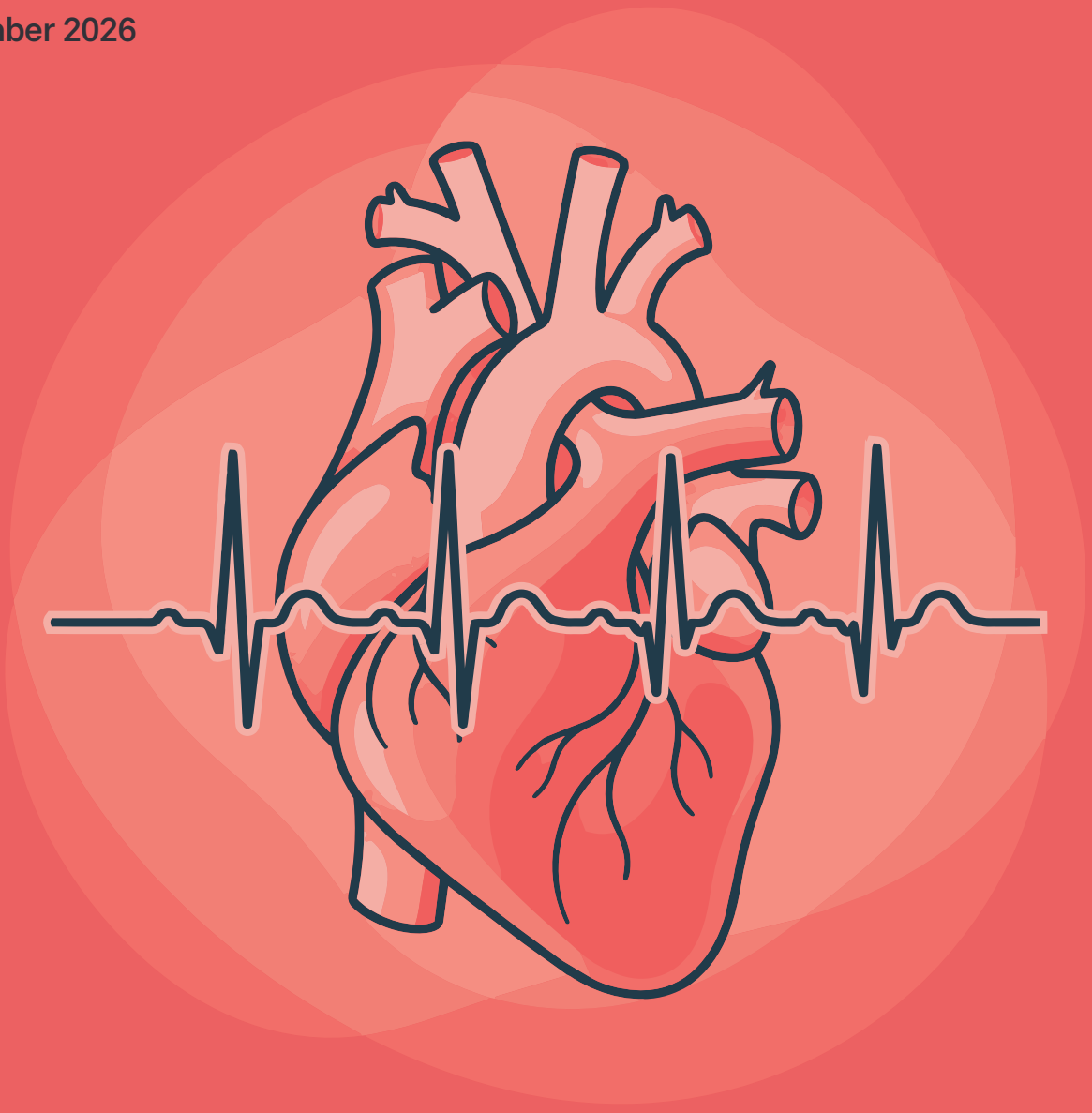
Future Health Research

Correcting the rhythm

Delivering better detection and treatment of atrial fibrillation through the CVD Modern Service Framework

November 2026



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Executive summary

Cardiovascular disease (CVD) is one of the UK's biggest killers. It causes over a quarter of all deaths, around 170,000 a year, an average of one every three minutes.[1] Around 7.6 million people are living with a heart or circulatory disease and the costs are substantial: an estimated £12 billion a year in healthcare costs and £28 billion in costs to the wider economy. Heart disease is the single largest factor behind people leaving the workforce due to ill health, and CVD is responsible for around a quarter of the life expectancy gap between the most and least deprived parts of England.[2]

Atrial fibrillation (AF) is a central part of this challenge. AF is the UK's most common heart rhythm disorder. A record 1.62 million people in the UK had been diagnosed with it by 2025, and the number diagnosed rose by 50 per cent in the decade to 2023.[3] Around 425,000 people in England are living with AF that is undiagnosed and untreated.[4] Up to 15 per cent of all UK strokes, around 30,000 a year, happen in people whose AF has never been diagnosed.[5] AF related hospital care already costs the NHS an estimated £2.3 billion to £4 billion a year, and this is projected to rise to as much as £12.14 billion by 2040 without action.[6]

The NHS has long recognised the importance of addressing AF. National ambitions set in 2019 aimed to detect 85 per cent of expected AF cases and adequately anticoagulate 90 per cent of those at high risk of stroke by 2029, and the national Detect, Protect, Perfect programme of 2015 to 2020 showed what coordinated action can achieve.[7,8]

The publication of the CVD Modern Service Framework (CVD MSF) in July 2026 creates a potentially powerful moment for renewed action on AF. The first of the new MSFs, it sets a clear national ambition to reduce premature deaths from heart disease and stroke by 25 per cent within a decade, backed by twelve priority actions across four themes and an equity metric for every priority.[9]

For AF, the framework provides a platform to build from; but there are gaps that need to be addressed in the forthcoming delivery plan. Whilst AF is named as one of the seven cardiovascular-kidney-metabolic risk factors and sits within the framework's case finding approach, there is no priority, target or metric for finding people with AF and the case finding tool it recommends, the NHS Health Check, does not routinely check for AF, despite best practice guidance.

Beyond detection, AF treatment appears only once in the framework: as a wider action on anticoagulation, outside the twelve priority actions and therefore without a target, a timescale or a metric.

AF is the UK's most common heart rhythm disorder. A record 1.62 million people in the UK had been diagnosed with it by 2025, and the number diagnosed rose by 50 per cent in the decade to 2023.

Rhythm control and ablation, recommended as a first line treatment option for paroxysmal AF in the 2024 European guidelines and available on the NHS under NICE guidance, do not appear anywhere in the framework.[10] The British Cardiovascular Society has made a similar point, calling for greater emphasis on AF detection, anticoagulation, rhythm control and integrated long term management.[11] Its President, Professor Andre Ng, said that while the framework rightly recognises AF as a major cardiovascular risk factor, "greater emphasis should be placed on its detection and comprehensive management", pointing to systematic case finding, anticoagulation, rhythm control, integrated long term management and digital and virtual care as the areas where opportunities remain.[12]

The delivery plan and the commitment to regular updates to the MSF create opportunities to introduce further targets and metrics which can drive improvements in the diagnosis of AF as well as ensuring that patients can access the right treatment at the right time.

This report, informed by an extensive evidence review and interviews with experts across government, the NHS, local government, patient organisations and NHS innovation networks, sets out a four part framework for action:

- Finding more people with AF, earlier by making the AF detection element of the NHS Health Check work in practice, setting an AF detection metric with an equity focus, and using pharmacy, outreach and new technology to reach those missed by routine care
- Delivering better, more coordinated AF care by ensuring every diagnosis leads quickly to a treatment decision and structured follow up, through integrated pathways, care coordination and digital models of care
- The right treatment for the right AF patient at the right time by tackling variation: getting more people who should be on anticoagulation onto it and staying on it, and closing the nearly five-fold variation between ICBs in access to ablation for the many patients for whom medication alone is not enough[13]
- Delivering and measuring progress by setting AF expectations for systems in the delivery plan, adding an AF indicator set to the CVD MSF dashboard, publishing ablation access data by ICB, introducing annual reporting and a three year review, and spreading proven AF innovation nationally

Such actions will ensure that the CVD MSF can deliver on its central ambitions: fewer strokes, fewer premature deaths, reduced pressure on the NHS and social care, and more people living longer in good health and in work. The framework has taken a first step to tackling AF and this report sets out how to build on that commitment.

