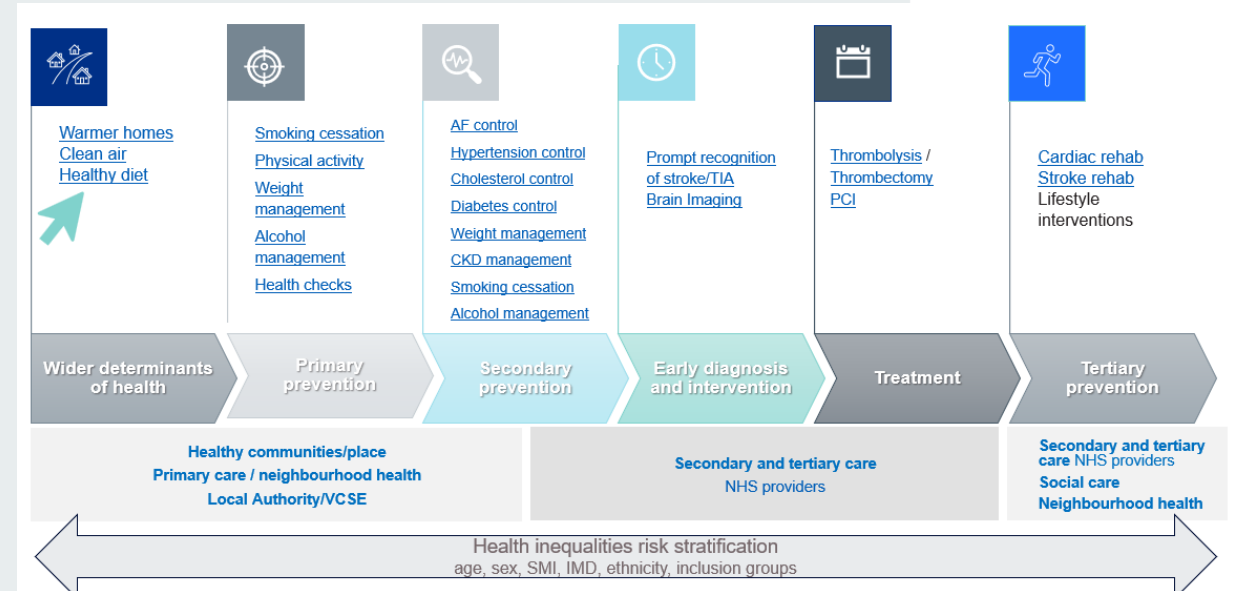
Intervention evidence base

Cost-effectiveness data

Tools and key guidelines

Key Lines of Enquiry

View the pathway overview [here](#)



Warmer homes



Pathway

Overview

Intervention: Interventions that improve housing insulation, heating and ventilation to reduce risks and cold and damp homes. This includes interventions that span health, energy, housing, and environmental sectors, and involve multiple government departments. NICE6 highlights the importance of warm housing, reducing fuel poverty, and coordination across health, social care, housing, and voluntary services.

Evidence: 4.3% of CVD DALYs in the Midlands are attributed to cold temperatures [1]. Cold temperatures can narrow blood vessels, raise blood pressure and increase blood clotting, increasing the risk of heart attacks and strokes [2]. Cold housing contributes to 21.5% of excess winter deaths, and most of these are linked to CVD [3]. There is strong evidence of physical and mental health improvements following home insulation and retrofitting. See the government's Winter Mortality report for evidence reviews of each intervention [2].

Cost effectiveness: High initial investment from LA, long term savings for NHS. The NHS spends £1.4–£2.5 billion nationally a year on illnesses related to cold and damp housing [4-6]. Interventions to combat cold homes are cost effective, with £857 million/year saved by the NHS in treatment costs if all excess cold hazards were fixed [6]. After 7 years, the investment pays for itself in health savings as modelled in 2018 [6].

Tools

Key guidelines:

1. [UKHSA](#) Adverse Weather and Health Plan (AWHP)
2. [NICE](#) 2015 guideline (NG6): Excess winter deaths and illness and the health risks associated with cold homes. - outlines evidence-based recommendations for identifying and supporting people most at risk during winter in England and Wales.

Other relevant frameworks include the annual [NHS](#) Winter Planning guidance and the [Urgent and Emergency Care Plan](#).

Case studies: [Healthy Homes, Healthy Lives](#)

KLOE Domain	Key Assessment Question
Effectiveness	Are interventions (e.g., insulation, heating upgrades, energy efficiency schemes) reducing excess winter deaths and cold-related illness (CVD, respiratory disease)? Are NICE NG6 recommendations implemented for identifying and supporting vulnerable households?
Efficiency	Are interventions targeted at high-risk groups (e.g., fuel-poor households, older adults, those with LTCs)? Are multi-sector partnerships (housing, health, energy) leveraged to maximise cost-effectiveness?
Equity	Are outcomes monitored by deprivation, age, and ethnicity? Are interventions addressing fuel poverty and health inequalities?
Governance & Leadership	What are the local authority's strategic ambitions to tackle cold homes? What are the governance structures for accountability? Do local authorities and ICBs have integrated winter resilience plans aligned with NHS Winter Planning guidance and Adverse Weather & Health Plan?
Sustainability	Are interventions aligned with Net Zero and long-term energy efficiency targets (e.g., Energy Company Obligation, Sustainable Warmth Strategy)? Do plans include maintenance and funding for future-proofing homes?
Key Metrics & Targets	Ensure as many fuel-poor homes as reasonably practicable achieve a minimum energy efficiency rating of EPC Band C by 2030 [7]

Wider determinants of health

Primary prevention

Secondary prevention

Early diagnosis and intervention

Treatment

Tertiary prevention

Clean air



Pathway

Overview

Intervention: Delivering clean air initiatives by improving outdoor and indoor air quality. Includes promoting active travel and reducing emissions. The LGA supports local authorities in delivering clean air initiatives and is separate from the Public Health grant.

Evidence: 5% of CVD DALYs in the Midlands are attributed to air pollution [1]. Long term exposure to particulate matter is associated with coronary events [2]. Many of the changes to improve outdoor air pollution have significant co-benefits. For effectiveness ratings of various clean air interventions, see Table 16 in the 2019 PHE review of interventions to improve outdoor air quality and public health [3].

Cost effectiveness: A study found that air pollution cost the UK over £27 billion in 2019 and up to £50 billion when wider impacts like dementia were included. Annual costs could still reach £30bn by 2040 despite projected reductions under current policies [4]. If the NECD 2030 Clean Air Strategy air pollution targets were met in Birmingham alone, the WM-Air AQ-LAT tool models that 5-year direct cost savings to the NHS are £3,595,00, including indirect cost savings and social care savings are £5,899,000 [5].

Tools

The WHO recommends annual average limits of 10 µg/m³ for NO₂ and 5 µg/m³ for PM2.5, with interim targets at higher levels, while UK strategies like the 2030 Clean Air and Net Zero action plan sets legally binding targets.

- [Estimation of costs to the NHS and social care due to the health impacts of air pollution](#)
- [Interactive monitoring networks map](#)
- [Air quality strategy: framework for local authority delivery- gov.uk](#)
- [Air Quality Frameworks and Action Plans](#)
- [Tool for predicting local air pollution health and social costs - WMCA](#)

KLOE Domain	Key Assessment Question
Effectiveness	Are interventions (e.g. Clean Air Zones, traffic reduction schemes) associated with reduced PM2.5 and NO ₂ levels? Are services using evidence-based approaches?
Efficiency	Are interventions targeted in high-burden areas (e.g. urban centres with high PM2)? Are multi-sectoral partnerships (e.g. transport, housing, health) leveraged to maximise impact?
Equity	Are air pollution interventions and outcomes monitored by deprivation and ethnicity?
Governance & Leadership	What are the local authority’s strategic ambitions to reduce emissions? What are the governance structures for accountability?
Sustainability	Are interventions designed to deliver long-term air quality improvements and health benefits, with clear plans for maintenance, funding, and integration into climate and net-zero strategies?
Key Metrics & Targets^	To meet legally binding targets: (1) The annual mean concentration is 10 µg m-3 or lower by 2040 (2) the population exposure is reduced by 35% compared to 2018 levels [6]



Healthy diet



Overview

Intervention: Healthy eating policy and delivery in England is shaped by national strategy from DHSC, evidence and guidance from OHID, implementation in healthcare settings by NHS England, local commissioning by ICBs, and public health programmes led by local authorities.

Evidence: Dietary risks were 2nd largest contributing factor to CVD deaths (36%) in under 70s [1]. NICE guidelines (NG238) recommends adoption of cardioprotective diet for people with high risk of CVD*.

Cost-effectiveness: Mixed evidence scenario dependent. A low-energy diet intervention is highly cost-effective for people with diabetes due to weight-related remission benefits, likely cost-effective for those with BMI over 30 depending on weight regain assumptions, but not cost-effective for those with BMI over 25 without obesity or diabetes [2].

Tools

Resources for a [whole system approach to obesity](#)
[Healthy eating: applying All Our Health](#) – resource for health workforce
[Blueprint by Nesta](#) - toolkit to support the design, implementation and scaling of dietary health policies that are most likely to work.
[Eatwell Guidance](#) – government recommendations

See attached appendix for:

- 1) Number of referrals into NHS Digital weight programme by ICB
- 2) Midland's local authority breakdown of:
 - 1) Those with Healthy Food policies
 - 2) An embedded whole system approach to obesity
 - 3) Adult obesity spend

KLOE Domain	Key Assessment Question
Effectiveness	To what extent does the service lead to successful weight loss and sustained behaviour change? Are evidence-based interventions (e.g. behavioural support + dietary advice) being used?
Efficiency	Are resources used optimally (e.g. cost per participant, staff time)? Is service delivery aligned with population need (e.g. higher uptake in areas with high obesity prevalence)?
Equity	Is uptake and quit success monitored by ethnicity, deprivation and disability? Is there a focus on practices in areas of high prevalence of obesity and deprivation?
Governance & Leadership	Do local systems have a coordinated obesity prevention strategy aligned with OHID's Whole System Approach to Obesity and NHS Long Term Plan commitments? Is there clear accountability for delivery across ICBs, local authorities, and community partners?
Sustainability	Is there provision for ongoing funding, workforce training, and digital tools to maintain impact?
Key Metrics & Targets	Proportion of adults meeting (1) "5-a-day" recommendation, (2) average salt intake to ≤6g/day 3) saturated fat intake to ≤10% of total energy intake, as per the Eatwell Guide, (4) free sugar intake to ≤5% of daily energy intake, consistent with government dietary guidelines.

Wider determinants of health

Primary prevention

Secondary prevention

Early diagnosis and intervention

Treatment

Tertiary prevention

Smoking Cessation



Pathway

Overview

Intervention: Smoking cessation interventions aim to help people quit through behavioural support and pharmacotherapy, reducing smoking-related illness and health inequalities. NHSE deliver in NHS settings, LA’s deliver in pharmacies + GPs.

Evidence: Quitting smoking reduced stroke by 37% and heart attack by 27% compared to sustainers [1]. Quitting also reduces recurrent CVD by ~1/3 in people who stop smoking at diagnosis [2]. There is strong evidence for the risk of smoking to CVD, 22% of CVD deaths in under 70s attributed to tobacco [3]. NHS Stop Smoking Services are effective, with over half of clients quitting at 4 weeks and 13–23% remaining abstinent at 12 months, supported by evidence from multiple UK studies between 2001 and 2006 [4].

Intervention cost-effectiveness: ASH estimates that smoking costs the Midlands £8.45 bn per year. In the Midlands, there is an estimated median cost recovery period of 2-3 years for Stop Smoking Services in the Midlands**. An opt-out tobacco programme pilot in Greater Manchester estimated £487/QALY (highly cost effective) and a Public Value ROI: £30.49 per £1 invested and Gross Financial ROI: £2.12 per £1 invested [5].

Tools

[ASH](#) Resources for ICSs/ICBs including toolkits
[NCSCT](#) Resources for commissioners & tobacco leads
[Statistics](#) on Local Stop Smoking Services in England
ROI tools: [Tobacco Dependence Treatment Service Impact Calculator – ASH](#)

Wider impact of smoking cessation

Main CVD related effects of smoking:

- 22% contribution to premature CVD mortality [6].
- Attributable fraction for CVD development of 5.3% [7].
- 15% of all-cause mortality in over 35s in England [8].

Other priority areas that smoking cessation impacts on:

Cancer: >25% of all cancer deaths are smoking related [8].

Respiratory: Approx 90% of COPD is smoking related [9], & 17% of Asthma DALYs are smoking related [10]. There are 124,000 emergency admissions in England for COPD & Midlands’ asthma admissions rates are highest nationally [11]

Infection: Increased risk of all infections [12], but particularly respiratory such as, TB, Pneumonia & Influenza [13].

Surgical: Effect on elective lists, morbidity, mortality & length of stay due to risk, complications & wound healing [14-16].

Maternal Health: Smoking in pregnancy carries a higher risk of poor maternal [17] and perinatal outcomes [18].

Child Health: Smoke exposure increases risk of SIDS, asthma & key infections, Respiratory, Otitis Media, Meningitis [19-21].

Inequalities: There is high variation in smoking prevalence particularly by deprivation, sex and ethnicity [22].

KLOE Domain	Key Assessment Question
Effectiveness	To what extent does the service lead to successful quit attempts and sustained abstinence from smoking? Are evidence-based interventions (e.g. pharmacotherapy + behavioural support) being used?
Efficiency	Are resources used optimally (e.g. cost per quitter, staff utilisation)? Is service delivery aligned with population need (e.g. higher investment in areas with high smoking prevalence)?
Equity	Is uptake and quit success monitored by ethnicity, deprivation? Are services accessible and tailored to priority groups (e.g. pregnant women, people with mental health conditions)?
Governance & Leadership	Do local systems have a coordinated smoking cessation strategies aligned with NHS Long Term Plan commitments? Is there clear accountability for delivery across ICBs, local authorities, and community partners?
Sustainability	Are smoking cessation services embedded into long-term commissioning plans with secure funding, workforce development, and digital infrastructure to maintain service continuity and scalability?
Key Metrics & Targets	(1) Are services contributing to the national ambition to reduce adult smoking prevalence to <5% by 2030? (2) Are quit rates at 4 weeks ≥35% (NCSCT benchmark)? (3) Are services achieving year-on-year improvement in quit attempts and success rates? (4) Are services aligned with Core20PLUS5 priorities?



Physical Activity

Overview

Intervention: Increasing activity levels through community programmes, active travel, and workplace schemes. DCMS are the lead organisation for sport activity and set policy, OHID provide support. Sport England, an arm's length body funded by DCMS, implement the policy and fund a network of national Active Partnerships (10 in the Midlands) who deliver place-based interventions and create local strategies that focus on reducing inequalities. Physical activity isn't mandated for local authorities although some do deliver programmes.

Evidence: There is strong evidence for the protective effect of physical activity on CVD [1]. Physical inactivity is estimated to contribute to almost 1 in 10 premature deaths from CHD and 1 in 6 deaths in the UK from any cause [2].