Summary of recommendations

Finding more people with AF, earlier

1) Make AF detection a priority action within the finding the missing millions theme, with a detection metric (recorded AF prevalence against expected prevalence) and an equity metric, reported at ICB and primary care network level
2) Amend the NHS Health Check so that pulse rhythm assessment is a required, recorded and returned element of every Check: specify blood pressure devices with irregular rhythm detection for the programme, add pulse rhythm result and onward referral fields to the Health Check dataset and quarterly data return, and update the best practice guidance and local authority commissioning standards to require the assessment
3) Set out in the delivery plan's guidance for systems the role of neighbourhood health teams and community pharmacy in AF case finding, extending the NHS pharmacy blood pressure service to include pulse rhythm checks, with the devices, training, funding and route to the GP record specified as conditions of commissioning
4) Use the CVD MSF's innovation adoption work to test and, where effective, roll out validated AF risk prediction tools, such as the approach recommended in the recent ASPIRE study

Delivering better, more coordinated AF care

5) Attach a treatment expectation to the case finding priority: a defined maximum time from AF diagnosis to a documented treatment decision, measured through the CVD MSF dashboard
6) Set out in guidance for systems an integrated AF pathway on the ABC model, covering general practice, emergency and secondary care including cardiology and electrophysiology, with defined referral criteria and timescales from diagnosis to specialist rhythm assessment, and with named responsibility for coordination
7) Spread proven models, including arrhythmia care coordination and AF virtual wards, through the CVD MSF's innovation and delivery mechanisms

The right treatment for the right AF patient at the right time

8) Make treatment to target for AF a priority action in the driving treatment to target theme, with the 90 per cent anticoagulation ambition restored as its metric and adherence support set out in guidance for systems
9) Include the NICE recommended annual AF treatment review in guidance for systems, covering symptoms, anticoagulation adherence and eligibility for rhythm management referral, and measure its completion and outcomes through the CVD MSF dashboard
10) Include ablation treatment within the CVD MSF at its next review, with the delivery plan setting referral expectations in the interim for patients whose AF remains symptomatic or uncontrolled on medication
11) Publish regular ablation activity and diagnosis to ablation times at ICB level from existing national cardiac audit data, integrated into the CVD MSF dashboard so that variation in access is visible alongside the framework's other metrics
12) Require that AF ablation technologies are procured through the Government's value-based procurement guidance, now being piloted ahead of wider roll out

Delivering and measuring progress

13) Add a defined AF indicator set to the CVD MSF dashboard at ICB and primary care network level, covering detection, treatment decision, annual review, access to ablation and AF related stroke admissions, and speed up CVDPREVENT publication so systems can track their own progress
14) Introduce annual reporting on progress with the MSF and include an assessment of progress and challenges in improving AF care
15) Commit in the delivery plan to a fuller review of the CVD MSF at three years, on the model of the national cancer plan
16) Include AF case finding and treatment within the CVD MSF's innovation adoption work, with the Health Innovation Networks as the delivery channel and AF

Atrial fibrillation and its impact

AF is a heart rhythm disorder in which the upper chambers of the heart beat irregularly, allowing blood to pool and clot. If a clot travels to the brain it causes a stroke. AF can affect anyone but becomes more common with age: European guidelines recommend opportunistic checks for AF in everyone aged 65 and over, and systematic checks in those aged 75 and over or at high risk of stroke.[14] It is also more common in men, with 2.9 per cent of men developing AF compared with 2 per cent of women.[15] Some people have no symptoms and are unaware they have it, which is why so much AF is only discovered after a stroke.[16]

1.62 million

people in the UK are now diagnosed with AF, a record high; the number diagnosed rose by 50 per cent in the decade to 2023[17]

425,000

people in England are estimated to be living with undiagnosed and untreated AF[18]

5x

increase in the risk of stroke, with AF linked to around one in five UK strokes[19]

30,000

UK strokes a year, up to 15 per cent of all strokes, occur in people with previously undiagnosed AF[20]

1 in 5

people die within a year of an AF diagnosis, rising to 42.7 per cent within five years[21]

Up to £4bn

a year in NHS costs from AF related hospital admissions, projected to rise to as much as £12.14 billion by 2040[22]

THE IMPACT ON PATIENTS AND FAMILIES

Ninety per cent of people with AF report symptoms. These include palpitations, breathlessness, fatigue, chest pain, dizziness, poor sleep and low exercise capacity, alongside anxiety, depression, low quality of life and, over time, a higher risk (45 per cent) of cognitive decline.[23, 24, 25, 26]

Around three in five people have two or more other health conditions at the time of their AF diagnosis, and conditions including high blood pressure, diabetes, a previous heart attack and COPD all significantly increase the risk of developing AF.[27, 28]

AF plays a role in exacerbating health inequalities, with people in the most deprived communities having a 12 per cent greater risk of developing AF and a 26 per cent higher fatality rate than those in the least deprived, a gap that has widened over time.[29] Under-detection is concentrated among people aged over 75, those with diabetes, and Black and South Asian communities, and is most pronounced in practices in the Midlands and the East of England.[30]

THE COST TO THE NHS, SOCIAL CARE AND THE ECONOMY

AF is the most common heart rhythm disorder driving hospital admission.

Counting admissions where AF is the primary or a secondary cause, AF related hospital care cost the NHS between an estimated £2.3 billion and £4 billion in 2020, and by 2040 costs are projected to reach between £3.85 billion and £12.14 billion, up to 4 per cent of NHS spending, as prevalence grows in an ageing and undertreated population.[31]

Hospital admissions are the main cost driver: managing an admitted AF patient costs around eight times more than managing a patient who avoids admission.[32, 33]

The wider costs fall largely outside the NHS. Stroke costs the UK an estimated £26 billion a year, of which £3.4 billion falls on the NHS, £5.2 billion on social services, £15.8 billion on unpaid family carers and £1.6 billion on lost productivity. With AF causing around one in five UK strokes, a substantial share of this burden is directly attributable to AF.[34] Preventing AF related strokes is therefore one of the most direct ways the CVD MSF can reduce demand not just on the NHS but on social care, family carers and the economy.

The policy context: two decades of action on AF

The NHS has recognised the importance of AF for more than twenty years, and where AF has been given national priority, a defined programme and a measure of success, the record shows that detection and treatment have improved.

2006:

AF was added to the Quality and Outcomes Framework, incentivising its detection and recording in general practice.[35]

2015 to 2020:

The national Detect, Protect, Perfect programme, run through the Academic Health Science Networks and funded by NHS England from 2017 to spread AF detection devices, avoided almost 12,000 AF related strokes, saved more than 2,900 lives and reduced NHS and social care costs by £263 million.[36]

2019:

The NHS Long Term Plan made early detection of AF a cardiovascular priority, and the National CVD Prevention System Leadership Forum set out in Public Health England's Health matters guidance two national AF ambitions: to detect 85 per cent of the expected number of people with AF, and to adequately anticoagulate 90 per cent of those at high risk of stroke, both by 2029.[37, 38]

2019:

The UK National Screening Committee decided not to recommend a national AF screening programme, leaving the NHS without a systematic pathway for early AF detection.[39]

2025:

The 10 Year Health Plan reaffirmed the goal of reducing premature cardiovascular mortality and committed to the CVD MSF as the delivery mechanism, but did not renew the 2019 AF ambitions.[40]

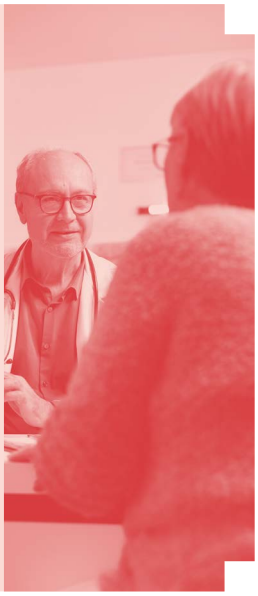
2026:

The CVD MSF was published, with a delivery plan expected later in 2026.

Since 2019 the AF ambitions have not been renewed, no national report of progress against them has been published, and no systematic detection pathway exists. The CVD MSF presents the opportunity to restore AF diagnosis and treatment as a priority with the targets and measures the framework's other priorities already carry.

Case study: The National Detect, Protect, Perfect programme, 2015 to 2020.

The Academic Health Science Networks (now the Health Innovation Networks) selected AF as a national programme and delivered this in every region of England. It worked across three elements of the pathway: Detect, raising public awareness of AF and the importance of pulse rhythm testing to identify people with undiagnosed AF; Protect, supporting healthcare professionals to offer optimal anticoagulation to everyone who would benefit; and Perfect, supporting patients to stay on their medication and clinicians to review patients with AF. In 2017 NHS England funded the network to increase uptake of innovative AF detection devices in general practice, pharmacy and community settings, and to understand what a national roll out of detection technology would require. Over the course of the programme almost 12,000 AF related strokes were avoided, more than 2,900 lives were saved, and £158 million in NHS costs and £105 million in social care costs were saved.[41] The programme showed that a nationally led, regionally delivered AF programme with a clear pathway and measured outcomes works. The CVD MSF can rebuild that approach within its own delivery plan.



The CVD Modern Service Framework:

What it says on AF

The CVD MSF, published on 7 July 2026, is the first of the Government's new modern service frameworks and the most significant national statement on cardiovascular care in a generation. It takes a cardiovascular-kidney-metabolic (CVKM) approach, recognising that heart, kidney and metabolic conditions share risk factors and are best tackled together. The framework:

- Sets a headline ambition to reduce premature deaths from heart disease and stroke by 25 per cent within a decade
- Establishes twelve priority actions across four themes: finding the missing millions, driving treatment to target, timely and equitable acute care, and rehabilitation
- Attaches targets and an equity metric to each priority action, with accountability for delivery sitting with ICBs
- Names AF as one of seven CVKM risk factors, alongside high blood pressure, high cholesterol, high blood sugar, obesity, chronic kidney disease and smoking, and includes it in its case finding approach
- Commits to a delivery plan, including guidance for systems, to follow publication[42]

Where AF sits in the framework

AF is included in the framework at the detection stage. The case finding approach uses an ABCDE model in which the A denotes atrial fibrillation, and earlier detection of AF sits within the finding the missing millions theme.[43] This is an important foundation; however there is no metric that clearly links to improved AF case finding and there are no AF specific targets. The tool the framework names for earlier detection is the NHS Health Check, which in practice does not routinely check for AF, despite its own best practice guidance.