Cost-effectiveness: Sport England evidence shows that improved health from physical activity relieves pressure on the NHS through £10.5 billion a year in health and social care savings. The wider national annual social value of physical activity is estimated as £100 billion, with a return on investment of £4.20 for every £1 spent [3].

Tools

Key policy documents:

[DCMS physical activity strategy](#)

[Sport England strategy and implementation plans](#)

[NHSE Harnessing the Benefits of Physical Activity](#)

Other resources and campaigns:

[The Economic Value of Sport: Local Model](#)

[NHS resources](#) – Get Active

[Let's Move!](#) Sport England's campaign for child activity

Wider Impact of improved physical activity

Main CVD related effects:

- 3% contribution to premature CVD mortality [4].
- Attributable fraction for CVD development of 1.7% [5].

Other priority areas that physical activity impacts on:

Healthy Ageing. Physical inactivity accounts for 30% of later life functional limitation and falls [6]. Fragility fractures alone estimated cost of £4.4 billion annually [7]. The attributable fraction for dementia is approx. 3.3% [8].

Diabetes. Up to 29% attributable to inactivity [9].

Mental Health. Protective and treatment effects. [10,11].

Cancer. Reduced relative risk of breast (10%) & bowel (24%) cancers; significant after BMI adjustment [12,13].

Active travel. Economic & environmental co-benefits [14].

Work & Health. Mediates many key drivers of economic inactivity such as CVD, MH, MSK & Obesity [15].



Pathway

KLOE Domain	Key Assessment Question
Effectiveness	Are interventions (e.g., Active Travel, community sport programmes, workplace activity schemes) increasing physical activity levels? Are evidence-based approaches (e.g. NHS Physical Activity Clinical Champions, behaviour change support) being implemented?
Efficiency	Are resources (e.g. funding, workforce, facilities) used optimally to deliver programmes in high-need areas? Are partnerships with local authorities, schools and voluntary sectors leveraged to maximise reach and cost-effectiveness?
Equity	Is uptake monitored by deprivation, ethnicity, age, and disability? Are targeted interventions in place for groups with lower activity levels (e.g., women, older adults, people with LTCs)?
Governance & Leadership	Do local systems have a coordinated physical activity strategy aligned with national frameworks (DCMS, Sport England, NHS)? Is there clear accountability across ICBs, local authorities, and Active Partnerships?
Sustainability	Are interventions embedded into long-term commissioning plans and integrated with climate goals (e.g. active travel for Net Zero)? Is there provision for ongoing funding, workforce development, and digital tools to maintain impact?
Key Metrics & Targets	CMO physical activity guidelines: (1) Under 5s: active play daily; (2) 5–18s: ≥60 mins/day activity incl. strength 3×/week; (3) Adults: ≥150 mins/week moderate or 75 vigorous + strength 2×/week; (4) 65+: same as adults + balance/fall prevention.

Wider determinants
of health

Primary
prevention

Secondary
prevention

Early diagnosis
and intervention

Treatment

Tertiary
prevention

Weight management services



Pathway

Evidence overview

Intervention: Tier 1: Universal prevention (population health). Tier 2: Community lifestyle services (often council run and includes referral to the NHS Digital Weight Management Programme [DWMP], a 12-week online service). Tier 3: Specialist multi-disciplinary weight management (NHS-commissioned; dietitians, psychological support, weight-loss medications). Tier 4: Bariatric surgery. NHSE medium planning states that ICBs should provide eligible access to weight loss drugs, new services and training, phased rollout over 12 years, prioritizing 220,000 patients nationally in first 3 years.

Evidence: Group-based behavioural interventions like Slimming World are supported by NICE guidance (NG246) for Tier 2 weight management. The DWMP is effective at achieving clinically meaningful weight loss [2]. 43% of participants enrolled on programmes in 21/22 lost weight and 17% of participants lost ≥5% of their body weight on tier 2 services [3]. Tier 3 effectiveness is limited (Low retention rates, often below 55%, 5% weight loss in ~50% of patients over 6-12 months, high variation between services) [4].

Cost-effectiveness: NHS weight management services £2,897/QALY to dominant [5]. NICE have stated that GLP-1 medications (Semaglutide and Tirzepatide) are cost-effective.

Tools

Resources for a [whole system approach to obesity](#)
[National Obesity Audit](#) – however small number providers submitting

GLP-1 NICE guidance: [TA1026 Tirzepatide](#) (approved for primary care), [TA875 Semaglutide](#) and their integration into the obesity management pathways [NG246](#).

Wider impact of obesity

Main CVD related effects:

- 18% contribution to premature CVD mortality[6].
- Attributable fraction for CVD development of 9.6% [7].
- 18% increase in all cause mortality for every 5-units beyond a BMI of 24 [8].
- CVD is the third highest health cause of total economic inactivity, contributing 14% [9].

Other priority areas that treating obesity impacts on:

Women’s health: Higher cancer risk, higher obesity related admissions and poor maternal outcomes[10-13].

Work and health: Largest single contributor to MSK, which is the highest cause of economic inactivity, in addition to direct and CVD related burden. [14]

Metabolic Health: Causes 80% of T2DM, also leading to CKD & Liver Disease, with co-burden from alcohol [15,16]

Inequalities: There is high variation in obesity prevalence and effects by sex, ethnicity and deprivation [17].

See appendix 2 for further details.

KLOE Domain	Key Assessment Question
Effectiveness	What proportion of those referred take up services? What is the average weight change achieved, and does it vary by participant characteristics?
Efficiency	Is there a focus on GP practices that have made no or low numbers of referrals in 2023/24? and a focus on practices in areas of high prevalence of obesity and deprivation?
Equity	Do the characteristics of those who take up services suggest equitable access according to dimensions of age, sex, ethnicity, and socioeconomic deprivation?
Governance & Leadership	Is there clear accountability and strong leadership across ICBs and local authorities to deliver integrated weight management strategies, with defined roles, decision-making structures, and alignment to national obesity frameworks?
Sustainability	Are weight management services embedded into long-term commissioning plans with secure funding, workforce development, and digital infrastructure to maintain service continuity and scalability?
Key Metrics & Targets	(1) Improve referrals in GP practices that have made no or low numbers of referrals in last financial year. (2) ≥60% programme completion rate (3) ≥30% achieving ≥3% weight loss (4) ≥10% achieving ≥5% weight loss (5) ≥80% satisfaction score (6) ≥90% accessibility compliance (7) annual NICE evidence update submission



Alcohol management

Overview

Intervention: Brief advice, referral pathways, and specialist services to reduce harmful alcohol consumption and associated cardiovascular risks. NICE advises systematic identification of CVD risk factors, including alcohol intake, and recommends lifestyle interventions (safe alcohol consumption advice) for those at ≥10% 10-year CVD risk. NHS alcohol management services operate through an integrated care pathway involving primary care, community alcohol services (commissioned by local authorities), and hospital-based ACTs, which provide a range of interventions from initial assessment to ongoing support and relapse prevention.

Evidence: Strong evidence of a nonlinear, risk-increasing association at all levels of alcohol intake, with exponentially higher risk for hypertension and coronary artery disease at heavy consumption [1]. ACTs reduced hospital bed days by 39%, unplanned admissions by 42%, and A&E attendances by 30% in the year following patient engagement [2].

Cost-effectiveness: ACTs had a modelled ROI of £5.06 per £1 invested [2].