Beyond case finding, AF is largely absent from the framework. On treatment, anticoagulation is addressed only as a wider action, without the targets, timescales and accountability that the twelve priority actions carry. Rhythm control and ablation, now recommended as a first line treatment option for paroxysmal AF in European guidelines and recommended by NICE for patients whose AF is not controlled by, or who cannot tolerate, antiarrhythmic drugs, are not mentioned. Beyond a general commitment to timely linkage into treatment pathways, the CVD MSF sets no specific expectation of what should happen after a diagnosis of AF, no timescale for a treatment decision, and no metric that would show whether people found with AF go on to be treated.[44] The British Cardiovascular Society has publicly called for greater emphasis on AF detection, anticoagulation, rhythm control and integrated long term management within the framework.[45]

For AF patients, ensuring they are not only diagnosed, but also treated appropriately, is the only way to achieve the MSF ambitions of fewer strokes, fewer premature deaths and reduced pressure on the NHS, social care and the economy.

The following sets out how its delivery plan and future iterations of the framework itself can deliver better detection and treatment of AF.

Finding more people with AF, earlier

THE CHALLENGE

Around 425,000 people in England are living with AF that has not been diagnosed.[46] In only 25 per cent of general practices does recorded AF prevalence match or exceed the expected national level, and recording is lowest among older people, people with diabetes, Black and South Asian communities and those living in deprived areas.[47]

A diagnosis can also get lost within the NHS. Analysis of UK Biobank data found that around a third of AF cases recorded in hospital were missing from primary care records, and that these patients had lower rates of anticoagulation and higher mortality.[48]

There is no systematic approach to finding AF and the CVD MSF does not create a case finding route of its own. AF detection often depends on chance: a symptom, an incidental finding of an irregular pulse, or a stroke.[49, 50]

THE OPPORTUNITY

Closing the gap in expected versus recorded AF prevalence aligns with the CVD MSF's ambition to reduce health inequalities.[51]

The UK National Screening Committee did not recommend a population screening programme when it last reviewed the evidence in 2019.[52] The National Screening Committee will however review its decision again once the results of the SAFER trial are published. This is a randomised controlled study of over 89,000 people across 197 English general practices comparing screening with usual care and is expected to report its stroke outcome results in 2028.[53]

The single biggest immediate opportunity for case finding still sits within the NHS Health Check programme, which is already named by the CVD MSF as its preferred detection approach. The Health Check's own best practice guidance states that pulse rhythm should be checked before blood pressure is taken, and that anyone with an irregular pulse should be referred for further investigation for AF.[54]

However in practice this rarely happens. Clinicians and public health commissioners interviewed for this research confirmed that pulse rhythm assessment is not routinely performed or recorded as part of the check, and that no commissioner can currently say how often it is.[55] To incentivise AF detection, the Health Check programme should record pulse rhythm checks as it does other checks such as blood pressure and cholesterol. This would turn existing best practice guidance into a functioning national AF detection route, at relatively low cost, and give the CVD MSF a measurable AF detection metric within the tool it has already chosen.

New technology also presents an opportunity to better integrate pulse rhythm monitoring through the use of newer blood pressure monitors which have built in irregular rhythm detection. Wearables, smartphone devices and blood pressure monitors capable of rhythm detection are expanding where and how AF can be found.[56] The ASPIRE study has now published, combining clinical demographics, NT-proBNP and ECG features into a single risk score that has been shown to be effective in identifying those at risk of AF, and to be cost effective.[57]

Community pharmacy has been shown to be a viable setting for AF case finding, and the popular NHS pharmacy blood pressure service, including in supermarket pharmacies, has the ability to reach those who do not visit their GP.[58, 59] Experts interviewed for this research reported that community outreach events reach substantial numbers of people not seen in general practice for a year. They were also clear about the preconditions: extending pharmacy case finding to AF requires funding, suitable devices and training, and any detection delivered outside general practice needs a defined route for the finding to reach the GP record.[60]

Driving detection of AF makes economic sense. UK modelling of a one off opportunistic screen for AF for everyone at age 65, with treatment for those found, suggests it could prevent up to 5,888 strokes over the decade to 2030 and reduce health and social care costs by up to £654.6 million.[61] Reviews find both systematic and opportunistic case finding in those aged 65 and over more cost effective than routine care, and trials of systematic screening have shown that it increases both AF detection and the start of anticoagulation compared with usual care.[62]

Recommendations: what the next CVD MSF update and its delivery plan should include

1) Make AF detection a priority action within the finding the missing millions theme, with a detection metric (recorded AF prevalence against expected prevalence) and an equity metric, reported at ICB and primary care network level
2) Amend the NHS Health Check so that pulse rhythm assessment is a required, recorded and returned element of every Check: specify blood pressure devices with irregular rhythm detection for the programme, add pulse rhythm result and onward referral fields to the Health Check dataset and quarterly data return, and update the best practice guidance and local authority commissioning standards to require the assessment
3) Set out in the delivery plan's guidance for systems the role of neighbourhood health teams and community pharmacy in AF case finding, extending the NHS pharmacy blood pressure service to include pulse rhythm checks, with the devices, training, funding and route to the GP record specified as conditions of commissioning
4) Use the CVD MSF's innovation adoption work to test and, where effective, roll out validated AF risk prediction tools, such as the approach recommended in the recent ASPIRE study

Case study: Coventry and Warwickshire, a nurse-led community AF clinic.

Coventry and Warwickshire has redesigned its AF pathway around a community nurse-led clinic, piloted from November 2024 to reduce the local burden of AF and to follow the integrated, shared care model set out in the 2024 European Society of Cardiology guidelines. The clinic is deliberately located in the region's most deprived area and accepts referrals from both primary and secondary care. It is staffed by two arrhythmia nurses, overseen by a consultant electrophysiologist at University Hospitals Coventry and Warwickshire, and offers same-day echocardiography, so that community care is integrated with specialist services rather than referred on to them. Every patient receives risk factor management, lifestyle advice and a stroke risk assessment, and patients who need it are listed directly for cardioversion or AF ablation without a further hospital appointment. The pathway is being recognised as an NHS England Blueprint and forms part of the Stroke Association's ten year plan.[63] The first nine months of data show what an integrated pathway delivers. Between November 2024 and August 2025 the nursing team saw 568 new patients, 428 of whom had a same-day echocardiogram. 553 were anticoagulated, 167 were listed directly for cardioversion, 102 were referred directly for AF ablation and 299 received medical treatment. Waiting times for initial specialist input fell from an average of 15.3 weeks to 5.1 weeks. Around a quarter of patients (137) avoided an A&E attendance for a fast heart rate and 80 avoided a hospital admission, and same-day echocardiography identified early heart failure in 134 patients (23.6 per cent), allowing treatment to start promptly. The wider prize is substantial: Coventry and Warwickshire sees around 1,400 strokes a year, a quarter of them in people with known AF, of whom only 61.8 per cent were anticoagulated before their stroke against a national average of 72.7 per cent. The clinical team estimate that closing that gap would prevent around 92 strokes a year in the region, saving between £920,000 and £1.84 million in acute admission costs alone.[64] The trust has since recruited a dedicated community AF nurse specialist post[65], and is an early adopter of pulsed-field ablation, giving patients found through the clinic a local route to rhythm control.[66] The Stroke Association, which identified the programme in interview for this research described it as a targeted, one stop approach that has been successful in reaching diverse communities.[67] For the CVD MSF, Coventry and Warwickshire shows what happens when detection is attached to a defined treatment route: faster treatment, fewer emergency attendances, and a measurable path to fewer strokes, delivered by two nurses and a consultant in a community setting.



Delivering better, more coordinated AF care

THE CHALLENGE

Finding people with AF only delivers if diagnosis leads quickly to effective treatment. Stroke registry data show that most AF related strokes occur in people whose AF was unknown, untreated or undertreated, and that most could be prevented through detection before a stroke occurs and treatment of those at increased risk.[68] Around a third of AF cases recorded in hospital are missing from primary care records, and those patients are less likely to be anticoagulated and more likely to die.[69]

The patient pathway after diagnosis is fragmented. Patient organisations and clinicians interviewed for this research described a typical journey of delayed diagnosis, prolonged management in primary care, late referral to a general cardiologist once symptoms become troublesome, medication first and specialist rhythm assessment last. The CVD MSF sets no specific timescale or measure for any stage of this journey. Public health commissioners described being able to evidence that checks were delivered but not what any check led to, and GPs warned that a finding recorded but not acted on can be worse than no check at all.[70]

THE OPPORTUNITY

Effective AF care models can help improve care and treatment outcomes and often involve the following attributes:

- **Integration**, so that stroke prevention, symptom control and management of other conditions are handled together rather than in separate silos
- **Care coordination**, so that someone is responsible for making sure each patient moves through the pathway
- **Digital and community based delivery**, so that care happens closer to home and hospital admissions are avoided

Examples of these are set out below and they align directly with the CVD MSF's shifts towards proactive, joined up and community based care.

Integrated care

The Atrial Fibrillation Better Care (ABC) pathway, endorsed by European guidelines, combines stroke avoidance, better symptom management and comorbidity control, and is consistently associated with significant reductions in stroke, heart attack and death.[71] Modelling for England finds that full implementation by 2040 could prevent up to 18,622 strokes and 26,890 bleeds, save up to 80,653 lives and cut NHS costs by up to £719.6 million in that year.[72]

Care coordination

The British Heart Foundation pilots placing arrhythmia care coordinators in NHS Tayside and NHS Lanarkshire improved detection and management, with Lanarkshire increasing anticoagulant prescribing and cutting expected AF related strokes by 14 per cent (seventy strokes) within a year.[73]

Care in the community

AF virtual wards have reduced cost per admission by £635 and cut average inpatient stays by three days, with only 4 per cent of patients re-attending within three months, and the model is now being tested across multiple NHS sites.[74, 75, 76]

Recommendations: what the next CVD MSF update and its delivery plan should include

5) Attach a treatment expectation to the case finding priority: a defined maximum time from AF diagnosis to a documented treatment decision, measured through the CVD MSF dashboard
6) Set out in guidance for systems an integrated AF pathway on the ABC model, covering general practice, emergency and secondary care including cardiology and electrophysiology, with defined referral criteria and timescales from diagnosis to specialist rhythm assessment, and with named responsibility for coordination
7) Spread proven models, including arrhythmia care coordination and AF virtual wards, through the CVD MSF's innovation and delivery mechanisms

Case study: Leicester, a digitally enabled AF virtual ward.