Tools

[Alcohol-use disorders: NICE commissioning support](#)
[QS83 Alcohol: preventing harmful use in the community](#)
[OHID commissioning guidance for local authorities](#)
[Brief advice toolkit for commissioners](#)
[Commissioners guide to social return of alcohol and drug treatment](#)

Wider Impact of alcohol management

Main CVD related effects:

- Highly complex bidirectional relationship which varies by CVD condition, with greatest risk for AF, Stroke and HF [3].
- Low overall attributable fraction for CVD development, 0.55% [4].
- However, latest evidence suggests no low-moderate protective effect for IHD, therefore historical underestimate of attribution [1, 5].

Other priority areas that alcohol management impacts on:

Admissions. Annual alcohol specific admissions across the Midlands of 63,000. However, broad related admissions were 214,000. This demonstrates both wider impact & that harmful but not necessarily dependent drinking represents the greatest prevention gains [6].

Liver Disease. Alcohol related cause in 55% of premature mortality [7].

Healthy Ageing. Comparatively higher rates of admissions in older ages in the Midlands [8]. CVD mortality from alcohol is also greater in >60s, with 20% increased risk and deprivation moderates this [9].

Cancer. Greatest risk in Oropharynx & oesophageal (up to 5 times). Liver cancer risk is doubled. Also, in GI & Breast by 40-60% [10].

Work & Health. 150,000 annual potential years of working life lost [11].

Mental Health. Key co-morbidity. 80% in alcohol treatment have MH[12].



Pathway

KLOE Domain	Key Assessment Question
Effectiveness	Are alcohol interventions (e.g. brief advice, referral to Alcohol Care Teams) reducing alcohol-related hospital admissions, and A&E attendances? Are NICE-recommended approaches (e.g. systematic risk identification, lifestyle advice) being implemented?
Efficiency	Are resources (staff, funding, digital tools) used optimally to deliver interventions in high-need areas? Are multi-sector partnerships (health, social care, community) leveraged to maximise cost-effectiveness?
Equity	Is uptake and outcome monitoring stratified by deprivation, ethnicity, and age? Are targeted interventions in place for groups with higher alcohol-related harm?
Governance & Leadership	Do local systems have clear accountability and leadership for alcohol harm reduction, with integrated strategies across ICBs, local authorities, and community services aligned to NICE and OHID guidance?
Sustainability	Are alcohol management services embedded into long-term commissioning plans with secure funding, workforce development, and digital infrastructure to maintain continuity and scale?
Key Metrics & Targets	Are ACTs established in hospitals with the highest alcohol-related admissions (top 25% of sites) [3]

Wider determinants of health

Primary prevention

Secondary prevention

Early diagnosis and intervention

Treatment

Tertiary prevention

NHS Health Checks



Pathway

Overview

Delivery: The NHS Health Check is for adults in England aged 40-74 that aims to identify early signs and assess the risk of conditions such as heart disease, stroke, kidney disease, type 2 diabetes, and dementia. LA’s commission this service and it’s delivered mostly by GPs (sometimes pharmacists and community outreach services). OHID has oversight.

Evidence: 1 in 4 are identified as at risk of CVD at a Health Check. In the 5 years after a health check, people are 20% less likely to be admitted to hospital for CVD and 46% less likely to die from CVD or any other cause [1]. Long term follow up found that those who attended the check had a lower risk of dementia (19%), heart attack (15%), atrial fibrillation (9%), kidney injury (23%), liver cirrhosis (44%), and all cause and CVD mortality (23%) [2].

Cost effectiveness: NICE considers the programme cost-effective. At a 50% take up rate, every £1 spent achieves a return of £2.93. Increasing 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 [3].

Tools

[National guidance, equity audits, evaluation and competency frameworks](#)

[NHS Health Check StARS framework](#) - strategic framework to raise delivery standards.

[NHS Health Check Improvement Matrix guide \[3\]](#) – operational framework to be used alongside StARS to guide targeted improvement with quantitative scoring and performance tracking tools.

[NHS Health Check – National guidance](#)

Wider impact of NHCs

Main CVD related effects:

- Via detection of key risk factors. However, the impact relies upon these being modified.

Other priority areas that NHCs impact on:

Women’s Health: with addition of menopause

Alcohol Harms: Audit-C screening, guidance and referral (Fibro scanning, ELF, Treatment services)

Lung Cancer: In addition to smoking cessation, opportunity for overlap with Lung Ca screening where eligible population identified at checks and vice versa

Wider impact of factors identified (see related: Hypertension, Cholesterol, Smoking & Obesity)

KLOE Domain	Key Assessment Question
Effectiveness	To what extent does the programme lead to the identification and appropriate management of CVD risk factors?
Efficiency	Are resources used optimally (e.g. cost per check, staff utilisation)? Is there evidence that resources are aligned with population health need (e.g. higher investment in areas of deprivation)?
Equity	Is uptake monitored by ethnicity, deprivation, and geography? Are outcomes equitable across population groups?
Governance & Leadership	Do local authorities and ICBs have clear accountability and leadership for delivering NHS Health Checks, with strategic plans aligned to OHID guidance and national prevention priorities? Is there a governance structure for monitoring uptake and quality?
Sustainability	Are NHS Health Check programmes embedded into long-term commissioning plans with secure funding, workforce training, and digital infrastructure to maintain delivery and scale?
Key metrics & targets^	Are local health check offers on track to achieve 20% of eligible population invited this year? Have you achieved year-on-year improvement in uptake? (aspiring to 75%)**



Diabetes prevention and management



Pathway

Overview

Delivery: *The Diabetes Prevention Programme (DPP):* delivered by ICBs through GP referrals for people with non-diabetic hyperglycaemia. *NHS Type 2 Path to Remission Programme:* delivered by ICBs through GP practice generated referrals for eligible people with type 2 diabetes. *Diabetes treatment & management:* delivered through multiple care settings including primary, secondary and community care with varying commissioning arrangements including local and national.

Evidence: People who achieve diabetes remission were 76% less likely to have a CVD event compared to those with whose blood glucose continue in the Diabetes range [1]. 8% of CVD deaths in under 70s were attributed to diabetes [2]. A study analysing the National Diabetes Audit found that the DPP significantly reduced population incidence of type 2 diabetes by 6.2% [3]. People with prediabetes who are referred to the NHS Diabetes Prevention Programme are 20% less likely to develop type 2 diabetes compared to people with prediabetes who were not offered this support [4].

Cost effectiveness: NHS Diabetes Prevention Programme is likely to dominate usual care, modelling estimates on average 40.8 incremental QALYs and £135,755 in costs saved per 1,000 people [5]

Tools

NICE guidelines: [NG28 – Type 2 diabetes in adults: management, QS209](#) – [Type 2 diabetes in adults: Quality Standard](#)

Diabetes Programme Quality Improvement Directory 2025/26 accessible on [The National Diabetes Programme - FutureNHS Collaboration Platform](#)

Gives an overview of the 2025/26 quality improvement priorities and annual areas of focus set by the NHS England Diabetes Programme. It is intended to support system level improvement by providing an overview of the priorities, data sources and related metrics for the Programme.