University Hospitals of Leicester has developed an AF virtual ward that treats patients who would otherwise be admitted, or discharges them early, using remote monitoring and daily review by the arrhythmia team. Patients presenting with AF who are clinically stable are given a wearable monitor and managed at home, with rate and rhythm control started or adjusted, anticoagulation reviewed, and escalation to hospital if needed. In the first published cohort of fifty virtual admissions, 49 hospital admissions were avoided,[77] and a subsequent single centre evaluation found the cost per admission was £635 lower than for matched inpatients, that average length of stay fell by three days, and that only 4 per cent of patients re-attended within three months.[78] The model is now being tested across multiple NHS sites with National Institute for Health and Care Research funding.[79] Leicester shows that acute AF care can move out of hospital safely and at lower cost, which is precisely the shift from hospital to community that the CVD MSF and the 10 Year Health Plan set out to deliver.



The right treatment for the right AF patient at the right time

THE CHALLENGE

Anticoagulation reduces the risk of AF related stroke by around two-thirds[80], yet uptake is patchy and variable. When the 2019 national ambition of 90 per cent was set, 84 per cent of known high risk patients were optimally managed,[81] and this measure only counts people already on general practice registers: it does not capture the 425,000 people whose AF is undiagnosed.

Anticoagulation alone does not treat the rhythm itself or the symptoms patients live with, and for up to 48 per cent of AF patients, antiarrhythmic drugs do not work or are not tolerated.[82] Patient organisation representatives and clinicians interviewed for this research described a recurring pathway problem: patients are referred to a general cardiologist and prescribed medication, rather than being assessed for ablation, with specialist rhythm assessment coming late if at all.[83]

The length of time between diagnosis and ablation treatment is of particular importance. A diagnosis to ablation time of under a year is linked to significantly lower AF recurrence and reduced all-cause mortality, and waiting more than a year is associated with a 70 per cent increased risk of recurrence in paroxysmal AF.[84] Late referral therefore reduces the benefit of the treatment and worsens outcomes for the patient.

Current NHS access to ablation is low and varies widely. Only 2.7 per cent of AF patients in England have had ablation treatment. The ten ICBs with the highest rates are all in the south of England, with Sussex the highest at 5.79 per cent, while many ICBs record rates below 2 per cent.[85] Across European Society of Cardiology member countries the median rate of AF ablation is 151 procedures per million people a year, with the best served countries performing several times that number.[86] Across all heart rhythm disorders, ablation rates in the UK are well below those in comparable countries: 301 procedures per million people in 2023, against 1,094 in France in 2024.[87]

THE OPPORTUNITY

Getting more AF patients onto the right treatment, at the right time, is one of the most direct routes to the CVD MSF's ambition of fewer strokes and fewer premature deaths.

Therapies based on newer oral anticoagulants deliver lower total healthcare costs per patient than warfarin, driven by fewer complications and admissions.[88] For patients whose symptoms are not controlled by, or who cannot tolerate, antiarrhythmic drugs, catheter ablation offers an important alternative. The NICE recommended annual AF review is the natural point to identify these patients, alongside checking anticoagulation adherence.[89]

The clinical evidence for catheter ablation has strengthened decisively over the past decade. Compared with medical therapy, catheter ablation reduces the risk of ischaemic stroke after 30 days by 37 per cent, death by 27 per cent and heart failure hospitalisation by 32 per cent.[90] It achieves better rhythm control and lower recurrence than medication,[91] delivers a 37 per cent improvement in quality of life,[92] and in a study of a standardised modern ablation protocol, 94 per cent of patients with paroxysmal AF were free from arrhythmia recurrence one year after a single procedure.[93]

As a result of this strengthened evidence the 2024 European Society of Cardiology guidelines for the management of AF now recommend catheter ablation as a first line rhythm control option for patients with symptomatic paroxysmal AF, and as a second line option in persistent AF where antiarrhythmic drugs have not worked.[94, 95]

In England, NICE guidance recommends catheter ablation for people whose AF is not controlled by, or who cannot take, antiarrhythmic drugs[96] and in 2025 NICE recommended pulsed-field ablation, a faster and safer next generation technique, as a treatment option for AF.[97]

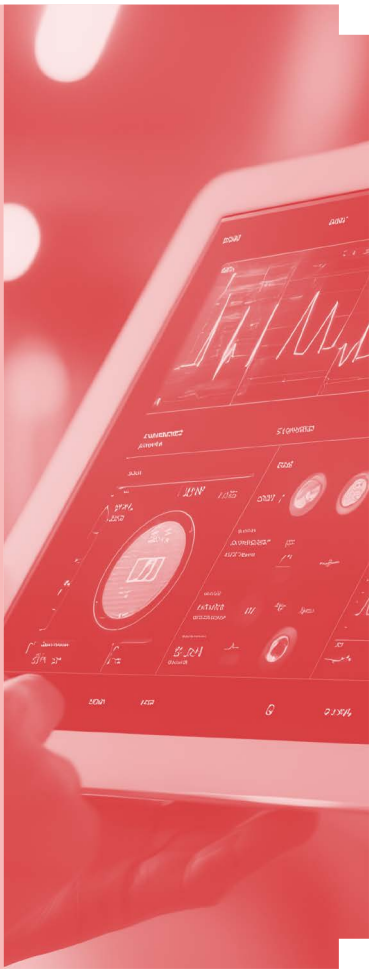
NICE's own economic modelling also found catheter ablation more cost effective over a lifetime than continued drug treatment for people in whom antiarrhythmic drugs have failed.[98] It also avoids years of ineffective medication with potentially unpleasant side effects, repeated appointments, admissions and the downstream costs of stroke and heart failure.

The next review of the MSF should work to bring the framework into line with recent clinical evidence and the value-based procurement approach for medical technology, which says the NHS should judge spending decisions on whole-life value.[99] This sees contracts awarded not on the basis of unit price, but on the value a product delivers to patients, the workforce and the wider system over its whole life, with at least 60 per cent of the scoring weighted to those value domains and whole-life cost capped at 40 per cent. The approach is being piloted by 13 NHS trusts and by NHS Supply Chain, whose cardiology and vascular framework is one of the first tenders to use it, with wider roll out to follow evaluation of the pilots.[100]

Finally, there is an opportunity to improve equity in access and outcomes for AF patients, which is a key objective of the CVD MSF, by addressing the unwarranted variation in access to ablation treatment.[101] Publishing ablation access data through the framework's accountability metrics would make this variation visible and actionable for the first time.[102]

Case study: Sussex, a locally commissioned service to close the anticoagulation gap.

Sussex has used a locally commissioned service in general practice to tackle variation in the treatment of AF. The service, commissioned from 2022, is the protect element of the national detect, protect, perfect approach, and takes the form of an annual systematic audit: every patient on a practice's AF register who is at high risk of stroke and not anticoagulated must have their record individually reviewed, earlier decisions not to anticoagulate critically re-examined, and the outcome recorded, with a 95 per cent completion standard. Practices receive comparative data on their own anticoagulation rates, hold an annual education session, and are paid according to the size of their AF register rather than the number of patients reviewed, a design intended to be equitable between practices with larger and smaller treatment gaps. In 2022/23, 89.0 per cent of high risk AF patients in Sussex were anticoagulated, below the national 90 per cent ambition; the service set an aspiration of 92 per cent by 2027, measured across the whole Sussex population and counting patients excluded from QOF reporting.[103] The ICB's cardiovascular clinical lead told this research that the service was designed to reduce variation between practices rather than simply to raise the average, and that on her account it took the system from below the national anticoagulation target to above it.[104] Separately, on Future Health Research analysis of NHS England and NHS Digital data, Sussex also has the highest rate of AF ablation of any ICB in England.[105] For the CVD MSF, Sussex shows how a defined treatment expectation, systematic review and practice level comparative data can be combined to close a treatment gap within existing primary care contracts.



Recommendations: what the next CVD MSF update and its delivery plan should include

8) Make treatment to target for AF a priority action in the driving treatment to target theme, with the 90 per cent anticoagulation ambition restored as its metric and adherence support set out in guidance for systems
9) Include the NICE recommended annual AF treatment review in guidance for systems, covering symptoms, anticoagulation adherence and eligibility for rhythm management referral, and measure its completion and outcomes through the CVD MSF dashboard
10) Include ablation treatment within the CVD MSF at its next review, with the delivery plan setting referral expectations in the interim for patients whose AF remains symptomatic or uncontrolled on medication
11) Publish regular ablation activity and diagnosis to ablation times at ICB level from existing national cardiac audit data, integrated into the CVD MSF dashboard so that variation in access is visible alongside the framework's other metrics
12) Require that AF ablation technologies are procured through the Government's value-based procurement guidance, now being piloted ahead of wider roll out[106]

Delivering and measuring progress

THE CHALLENGE

Delivering the MSF against current service pressures and restructuring is likely to be highly challenging. Experts interviewed for this research described reduced ICB clinical capacity following reorganisation, clinical networks under funding pressures, and neighbourhood health structures that are promising but early in formation, with cardiovascular work not yet established.[107]

Data gaps and inconsistency are another difficulty for measuring progress and holding the system to account for the delivery of the CVD MSF. CVDPREVENT already collects AF indicators, but data publication lags, and clinicians interviewed linked delayed feedback directly to challenges in improving patient care.[108]

Uptake of proven innovation also remains too slow, with successful local programmes finding no reliable route to national spread. This has resulted in AF detection devices distributed under earlier programmes left unused because practices lacked the capacity and confidence to adopt them, national innovation schemes that have not yet lifted uptake sufficiently, and locally developed patient resources, pathways and tools with no national route to adoption, so that each area often has to recreate them.[109]

THE OPPORTUNITY

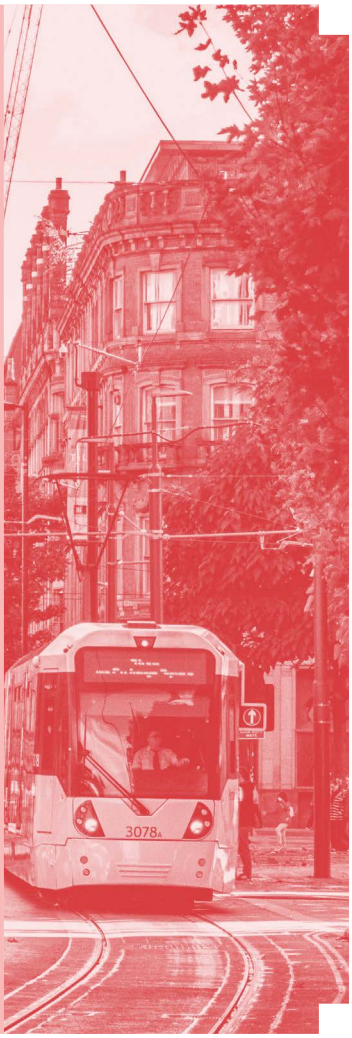
A public dashboard carrying the MSF's indicators is already in development, with the aim of reaching primary care network level – where metrics allow.[110] Adding a defined AF indicator set would make the whole AF pathway visible for the first time: register size against expected prevalence, anticoagulation among those eligible, time from detection to treatment decision, access to ablation, and AF related stroke admissions. Each maps directly onto the CVD MSF's own measures of success: premature mortality, morbidity, NHS demand and unwarranted variation.

There is an opportunity to also utilise the delivery plan to set guidance for systems on AF treatment and care pathways, and define who is accountable for what in an evolving healthcare system landscape. For example, who leads on pathway improvement as clinical networks change, and what role neighbourhood health teams play in delivering the CVD MSF. The delivery plan should also set concrete review points, with annual reporting and a fuller review at three years, similar to the national cancer plan.[111]

The CVD MSF also has a proven vehicle for spreading innovation. The Health Innovation Networks delivered the Detect, Protect, Perfect programme and remain the channel through which the framework's innovation adoption commitments can be delivered for AF.[112] The Department of Health and Social Care's plan for an Atlas of Innovation, being developed alongside the framework, provides a route for showcasing good AF practice as part of CVD MSF delivery. Experts interviewed identified strong local AF innovation, from population optimisation tools to targeted community detection models, ready to scale with the right exposure.[113]

Case study: Greater Manchester, system led prevention at scale.

Greater Manchester has the highest cardiovascular death rate in England, more than twice the national average, with nearly 5,500 deaths a year.[114] In response NHS Greater Manchester has run a system wide prevention programme through general practice, known as BeCCoR (Beyond Core Contract Reviews), which pays practices to go beyond their standard contract to identify patients at highest risk of heart attack, stroke and diabetes complications and give them an enhanced review covering blood pressure, cholesterol, kidney function, blood sugar, weight and smoking, with treatment started or optimised where needed. In its first year the programme is estimated to have prevented around 380 major health emergencies, including 180 heart attacks and 200 strokes, and to have saved between £6 million and £8 million in health and care costs. For AF specifically, protective anticoagulation for patients with irregular heart rhythms is credited with preventing 53 strokes. The programme deliberately focused on the most deprived areas, where cardiovascular disease and diabetes are most common.[115] The programme builds on a decade of AF work in Greater Manchester through Health Innovation Manchester, which delivered the national detect, protect, perfect programme locally, deployed more than 400 mobile ECG devices across GP practices and community settings, and used community partners including fire and rescue services and women's groups in South Asian communities to reach people who do not use routine services.[116, 117] Interviewees for this research also pointed to Greater Manchester for the way stroke prevention has been connected to neighbourhood health, with prevention accelerator work under way and a funded evaluation.[118] For the CVD MSF, Greater Manchester shows an ICB using its own contracting levers to deliver treatment to target at scale, measuring the outcome in strokes and heart attacks prevented, and focusing the effort where inequality is greatest.



Recommendations: what the next CVD MSF update and its delivery plan should include

13) Add a defined AF indicator set to the CVD MSF dashboard at ICB and primary care network level, covering detection, treatment decision, annual review, access to ablation and AF related stroke admissions, and speed up CVDPREVENT publication so systems can track their own progress

14) Introduce annual reporting on progress with the MSF and include an assessment of progress and challenges in improving AF care

15) Commit in the delivery plan to a fuller review of the CVD MSF at three years, on the model of the national cancer plan

16) Include AF case finding and treatment within the CVD MSF's innovation adoption work, with the Health Innovation Networks as the delivery channel and AF good practice showcased through the planned Atlas of Innovation

Conclusion

The CVD MSF's central ambition is to reduce premature mortality from cardiovascular disease by 25 per cent. Delivering this means fewer strokes, fewer premature deaths, reduced pressure on the NHS and social care, and more people living longer in good health and in work.

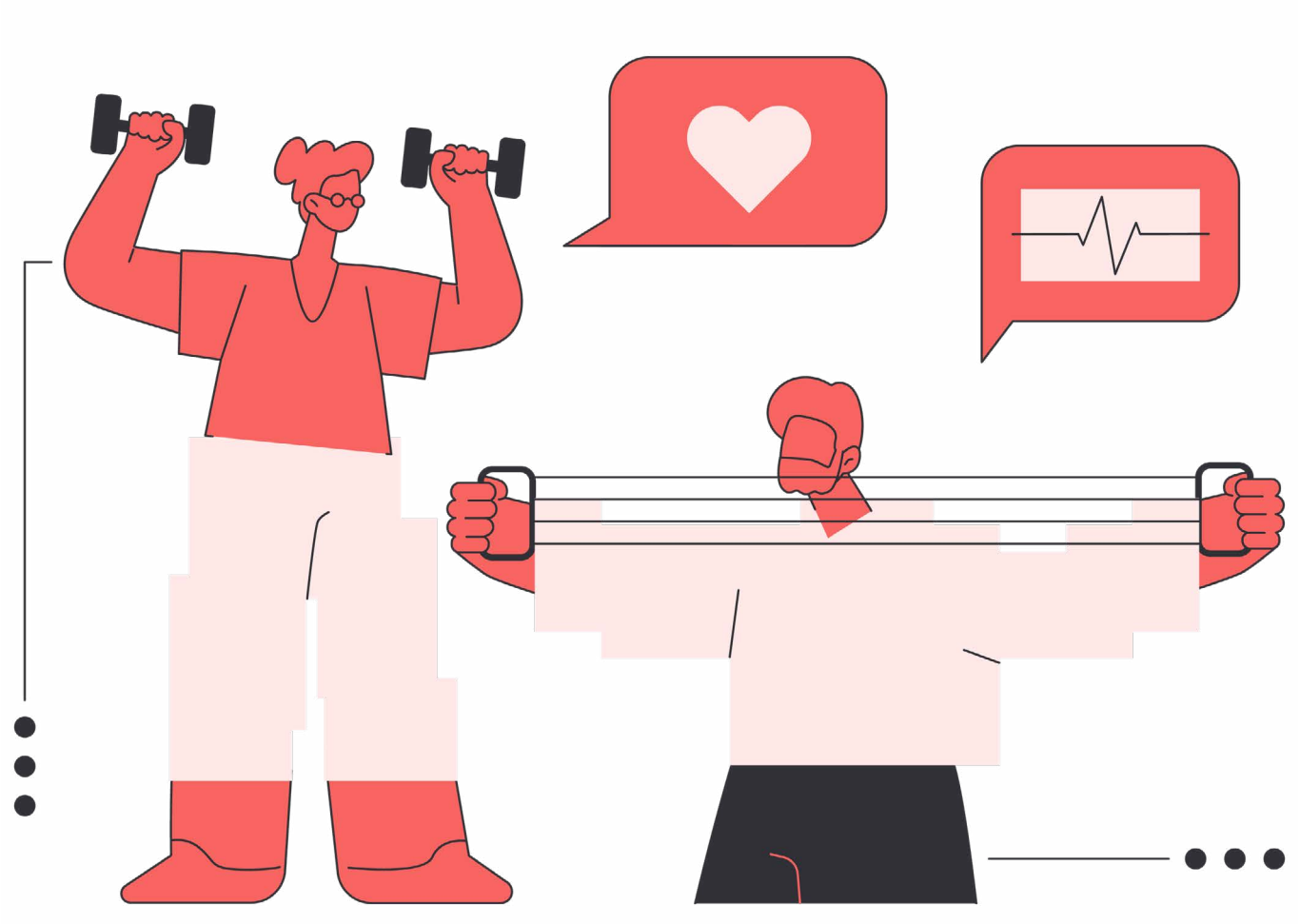
Action on AF is one of the most direct ways to deliver on this.

The CVD MSF recognises AF as a condition the NHS must detect but is not clear on how this is to be delivered and importantly what should then happen when someone is diagnosed. While there are some non-priority recommendations on the use of anticoagulants, there is nothing about the use of ablation which European guidelines now recommend as a first line treatment option for paroxysmal AF.