KLOE Domain	Key Assessment Question
Effectiveness	How effectively are the diabetes programmes improving outcomes for people at risk of or living with diabetes?
Efficiency	Are resources (staff, digital tools, funding) being used optimally to deliver timely and coordinated diabetes care and prevention services?
Equity	Are diabetes services accessible and tailored to meet the needs of diverse populations, especially those at higher risk or with poorer outcomes?
Governance & Leadership	Do ICBs and local systems have clear accountability and leadership for delivering diabetes prevention and remission programmes, with strategic plans aligned to NICE NG17/NG28 guidance? Is there a governance structure for monitoring uptake, outcomes, and equity?
Sustainability	Are diabetes prevention and management services embedded into long-term commissioning plans with secure funding and workforce development?
Key metrics & targets^	National Diabetes Audit targets: (1) BP: ≤140/80 mmHg. HbA1c: ≤58 mmol/mol. Cholesterol: <5 mmol/L, (2) Annual improvement in the number of people starting (milestone 1 achievement) the NHS Diabetes Prevention Programme and those starting (milestone 1 achievement) the NHS Type 2 Path to Remission Programme

Wider determinants of health

Primary prevention

Secondary prevention

Early diagnosis and intervention

Treatment

Tertiary prevention

Atrial fibrillation identification and management



Overview

Delivery: Atrial fibrillation identification and management in the UK is primarily delivered through opportunistic screening and diagnosis in primary care, with complex cases managed in secondary care and supported by integrated pathways and digital tools. NICE guidelines recommend opportunistic case finding in patients with suspected AF.

Evidence: It is estimated that 30% of AF cases are undiagnosed, and over half are untreated or poorly controlled. Anticoagulation prevents 2/3 of strokes in AF [1].

Cost effectiveness: Opportunistic screening for AF yields c£10,000/QALY* [2].

Tools

[NHS right care: AF Interventions](#)

[Recommendations | Atrial fibrillation: diagnosis and management | Guidance | NICE](#)

[NHS England » Commissioning recommendations for the national procurement of direct acting oral anticoagulants \(DOACs\)](#)

[Guidance on DOAC prescribing](#)

[Atrial fibrillation prevalence estimates for local populations \(gov.uk\)](#)

[CVDPrevent Audit — NHS Benchmarking Network](#)

[New Medicine Service](#)

[Case Study:](#) Pharmacist-led virtual clinics to optimise anticoagulation therapy in AF (pg 114)

KLOE Domain	Key Assessment Question
Effectiveness	Is AF being managed in line with clinical guidelines (e.g. NICE NG196)?
Efficiency	Are resources used optimally? Is AF care aligned with population health need?
Equity	Is access to AF care monitored by ethnicity, deprivation, geography, and age? Are outcomes equitable?
Sustainability	Are AF detection and anticoagulation services embedded into long-term commissioning plans with secure funding, workforce development, and digital tools (e.g., virtual clinics, remote monitoring)?
Governance & Leadership	Do ICBs and local systems have clear accountability and leadership for AF management, with strategic plans aligned to NICE NG196 and NHS RightCare AF pathway? Is there a governance structure for monitoring detection rates, anticoagulation uptake, and equity?
Key metrics & targets*	(1) 85% of the expected number of people with AF are detected by 2029, (2) 90% of people with AF who are known to be at high risk of a stroke to be adequately anticoagulated by 2029, (3) 95% of patients with GP recorded AF and with a CHA2DS2-VASc score of 2 or more, who are treated with anticoagulant drug therapy



Hypertension case finding and management



Pathway

Overview

Delivery: Case finding and treatment to achieve blood pressure targets. Hypertension case finding is a service primarily delivered by GPs and pharmacies.

Evidence: A 10-mmHg reduction in BP reduced risk of major CVD events by 20% and 13% reduction in all cause-mortality [1]. Lowering blood pressure reduces the incidence of stroke by 35–40%, heart attacks by 20–25% and heart failure by 50% [2].

Cost effectiveness: If treat to target for hypertension was improved from 70% (as of 2025) to 80%, this would result in estimated £23.4 million savings for the Midlands in 3 years [3]. A 20% improvement in BP management (to 140/90 mmHg target) would accrue system net savings to c£14 p.a. per controlled patient. Of these, c£5.75 would accrue to the NHS and c£7.91 would accrue to local authorities [4].

Tools

[Size of the Prize – UCLPartners](#) – modelling tool for ICBs/PCNs.

[NHS right care: Blood Pressure High Value Interventions](#)

[NICE Guideline NG136: Adult Diagnosis & Management](#)

[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](#)

Wider Impact of hypertension management

Main CVD related effects:

- 41% contribution to premature CVD mortality [5].
- Attributable fraction for CVD development of 14% [6].
- Non-uniform attributable fraction by CVD condition

Other priority areas that treating hypertension impacts on:

CKD. Hypertension is second only to diabetes by attributable risk [8].

Maternal Health. Approx 315,000 women ages 16-45 have undiagnosed hypertension in the UK [9]. Pre-existing (chronic) hypertension increases complications, including pre-eclampsia and still birth, with 4 times higher rates in Black and Asian women [10].

Surgical Risk. 16% of short-term elective cancellations due to ‘cardiac’ causes, including hypertension. Each cancellation costs £6,500-£11000 [11]. Aiming <160/100 pre-op reduces cancellation rates and is a key target for ‘prehabilitation’ [12].

Dementia. Attributable fraction of 15%, highest in younger onset [13].

KLOE Domain	Key Assessment Question
Effectiveness	Are patients with diagnosed high blood pressure being treated to target levels as per NICE NG136?
Efficiency	Are high-risk populations (e.g. older adults, people in deprived areas) being prioritised for blood pressure checks and follow-up?
Equity	Is diagnosis and treatment coverage monitored by ethnicity, deprivation, geography, and age?
Sustainability	Are interventions embedded within long-term plans with secure funding, workforce development to maintain continuity and scalability?
Governance & Leadership	Do ICBs and local systems have clear accountability and leadership for hypertension case finding, with strategic plans aligned to NICE NG136 and NHS RightCare pathways?
Key metrics & targets^	(1) 80% of the expected number of people with high BP are diagnosed by 2029. (2) 80% of the total number of people already diagnosed with high blood pressure are treated to target as per NICE guidelines by 2029. (3) 77% of the total number of people already diagnosed with high blood pressure are treated to target as per NICE guidelines

Wider determinants of health

Primary prevention

Secondary prevention

Early diagnosis and intervention

Treatment

Tertiary prevention

Lipid Disease case finding and management



Pathway

Overview

Delivery: Case finding and treatment of hypercholesterolaemia in people with high CVD-risk conditions, post-acute CVD event and in those with familial hypercholesterolaemia in primary and secondary care. Lipid case finding and management is delivered in primary and secondary care. As of Nov 2025, a pilot of case finding in 8 community pharmacies began in the Midlands [1].

Evidence: Every 1mmol/l reduction LDL cholesterol reduces risk of a CVD event by 25% [2]. Those with other risk factors are at significantly greater risk of CVD. Of people with CVD, 20% in England are not on statins [3].

Cost effectiveness: Treating 95% of patients in the Midlands with lipid lowering therapy would prevent 2,879 CV events and 143 deaths over 3 years, saving approximately £31 million to the NHS in the Midlands and a further £14 million to social care for stroke [3].

Tools

[Size of the Prize – UCLPartners](#) – Modelling tool for ICBs/PCNs.

[Proactive Care Frameworks](#) - tool for primary care networks to optimise care + identify high risk patients.

[NICE Clinical Guidelines 181](#): Cardiovascular disease

[NHS RightCare’s CVD prevention pathway](#)

[NICE Clinical guidelines 71](#): Familial hypercholesterolaemia

[NICE NG185](#): Secondary & tertiary Prevention

[Protocols](#) to guide consultations for patients

Wider Impact of lipid (cholesterol) management

Main CVD related effects:

- 30% contribution to premature CVD mortality [4].
- Attributable fraction for CVD development of 8.2% [5].

Other priority areas that treating cholesterol impacts on:

Liver Disease. 24% reduction in all-cause Liver Disease risk after 1 year of statin treatment, this is higher in Men and those with diabetes [6].

Inequalities. Males have higher cholesterol levels than females in early middle age, but this is reversed post-menopause [7]. Women are comparatively under-treated but may convey greater overall modifiable benefit [8].

Wider statin benefits. Limited evidence for modest reductions or improvements in Osteoporosis, COPD, IBD & Cancer [9].

KLOE Domain	Key Assessment Question
Effectiveness	Are patients with high cholesterol being managed according to NICE NG185? Are statins prescribed for patients with a ≥10% 10-year CVD risk? Are patients with Familial Hypercholesterolaemia (FH) being identified and optimally treated?
Efficiency	Are lipid-lowering therapies being targeted to high-risk groups to prevent costly hospital admissions?
Equity	Is access to cholesterol testing and statin therapy monitored by ethnicity, deprivation, geography, and age? Are there disparities in diagnosis or treatment rates for FH or high cholesterol? Are outcomes (e.g. cholesterol control, CVD events) equitable across different population groups?
Sustainability	Are lipid management interventions embedded within long-term plans with secure funding, workforce development to maintain continuity and scalability?
Governance & Leadership	Do ICBs and local systems have clear accountability and leadership for lipid case finding and management, with strategic plans aligned to NICE CG71 and NHS RightCare pathways?
Key metrics & targets*	(1) 75% of eligible people aged 40-74 without established CVD have received a CVD risk assessment and cholesterol reading recorded on a primary care data system in the last 5 years by 2029. (2) 45% of people aged 40-74 without established CVD identified as having a 20%+ 10-year risk of developing CVD are treated with statins by 2029. (3) 25% of people with FH are diagnosed and treated optimally according to the NICE guideline (4) 60% of patients aged 25-84 with a CVD risk score greater than 20% are treated with lipid lowering therapy. (5) 95% of patients with GP recorded CVD (narrow definition), who are currently treated with lipid lowering therapy (6) 35% of patient with GP recorded CVD (narrow definition) are treated to target cholesterol levels



Heart Failure case finding and management



Pathway

Overview

Intervention: Early detection and treatment of Heart Failure (HF) to reduce progression and complications. Diagnosis through clinical assessment and confirmed with echocardiography. Managed via GPs, HF clinics, and community HF nurses for medicines optimisation.

Evidence: 80% of HF is diagnosed during emergency hospital admissions [1]. HF is the second highest CVD condition in terms of NHS cost, after Stroke costing over 2 billion [2]. HF has approximately 20% mortality at one year & is the most common cause of admission in >65s. It is associated with double the length of hospital stays & 30% risk of readmission within 3 months [3]. The approximate unit cost of each admission for HF exceeds £10,000 [3] and annual admissions rates primary diagnosis in England are over 100,000 [4].

Cost effectiveness: HF is a key ambulatory care sensitive (ACS) condition whereby optimal community management prevents unplanned admissions. HF is one of a few ACSs with rates increasing over the last 5 years [5]. Diagnosis via hospital admission incurs an extra longitudinal cost of £2485 per patient compared to community [6]. Therefore, the greatest cost gains are via improved early detection in primary care. However, home management programmes such as REACH-HF also show a 78% probability of cost effectiveness and cost per QALY of £1720 [7].

Tools

[Overview](#) | [Chronic heart failure](#) | [Guidance](#) | [NICE UCL Partners Proactive Care Framework - Heart Failure](#) Primary Care Guidance

[BHF Heart Failure - a blueprint for change](#) Suggestions for systems & healthcare approach reforms

[Resources for Health Professionals — British Society For Heart Failure](#) National charity professional resources. Includes segmentation and adapted treatment guidance.

Wider Impact

Main CVD related effects:

- In a UK biobank study, HF was the leading cause of CVD related deaths in those with CVD [8].

Other priority areas that treating HF impacts on:

Acute admissions. 25% due to infection: Respiratory, UTI & skin & soft tissue infection or complicating COPD/ CLD, Falls, Asthenia & AKI [9]. Much of this will not be coded as primary or secondary HF diagnosis on HES statistics [10].

Reduced mobility leading to falls, reduced physical activity, social isolation & MSK or other chronic pain [11].

Infection HF has highest relative infection mortality risk among CVD conditions [8]. Infection is also bidirectional for HF development in those with CVD risk factors [12].

CKD and AKI. From medication, infection & congestion Co-diagnosis carries high mortality & readmissions [13].

KLOE Domain	Key Assessment Question
Effectiveness	Is HF care delivered in line with national clinical guidelines (e.g., NICE NG106)?
Efficiency	Are resources used optimally in HF care delivery?
Equity	Is access to HF diagnosis and management equitable across population groups? Are outcomes equal?
Sustainability	Are HF interventions embedded within long-term plans with secure funding, workforce development, and digital tools (e.g., remote monitoring) to maintain continuity and scalability?
Governance & Leadership	Do ICBs and local systems have clear accountability and leadership for HF management, with strategic plans aligned to NICE NG106 and NHS RightCare pathways?
Key metrics & targets^	QOF Indicators: HF 008 Diagnosis confirmed by echocardiography HF 003 LVSD/ rEF on ACEi HF 006 LVSD/ rEF on Beta Blocker HF 007 Annual review, optimisation & functional capacity PCA Rates for these indicators PHOF Fingertips: Those aligned to QOF (HF 003, 006, 007,008) Hospital Admissions due to HF Deaths at home due to HF

Wider determinants
of health

Primary
prevention

Secondary
prevention

Early diagnosis
and intervention

Treatment

Tertiary
prevention

CKD management



Overview

Intervention: Early detection and treatment of chronic kidney disease to reduce cardiovascular risk. Managed via GPs, renal clinics, and medicines optimisation teams.

Evidence: CKD significantly increases the risk of CVD, including coronary artery disease, stroke, heart failure, and arrhythmias [1]. Improving detection and management of CKD is listed by NHSE as a high impact and value part of the CVD prevention pathway [2]. CKD shares risk factors with CVD. Early identification and treatment of CKD improves CVD outcomes.

Cost effectiveness: In a cost-effectiveness study of several NHS population-level interventions designed to manage CKD, all interventions demonstrated cost-effectiveness, with the combined approach yielding between £7,675 per QALY in the base case scenario and £22,767 per QALY in constrained resources [3].

Tools

[NG203 Chronic kidney disease: assessment and management](#)

[Renal Clinical Network Specification – NHS England](#): Provides a framework for renal clinical networks to support CKD care.

[ISN-KDIGO CKD Early identification & intervention toolkit](#) – global resource

[UK eCKD Guide – UK Kidney Association \(UKKA\)](#) – guidelines derived from NICE and the UKKA

[London Kidney Network CKD Pathways](#) – case study for early identification and targeting inequalities

KLOE Domain	Key Assessment Question
Effectiveness	Is CKD care delivered in line with national clinical guidelines (e.g., NICE NG203)?
Efficiency	Are resources used optimally in CKD care delivery?
Equity	Is access to CKD care equitable across population groups?
Sustainability	Are CKD interventions embedded within long-term plans with secure funding, workforce development, and digital tools (e.g., remote monitoring) to maintain continuity and scalability?
Governance & Leadership	Do ICBs and local systems have clear accountability and leadership for CKD management, with strategic plans aligned to NICE NG203 and NHS RightCare pathways?
Key metrics & targets^	(1) 80% of patients with diabetes and/or hypertension have an annual eGFR and albuminuria test. (2) 90% of patients with CKD stages 3–5 are coded correctly in primary care. (3) 70% of patients with CKD and proteinuria are prescribed ACEi/ARB or SGLT2i where indicated. (4) 100% of patients with CKD stage 4–5 have a documented care plan or referral pathway.