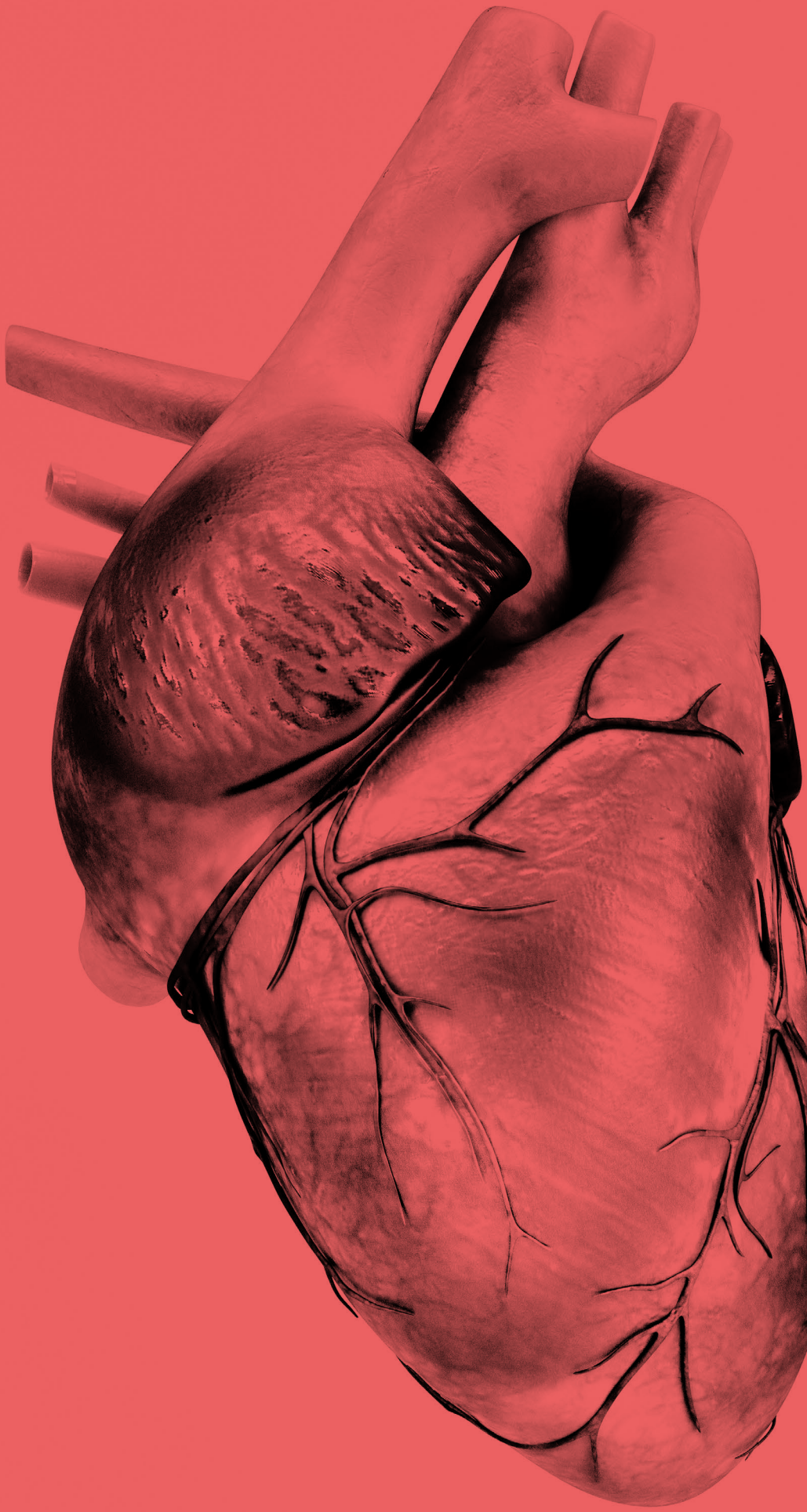
The delivery plan presents an immediate opportunity to address these gaps by making the NHS Health Check programme prioritise AF diagnosis, ensuring every diagnosis leads quickly to a treatment decision, opening clear routes to the right treatment for the right patient, and measuring progress at every stage.

Much of this does not require a new programme or significant new money. It requires the MSF's commitments to be adapted, existing data to be published faster, NICE guidance to be followed and accountability mechanisms, including metrics and equity measures and innovation channels, to be applied to AF.

Acting on the recommendations in this report would mean fewer strokes, fewer premature deaths, less pressure on the NHS, social care and family carers, and more people living longer, healthier lives in work, all of which are ambitions set by the CVD MSF.



Appendix



ABOUT THIS REPORT

This report examines how increased action on atrial fibrillation can support national and local NHS organisations in delivering the CVD MSF. It has been informed by an extensive literature and evidence review of 30 documents,[119] and by a programme of stakeholder interviews conducted between February and September 2026 with the Department of Health and Social Care, national charities, patient organisations, ICB clinical leadership, local government public health and Health Innovation Network leadership. All interviews were held on a background basis and findings are reported without attribution.[120]

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References

1 British Heart Foundation, Facts and figures, last reviewed December 2025, https://www.bhf.org.uk/what-we-do/news-from-the-bhf/contact-the-press-office/facts-and-figures

2 British Heart Foundation and partner organisations, Tackling the UK's biggest killers: a consensus for cardiovascular disease, 2025, https://www.bsecho.org/Public/Public/News/Articles/2025/2025-02/202502-BHF.aspx

3 British Heart Foundation press releases on atrial fibrillation prevalence, 2023 and 2025, https://www.bhf.org.uk/what-we-do/news-from-the-bhf/news-archive/2023/may/new-figures-show-the-number-of-uk-people-with-heart-rhythm-condition and https://www.bhf.org.uk/what-we-do/news-from-the-bhf/news-archive/2025/may/worst-start-to-decade-heart-disease-50-years-bhf-strategy-launch

4 NICE, Atrial fibrillation: how common is it?, NICE Clinical Knowledge Summaries, https://cks.nice.org.uk/topics/atrial-fibrillation/background-information/prevalence/

5 Wahab et al., Screening for atrial fibrillation: a narrative review, British Journal of Cardiology, 2025, https://bjcardio.co.uk/2025/03/screening-for-atrial-fibrillation-a-narrative-review/

6 Burdett P and Lip G Y H, Atrial fibrillation in the UK: predicting costs of an emerging epidemic recognizing and forecasting the cost drivers of atrial fibrillation-related costs, European Heart Journal: Quality of Care and Clinical Outcomes, 2022, https://pubmed.ncbi.nlm.nih.gov/33346822/

7 Public Health England, Health matters: preventing cardiovascular disease, GOV.UK, 2019, https://www.gov.uk/government/publications/health-matters-preventing-cardiovascular-disease/health-matters-preventing-cardiovascular-disease

8 Health Innovation Network, Atrial fibrillation: Detect, Protect, Perfect programme, https://thehealthinnovationnetwork.co.uk/programmes/cardiovascular-disease/atrial-fibrillation/

9 Department of Health and Social Care and NHS England, Cardiovascular disease modern service framework: a cardiovascular-kidney-metabolic approach, GOV.UK, 7 July 2026, https://www.gov.uk/government/publications/cardiovascular-disease-modern-service-framework

10 Department of Health and Social Care and NHS England, Cardiovascular disease modern service framework: a cardiovascular-kidney-metabolic approach, GOV.UK, 7 July 2026, https://www.gov.uk/government/publications/cardiovascular-disease-modern-service-framework

11 British Cardiovascular Society, BCS comments on the Government's CVD MSF, July 2026, https://britishcardiovascularsociety.org.uk/update/bcs-comments-on-the-governments-cvd-msf/

12 British Cardiovascular Society, BCS comments on the Government's CVD MSF, statement by Professor Andre Ng, President, July 2026, https://britishcardiovascularsociety.org.uk/update/bcs-comments-on-the-governments-cvd-msf/

13 Future Health Research analysis of NHS England and NHS Digital data on AF ablation activity by integrated care board, 2026.

14 Wahab et al., Screening for atrial fibrillation: a narrative review, British Journal of Cardiology, 2025, https://bjcardio.co.uk/2025/03/screening-for-atrial-fibrillation-a-narrative-review/

15 NICE, Atrial fibrillation: how common is it?, NICE Clinical Knowledge Summaries, https://cks.nice.org.uk/topics/atrial-fibrillation/background-information/prevalence/

16 Freedman B et al., Stroke prevention in atrial fibrillation, The Lancet, 2016, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)31257-0/abstract

17 British Heart Foundation press releases on atrial fibrillation prevalence, 2023 and 2025, https://www.bhf.org.uk/what-we-do/news-from-the-bhf/news-archive/2023/may/new-figures-show-the-number-of-uk-people-with-heart-rhythm-condition and https://www.bhf.org.uk/what-we-do/news-from-the-bhf/news-archive/2025/may/worst-start-to-decade-heart-disease-50-years-bhf-strategy-launch

18 NICE, Atrial fibrillation: how common is it?, NICE Clinical Knowledge Summaries, https://cks.nice.org.uk/topics/atrial-fibrillation/background-information/prevalence/

19 British Heart Foundation, Number of UK people with heart rhythm condition rises by 50% in a decade, May 2023, https://www.bhf.org.uk/what-we-do/news-from-the-bhf/news-archive/2023/may/new-figures-show-the-number-of-uk-people-with-heart-rhythm-condition

20 Wahab et al., Screening for atrial fibrillation: a narrative review, British Journal of Cardiology, 2025, https://bjcardio.co.uk/2025/03/screening-for-atrial-fibrillation-a-narrative-review/