Prompt recognition of stroke/TIA



Overview

Intervention: Rapid identification for suspected stroke or TIA and urgent referral to specialist care. 20% of strokes are preceded by a TIA. Over 80% of strokes are preventable or the onset of the first event may be delayed given the cause of the stroke is attributable to a modifiable risk factor [1]. ISDNs are accountable for delivering care across the full pathway, from pre-hospital to life after stroke.

Optimising performance against guidance: 2021 [Stroke Service Model](#): Providers must ensure rapid pre-hospital stroke care using validated screening tools, category 2 ambulance response, pre-alert systems, and telemedicine triage, aiming for a call-to-needle time of ≤180 minutes. For TIA, patients require urgent assessment within 24 hours, MRI over CT when appropriate, and timely carotid imaging with surgery within seven days if indicated.

[The GIRFT Stroke review](#) recommends: improving speed and effectiveness of scanning and diagnosis by adopting the [National Optimal Stroke Imaging Pathway](#) (NOSIP) and focusing on education in primary and secondary care to improve recognition and treatment.

Tools

RightCare Stroke [Toolkit](#) [2]
Providers must submit data to [SSNAP](#) to monitor: time from symptom onset to hospital arrival, time to brain imaging, time to thrombolysis, TIA clinic access within 24 hours, six-month follow-up reviews.

NICE Guidance [NG128](#) (acute stage interventions for stroke and TIA within the first 48 hours)

[Case Study : Use of Stroke Telemedicine at South East Coast Ambulance Service and East Kent Hospitals University](#)

[Case Study : Video assisted Stroke triage at University College Hospitals London](#)

[Case study TIA referral system in Oxford, pg 131](#)

KLOE Domain	Key Assessment Question
Effectiveness	Is stroke/TIA care delivered in line with clinical guidelines (e.g., NICE NG128)? Are services submitting to SSNAP?
Efficiency	See GIRFT recommendations
Equity	See GIRFT recommendations and Stroke Specific Health Inequalities Framework [2]
Leadership & Governance	See GIRFT recommendations
Sustainability	See GIRFT recommendations
Key metrics & targets^	(1) Annual improvement of symptom onset to arrival time. (2) Percentage of patients admitted to stroke unit within four hours of arrival at hospital



Brain imaging



Pathway

Overview

Intervention: Brain imaging in stroke care involves rapid use of CT or MRI scans to confirm diagnosis, identify vessel occlusion, and guide urgent treatments like thrombolysis or thrombectomy. National data shows that imaging standards are not being met (43% of patients with stroke are not being scanned within one hour of arrival at the hospital) and there is wide variation across stroke units.

Optimising performance against guidance:

NCGS: Patients with suspected acute stroke should be admitted immediately to a hyperacute stroke service, receive brain imaging within one hour, and have scans interpreted by trained professionals. Those eligible for thrombectomy need an urgent CT angiogram without delaying thrombolysis, and advanced imaging like CT/MR perfusion or MRI should be used for delayed or uncertain cases.

The [National Stroke Service Model](#) and [GIRFT](#) recommends adopting NOSIP which sets enhanced goals for hyper-acute stroke care time targets of plain CT head and CTA within 20 minutes and CT perfusion if indicated. In addition, AI-supported interpretation and networked image sharing is recommended.

Tools

Providers/ICBs must evidence performance via SSNAP metrics: time from arrival to scan, percentage of patients scanned within 1 hour, imaging modality used.

[2021 GIRFT Stroke speciality report recommendations](#)

GIRFT recommendations:

ISDNs should work towards 24/7 imaging, aligning with existing NICE guidance and incorporating recommendations from Professor Sir Mike Richards’ [review](#). Investment in infrastructure and training to support sharing of images, and a coordinated national rollout of AI-enabled tools to support image interpretation and clinical decision-making.

KLOE Domain	Key Assessment Question
Effectiveness	Is brain imaging delivered in line with clinical guidelines (e.g., NICE NG128)? Are services submitting to SSNAP?
Efficiency	Are there clear processes for rapid sharing of imaging across team members so rapid care? Has the use of AI for image interpretation been explored?
Leadership & governance	See GIRFT recommendations
Sustainability	See GIRFT recommendations
Equity	See GIRFT recommendations
Key metrics & targets^	(1) Annual improvement of % of patients receiving first brain scan within 20 minutes of arrival at hospital



Thrombolysis/thrombectomy



Pathway

Overview

Intervention: Procedure used to remove a blood clot from a blocked artery in the brain, typically performed in cases of acute ischaemic stroke. Thrombectomy is typically undertaken by specialist neurosciences centres. There are 24 of these across England, 23 of which currently undertake routine thrombectomy, compared to 20 ISDNs. Centres are not evenly spread across the country and they often serve several networks.

Optimising performance against guidance:

Thrombectomy must be delivered urgently and in line with NICE guidance, with 24/7 intra-hospital transfer pathways and repatriation systems in place to ensure timely access for all eligible patients.

All potential candidates should undergo CT angiography during initial imaging, with interpretation supported by AI or off-site expertise, as up to 10% of stroke admissions may benefit from this intervention.

Tools

Mechanical Thrombectomy (MT) delivery in England: quality review programme focused on the delivery of MT interventions

[Case Study : Improving access to mechanical thrombectomy at Royal London Hospital](#)

[Case Study : Working cross-organisation to transform Stroke thrombectomy pathways in the Thames Valley](#)

[Case Study: Delivering 24/7 thrombectomy](#) (pg 107)

KLOE Domain	Key Assessment Question
Effectiveness	Is brain imaging delivered in line with clinical guidelines (e.g., NICE NG128)? Is the NOSIP adhered to?
Efficiency	Are the processes for agreeing treatment and management of patients that are eligible for thrombectomy clear?
Leadership & governance	See GIRFT recommendations
Sustainability	See GIRFT recommendations
Equity	See GIRFT recommendations
Key metrics & targets^	(1) Percentage of patients receiving thrombolysis (2) Percentage of patients receiving thrombectomy. GIRFT recommendations: Improve access to and time to thrombectomy intervention and aiming for 8% of all patients with stroke accessing thrombectomy by 2025 (pg 108 for further metrics)

Wider determinants of health

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Early diagnosis and intervention

Treatment

Tertiary prevention

Percutaneous Coronary Intervention (PCI)



Overview

Intervention: PCI a minimally invasive procedure that uses a catheter to open blocked coronary arteries, often with a stent, to restore blood flow to the heart during an acute coronary syndrome or heart attack. It is the most common invasive procedure for coronary heart disease in the UK. PCI contributed 17.6% to 1-year mortality reductions in acute myocardial infarction patients [1]. PCI reduced cardiac death by 31% and MI by 26% compared to non-PCI interventions in unstable CAD [2].

Optimising performance against guidance: GIRFT recommendations: heart attack centres providing 24/7 PCI services, early discharge (48–72 hours) for low-risk STEMI patients post-PCI with virtual follow-up, a focus on optimising patient flow, reducing length of stay, and maintaining safety and supporting audit and benchmarking through NICOR and BCIS datasets.

Tools

[National Percutaneous coronary intervention - NICOR](#) (National Institute for Cardiovascular Outcomes Research) 2025 annual report and resources

[NG185 NICE Acute coronary syndromes](#)
[CG95 Recent-onset chest pain of suspected cardiac origin](#)

[GIRFT Cardiology Report](#)

Barts Heart Centre [case study](#) details optimising early PCI discharge through a pathway combining GIRFT 2021 recommendations, national guidance, and innovative practice at Barts Heart Centre.

KLOE Domain	Key Assessment Question
Effectiveness	Is PCI being delivered in line with clinical guidelines (e.g., NICE NG185, CG95)?
Efficiency	Are resources used optimally (e.g., cost per PCI, length of stay, use of cath lab capacity)? Is there evidence that PCI services are aligned with population health need (e.g., access in high-risk or deprived areas)?
Leadership & governance	See GIRFT recommendations
Sustainability	See GIRFT recommendations
Equity	Is access to PCI monitored by ethnicity, deprivation, geography, and age? Are outcomes (e.g., survival, complications) equitable across population groups?
Key metrics & targets^	Annual improvement of number of patients achieving 72-hour target for NSTEMI angiography; door-to-balloon time within 60 mins for patients following STEMI; call-to-balloon time within 120 mins for patients following STEMI*



Cardiac rehabilitation


Pathway

Overview

Intervention: Structured exercise and education programmes post-cardiac event to improve recovery, reduce recurrence, and enhance quality of life. Delivered by hospital rehab teams, community services, and digital programmes (e.g. REACH-HF). Exercise-based CR lowers the chance of dying from CVD by 26%, reduces hospital admissions by 23%, and cuts the risk of heart attacks by 18% [1].

Optimising performance against guidance:

Cardiac rehab should begin within 10 days of discharge after myocardial infarction (MI) [3]. GIRFT recommends offering cardiac rehabilitation in community or hospital settings, including virtual rehab at home [4].

Tools

[NG185 NICE Acute coronary syndromes](#)

[QS99 Secondary prevention after a myocardial infarction](#)

[QS9 Chronic heart failure in adults](#)

[National Audit of Cardiac Rehabilitation](#)

[BACPR Resource Hub for Commissioners & Providers](#)

KLOE Domain	Key Assessment Question
Effectiveness	Is CR delivered in line with clinical guidelines?
Efficiency	Are resources used optimally in CR delivery?
Equity	Uptake rates by IMD quintile and ethnic group; % of priority groups starting CR
Leadership & governance	See GIRFT recommendations
Sustainability	See GIRFT recommendations
Key metrics & targets	Multidisciplinary team with ≥ 3 different staff types. (2) Patients starting Core CR from all priority groups (3) Duration of CR is ≥ 56 days (8 weeks) (4) Assessment 1 (pre-CR) reaching England average 80% (5) Wait time (Referral to start of Core) (CABG) reaching England average 46 days (6) Wait time (Referral to start of Core) (MI/PCI) reaching England average 33 days (7) Assessment 2 (post-CR) reaching 57% England average

Wider determinants
of health

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prevention

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prevention

Early diagnosis
and intervention

Treatment

Tertiary
prevention

Stroke rehabilitation

Overview

Intervention: Multidisciplinary therapy and support for stroke survivors to restore function and reduce long-term disability. There is strong evidence that a coordinated multidisciplinary approach to rehabilitation of stroke survivors results in a reduction in death, institutionalisation, and dependency. Inpatient rehabilitation services, ESD and community stroke/neuro rehabilitation services should work closely together. They must ensure that their patients receive physiotherapy, occupational therapy, speech and language therapy, vocational rehabilitation, psychological rehabilitation and life after stroke support.

Optimising performance against guidance:

National clinical guidelines recommend that people with stroke should be offered and/or participate in at least 45 minutes of each appropriate therapy every day. Stroke patients eligible for early supported discharge (ESD) should receive assessment and daily rehabilitation within 24 hours, while others should be assessed within 72 hours and begin treatment within 7 days [1].

Tools

SSNAP data is used to benchmark performance, including: time to stroke unit admission; therapy intensity and timing; discharge planning and six-week follow-up.

[NG236 – NICE Stroke Rehabilitation in Adults](#)

[National Stroke Service Model](#) – pg 24 for rehabilitation requirements

[National service model for an integrated community stroke service](#)

GIRFT recommendations:

Daily MDT and discharge planning is integrated with social care and involves the patient and relatives. ISDNs must ensure there is a seven-day accessible Integrated Community Stroke Service to support discharge and community-based rehabilitation. ISDNs should work to optimise lifelong recovery following stroke and review current Life After Stroke pathways, including access to neuropsychology, vocational rehabilitation, voluntary sector support and appropriate patient-directed follow-up.

KLOE Domain	Key Assessment Question
Effectiveness	Is the service being delivered in line with clinical guidelines (NG236)? And the models set out in National Stroke Service Model , National service model for an integrated community stroke service Are services submitting to SSNAP?
Efficiency	See GIRFT recommendations
Leadership & governance	See GIRFT recommendations
Sustainability	See GIRFT recommendations
Equity	Is access to stroke rehabilitation monitored by ethnicity, deprivation, geography, and age?
Key metrics & targets^	ESD patients: assessed and treated within 24 hours of discharge. Non-ESD patients: assessed within 72 hours, treatment started within 7 days. Minimum of 45 minutes/day of each appropriate therapy (physio, OT, speech) for patients able to participate. Delivered 5–7 days/week, tailored to individual goals.

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CVKM Prevention Wider Impact Summary



Contents

Primary Prevention

Smoking & Obesity have the widest impact of primary risks, in addition to inequalities. Particularly on cancer, admissions, elective care, women's, maternal & child health.

Identification

NHS Health Checks provide a platform for early diagnosis, wider health discussions, alcohol, menopause and increased healthcare contact.

Secondary Prevention

Hypertension has the highest attributable fraction of all risks, affects all wider CVDRM outcomes as well as dementia, maternal health, indirect admissions and elective care.

Tertiary Prevention

Heart Failure and **Diabetes** are the only ambulatory care sensitive conditions among CVDRM outcomes. Of these, HF is under-diagnosed, admissions rates are increasing, costly and carry a poor prognosis. Its wider impact is also far-reaching & likely under-reported.

General health impacts of CVD Prevention across all levels

Dementia. Vascular Dementia has highest increased risk (7-fold), from CVD. But All-type and Alzheimer's are also independently increased [1]. Hypertension is the strongest risk factor [2].

Infection. Those with CVD have 4-times greater risk of death from infection than those without. This is highest in respiratory infection but includes all susceptibility. [3] The burden is further complicated by a higher CVD event likelihood post infection period [4,5]. Therefore, a further consideration is those with poorly managed CVD due to low healthcare contact are also less likely to be vaccinated; this represents a potential dual risk and inequality. There are also other bidirectional relationships, such as heart failure development following infection [6].

Cancer. 50% increased risk of cancer mortality [7]. Also, increased CVD risk in cancer survivors [8]. Both mediated via shared risks but also represent opportunity for detection & interventions.

Elective care and surgical risk. 16% of late notice cancellations for elective operations are due to 'cardiac' causes and each cancellation costs £6,500-£11000 [9]. Additionally, pre-operative (anaesthetic), operative and post-operative complications from CVD lead to increased cost, length of stay, morbidity & mortality [10]. 'Prehabilitation' is cost effective, particularly smoking cessation, however, the timing & equity of programmes is important to consider [11].

Alcohol. 3rd highest cause of related admissions [12], due to cardiometabolic co-morbidity.

Mental Health. Complex bidirectional increased risk, with joint benefits from holistic care [13].

Summary

The main additional areas CVD prevention impacts:

- **Cancer**
- **Maternal and Women's Health**
- **Non-CVD Admissions and Elective Care**
- **Infection**
- **Work and Health (Economic Inactivity)**
- **Healthy Ageing & Dementia**
- **Inequalities**

Upstream interventions will generally yield wider benefits but are often less tangible and therefore may be less evidence led (see metrics).

Further considerations

- Potential wider harms of interventions
- Capacity and higher-order effect on services
- Degree of influence
- Scale of impact by demographics (PHM)



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