21 Chung S C et al., Atrial fibrillation epidemiology, disparity and healthcare contacts: a population-wide study of 5.6 million individuals, The Lancet Regional Health: Europe, 2021, https://pmc.ncbi.nlm.nih.gov/articles/PMC8351189/

22 Burdett P and Lip G Y H, Atrial fibrillation in the UK: predicting costs of an emerging epidemic recognizing and forecasting the cost drivers of atrial fibrillation-related costs, European Heart Journal: Quality of Care and Clinical Outcomes, 2022, https://pubmed.ncbi.nlm.nih.gov/33346822/

23 Aliot E et al., Quality of life in patients with atrial fibrillation: how to assess it and how to improve it, Europace, 2014, https://academic.oup.com/europace/article/16/6/787/561082

24 Van Gelder I C et al., 2024 ESC Guidelines for the management of atrial fibrillation, European Heart Journal, 2024, 45(36): 3314 to 3414, https://academic.oup.com/eurheartj/article/45/36/3314/7738779

25 Sadlonova et al., Generalized anxiety is a predictor of impaired quality of life in patients with atrial fibrillation: findings from the prospective observational ARENA study, 2025, https://pmc.ncbi.nlm.nih.gov/articles/PMC11995162/

26 Chung et al., Cognitive impairment and dementia in atrial fibrillation: a population study of 4.3 million individuals, JACC: Advances, 2023, https://www.jacc.org/doi/10.1016/j.jacadv.2023.100655

27 Chung S C et al., Atrial fibrillation epidemiology, disparity and healthcare contacts: a population-wide study of 5.6 million individuals, The Lancet Regional Health: Europe, 2021, https://pmc.ncbi.nlm.nih.gov/articles/PMC8351189/

28 Shantsila et al., Atrial fibrillation: comorbidities, lifestyle, and patient factors, 2024, https://pmc.ncbi.nlm.nih.gov/articles/PMC10866737/

29 Chung S C et al., Atrial fibrillation epidemiology, disparity and healthcare contacts: a population-wide study of 5.6 million individuals, The Lancet Regional Health: Europe, 2021, https://pmc.ncbi.nlm.nih.gov/articles/PMC8351189/

30 Routen A et al., Variations in documentation of atrial fibrillation predicted by population and service level characteristics in primary health care in England, Journal of Public Health, 2022, https://pmc.ncbi.nlm.nih.gov/articles/PMC10017082/

31 Burdett P and Lip G Y H, Atrial fibrillation in the UK: predicting costs of an emerging epidemic recognizing and forecasting the cost drivers of atrial fibrillation-related costs, European Heart Journal: Quality of Care and Clinical Outcomes, 2022, https://pubmed.ncbi.nlm.nih.gov/33346822/

32 Buja et al., The cost of atrial fibrillation: a systematic review, Value in Health, 2024, https://www.valueinhealthjournal.com/article/S1098-3015(24)00035-4/fulltext

33 Kassianos et al., The non-anticoagulation costs of atrial fibrillation management: findings from an observational study in NHS primary care, 2014, https://pubmed.ncbi.nlm.nih.gov/24744805/

34 Patel A, Berdunov V, Quayyum Z, King D, Knapp M and Wittenberg R, Estimated societal costs of stroke in the UK based on a discrete event simulation, Age and Ageing, 2020, 49(2): 270 to 276, https://doi.org/10.1093/ageing/afz162

35 Camm et al., Role of primary and secondary care data in atrial fibrillation ascertainment: impact on risk factor associations, patient management, and mortality in UK Biobank, 2025, https://pmc.ncbi.nlm.nih.gov/articles/PMC11799740/

36 Health Innovation Network, Atrial fibrillation: Detect, Protect, Perfect programme, https://thehealthinnovationnetwork.co.uk/programmes/cardiovascular-disease/atrial-fibrillation/

37 NHS England, The NHS Long Term Plan, January 2019, https://www.england.nhs.uk/2019/01/long-term-plan/

38 Public Health England, Health matters: preventing cardiovascular disease, GOV.UK, 2019, https://www.gov.uk/government/publications/health-matters-preventing-cardiovascular-disease/health-matters-preventing-cardiovascular-disease

39 Wahab et al., Screening for atrial fibrillation: a narrative review, British Journal of Cardiology, 2025, https://bjcardio.co.uk/2025/03/screening-for-atrial-fibrillation-a-narrative-review/

40 Department of Health and Social Care and NHS England, 10 Year Health Plan: Fit for the Future, GOV.UK, 3 July 2025, https://www.gov.uk/government/publications/10-year-health-plan-for-england-fit-for-the-future

41 Health Innovation Network, Atrial fibrillation: Detect, Protect, Perfect programme, https://thehealthinnovationnetwork.co.uk/programmes/cardiovascular-disease/atrial-fibrillation/

42 Department of Health and Social Care and NHS England, Cardiovascular disease modern service framework: a cardiovascular-kidney-metabolic approach, GOV.UK, 7 July 2026, https://www.gov.uk/government/publications/cardiovascular-disease-modern-service-framework

43 Department of Health and Social Care and NHS England, Cardiovascular disease modern service framework: a cardiovascular-kidney-metabolic approach, GOV.UK, 7 July 2026, https://www.gov.uk/government/publications/cardiovascular-disease-modern-service-framework

44 Department of Health and Social Care and NHS England, Cardiovascular disease modern service framework: a cardiovascular-kidney-metabolic approach, GOV.UK, 7 July 2026, https://www.gov.uk/government/publications/cardiovascular-disease-modern-service-framework

45 British Cardiovascular Society, BCS comments on the Government's CVD MSF, July 2026, https://britishcardiovascularsociety.org.uk/update/bcs-comments-on-the-governments-cvd-msf/

46 NICE, Atrial fibrillation: how common is it?, NICE Clinical Knowledge Summaries, https://cks.nice.org.uk/topics/atrial-fibrillation/background-information/prevalence/

47 Routen A et al., Variations in documentation of atrial fibrillation predicted by population and service level characteristics in primary health care in England, Journal of Public Health, 2022, https://pmc.ncbi.nlm.nih.gov/articles/PMC10017082/

48 Camm et al., Role of primary and secondary care data in atrial fibrillation ascertainment: impact on risk factor associations, patient management, and mortality in UK Biobank, 2025, https://pmc.ncbi.nlm.nih.gov/articles/PMC11799740/

49 Wahab et al., Screening for atrial fibrillation: a narrative review, British Journal of Cardiology, 2025, https://bjcardio.co.uk/2025/03/screening-for-atrial-fibrillation-a-narrative-review/

50 Department of Health and Social Care and NHS England, Cardiovascular disease modern service framework: a cardiovascular-kidney-metabolic approach, GOV.UK, 7 July 2026, https://www.gov.uk/government/publications/cardiovascular-disease-modern-service-framework

51 Department of Health and Social Care and NHS England, Cardiovascular disease modern service framework: a cardiovascular-kidney-metabolic approach, GOV.UK, 7 July 2026, https://www.gov.uk/government/publications/cardiovascular-disease-modern-service-framework

52 Wahab et al., Screening for atrial fibrillation: a narrative review, British Journal of Cardiology, 2025, https://bjcardio.co.uk/2025/03/screening-for-atrial-fibrillation-a-narrative-review/

53 NIHR Cambridge Biomedical Research Centre, Cambridge-led study becomes largest randomised atrial fibrillation screening trial ever undertaken, April 2025, https://cambridgebrc.nihr.ac.uk/2025/04/23/cambridge-led-study-becomes-largest-randomised-atrial-fibrillation-screening-trial-ever-undertaken/

54 Public Health England, NHS Health Check best practice guidance: for commissioners and providers, October 2019 (PHE publications gateway number GW-1198), section 4.1 Systolic and diastolic blood pressure, page 20, and section 6.5 Identifying individuals with an irregular pulse, page 43, https://www.healthcheck.nhs.uk/seecmsfile/?id=1480

55 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

56 Kalarus Z et al., Searching for atrial fibrillation: looking harder, looking longer, and in increasingly sophisticated ways. An EHRA position paper, Europace, 2023, https://academic.oup.com/europace/article/25/1/185/6763073

57 Cameron et al., AF screening to prevent ischaemic stroke and health economic impacts (the ASPIRE study), abstract ESOC2026LB151, European Stroke Journal, 2026, 11(Supplement 1), https://academic.oup.com/esj/article/11/Supplement_1/i1013/8668034

58 Savickas V et al., Pharmacists detecting atrial fibrillation in general practice: a qualitative focus group study, BJGP Open, 2020, https://bjgpopen.org/content/4/3/bjgpopen20x101042

59 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

60 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

61 Burdett P et al., Targeted vs. full population screening costs for incident atrial fibrillation and AF-related stroke for a healthy population aged 65 years in the United Kingdom, 2022, https://pmc.ncbi.nlm.nih.gov/articles/PMC9670327/

62 Wahab et al., Screening for atrial fibrillation: a narrative review, British Journal of Cardiology, 2025, https://bjcardio.co.uk/2025/03/screening-for-atrial-fibrillation-a-narrative-review/

63 Wood S, Singh N, Kullar K, Brooker C, Santos S, Fereday L, Geissler S, Lim V G, Osman F, Eftekhari H and Panikker S, An innovative strategy and national framework for atrial fibrillation care integration: early insights from a nine-month pilot of a nurse-led community clinic in Coventry and Warwickshire to reduce the local burden, abstract 361, Heart, 2026, volume 112, supplement 1, A39, https://heart.bmj.com/content/112/Suppl_1/A39.2

64 Wood S, Singh N, Kullar K, Brooker C, Santos S, Fereday L, Geissler S, Lim V G, Osman F, Eftekhari H and Panikker S, An innovative strategy and national framework for atrial fibrillation care integration: early insights from a nine-month pilot of a nurse-led community clinic in Coventry and Warwickshire to reduce the local burden, abstract 361, Heart, 2026, volume 112, supplement 1, A39, https://heart.bmj.com/content/112/Suppl_1/A39.2

65 University Hospitals Coventry and Warwickshire NHS Trust, Atrial Fibrillation Band 7 Clinical Specialist Nurse (Community AF Nurse Specialist), vacancy posted May 2024, https://findajob.dwp.gov.uk/details/14530289

66 University Hospitals Coventry and Warwickshire NHS Trust, Cardiology department page noting the 50th atrial fibrillation patient treated with pulsed field ablation, https://www.uhcw.nhs.uk/our-services-and-people/our-departments/cardiology/

67 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

68 Freedman B et al., Stroke prevention in atrial fibrillation, The Lancet, 2016, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)31257-0/abstract

69 Camm et al., Role of primary and secondary care data in atrial fibrillation ascertainment: impact on risk factor associations, patient management, and mortality in UK Biobank, 2025, https://pmc.ncbi.nlm.nih.gov/articles/PMC11799740/

70 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

71 Stevens et al., The Atrial Fibrillation Better Care pathway for managing atrial fibrillation: a review, Europace, 2021, https://academic.oup.com/europace/article/23/10/1511/6298528

72 Camacho E M and Lip G Y H, Estimating the impact of implementing an integrated care management approach with Atrial fibrillation Better Care (ABC) pathway for patients with atrial fibrillation in England from 2020 to 2040, European Heart Journal: Quality of Care and Clinical Outcomes, 2024, https://pubmed.ncbi.nlm.nih.gov/37697684/

73 British Heart Foundation, Managing atrial fibrillation in primary care, https://www.bhf.org.uk/for-professionals/healthcare-professionals/innovation-in-care/managing-atrial-fibrillation-in-primary-care

74 Kotb et al., Digitally enabled acute care for atrial fibrillation: conception, feasibility and early outcomes of an AF virtual ward, Open Heart, 2023, https://openheart.bmj.com/content/10/1/e002272

75 Saleh et al., Insights from a single centre implementation of a digitally-enabled atrial fibrillation virtual ward, PLOS Digital Health, 2024, https://journals.plos.org/digitalhealth/article?id=10.1371/journal.pdig.0000475

76 NIHR Leicester Biomedical Research Centre, Pioneering treatment using a virtual ward for heart patients to be tested across different NHS sites, 2025, https://leicesterbrc.nihr.ac.uk/pioneering-treatment-using-a-virtual-ward-for-heart-patients-to-be-tested-across-different-nhs-sites/

77 Kotb et al., Digitally enabled acute care for atrial fibrillation: conception, feasibility and early outcomes of an AF virtual ward, Open Heart, 2023, https://openheart.bmj.com/content/10/1/e002272

78 Saleh et al., Insights from a single centre implementation of a digitally-enabled atrial fibrillation virtual ward, PLOS Digital Health, 2024, https://journals.plos.org/digitalhealth/article?id=10.1371/journal.pdig.0000475

79 NIHR Leicester Biomedical Research Centre, Pioneering treatment using a virtual ward for heart patients to be tested across different NHS sites, 2025, https://leicesterbrc.nihr.ac.uk/pioneering-treatment-using-a-virtual-ward-for-heart-patients-to-be-tested-across-different-nhs-sites/

80 Wahab et al., Screening for atrial fibrillation: a narrative review, British Journal of Cardiology, 2025, https://bjcardio.co.uk/2025/03/screening-for-atrial-fibrillation-a-narrative-review/

81 Public Health England, Health matters: preventing cardiovascular disease, GOV.UK, 2019, https://www.gov.uk/government/publications/health-matters-preventing-cardiovascular-disease/health-matters-preventing-cardiovascular-disease

82 Calkins H et al., Treatment of atrial fibrillation with antiarrhythmic drugs or radiofrequency ablation: two systematic literature reviews and meta-analyses, Circulation: Arrhythmia and Electrophysiology, 2009, https://www.ahajournals.org/doi/10.1161/circep.108.824789

83 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

84 Amin A M et al., Impact of diagnosis to ablation time on recurrence of atrial fibrillation and clinical outcomes after catheter ablation: a systematic review and meta-analysis with reconstructed time-to-event data, Circulation: Arrhythmia and Electrophysiology, 2025, https://pubmed.ncbi.nlm.nih.gov/39895523/

85 Future Health Research analysis of NHS England and NHS Digital data on AF ablation activity by integrated care board, 2026.

86 European Society of Cardiology and European Heart Rhythm Association, Arrhythmia care in ESC member countries: the 2025 ESC-EHRA atlas on heart rhythm disorders, Europace, 2025, https://pmc.ncbi.nlm.nih.gov/articles/PMC12284390/

87 European Society of Cardiology, ESC Atlas of Cardiology, Ablations to correct heart rhythm disorders per million people, accessed November 2026, https://eatlas.escardio.org/Atlas/ESC-Atlas-of-Cardiology/Cardiovascular-healthcare-delivery/Electrophysiology/sipcp_ablt_1m_r-ablations-to-correct-heart-rhythm-disorders-per-million-people

88 Buja et al., The cost of atrial fibrillation: a systematic review, Value in Health, 2024, https://www.valueinhealthjournal.com/article/S1098-3015(24)00035-4/fulltext

89 NICE, Atrial fibrillation: diagnosis and management, NICE guideline NG196, 2021, https://www.nice.org.uk/guidance/ng196

90 Montane et al., Catheter and surgical ablation for atrial fibrillation: a systematic review and meta-analysis, 2025, https://pubmed.ncbi.nlm.nih.gov/40587868/

91 Karim et al., Treatment outcomes of catheter ablation versus medical therapy in patients with atrial fibrillation: a systematic review, 2024, https://assets.cureus.com/uploads/review_article/pdf/254956/20240614-13355-10t2kq3.pdf

92 Mark D B et al., Effect of catheter ablation vs medical therapy on quality of life among patients with atrial fibrillation: the CABANA randomized clinical trial, JAMA, 2019, https://jamanetwork.com/journals/jama/fullarticle/2728675

93 Phlips T et al., Improving procedural and one-year outcome after contact force-guided pulmonary vein isolation: the role of interlesion distance, ablation index, and contact force variability in the CLOSE protocol, EP Europace, 2018, https://scispace.com/pdf/improving-procedural-and-one-year-outcome-after-contact-33eqlb4biv.pdf

94 Van Gelder I C et al., 2024 ESC Guidelines for the management of atrial fibrillation developed in collaboration with the European Association for Cardio-Thoracic Surgery (EACTS), European Heart Journal, 2024, 45: 3314 to 3414, https://doi.org/10.1093/eurheartj/ehae176

95 Fatunde et al., Catheter ablation as the first-line therapy for atrial fibrillation: update on evidence and clinical implications, 2025, https://www.scienceopen.com/hosted-document?doi=10.15212/CVIA.2025.0001

96 NICE, Atrial fibrillation: diagnosis and management, NICE guideline NG196, 2021, https://www.nice.org.uk/guidance/ng196

97 NICE, Pulsed-field ablation for atrial fibrillation, interventional procedures guidance IPG806, 2025, https://www.nice.org.uk/guidance/ipg806

98 NICE, Atrial fibrillation: diagnosis and management, NICE guideline NG196, 2021, https://www.nice.org.uk/guidance/ng196

99 Department of Health and Social Care, Value-based procurement for medical technology, GOV.UK, 2024 (updated 2025), https://www.gov.uk/government/publications/value-based-procurement-for-medical-technology

100 Department of Health and Social Care, NHS to invest in pioneering tech to drive down waiting lists, press release, GOV.UK, October 2025, https://www.gov.uk/government/news/nhs-to-invest-in-pioneering-tech-to-drive-down-waiting-lists. The release confirms that 13 NHS trusts are piloting the guidance and that the Department is partnering with NHS Supply Chain and the NHS London Procurement Partnership to roll it out, including through NHS Supply Chain's cardiology and vascular framework.

101 Future Health Research analysis of NHS England and NHS Digital data on AF ablation activity by integrated care board, 2026.

102 Department of Health and Social Care and NHS England, Cardiovascular disease modern service framework: a cardiovascular-kidney-metabolic approach, GOV.UK, 7 July 2026, https://www.gov.uk/government/publications/cardiovascular-disease-modern-service-framework

103 NHS Sussex, Atrial Fibrillation Protect Audit Locally Commissioned Service, service specification SSX-LCS013, 1 April 2022 to 30 September 2025, reviewed May 2024, https://int.sussex.ics.nhs.uk/wp-content/uploads/2022/03/SSX-LCS013-Atrial-Fibrillation-Protect-Audit-LCS-v2-Jun24.pdf

104 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

105 Future Health Research analysis of NHS England and NHS Digital data on AF ablation activity by integrated care board, 2026.

106 Ablation catheters used for AF are within the scope of NHS England's Specialised Services Devices Programme (formerly the High Cost Tariff Excluded Devices programme). Under the programme, trusts commissioned to provide specialised services purchase these devices through a national supply route via NHS Supply Chain, and their cost is reimbursed by NHS England separately from the national tariff. Value-based procurement principles would therefore apply to AF ablation technologies at national level, through NHS Supply Chain frameworks, rather than through local commissioning. NHS England, National supply system for high-cost tariff-excluded devices, https://www.england.nhs.uk/commissioning/spec-services/key-docs/medical-devices/

107 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

108 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

109 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

110 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

111 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

112 Health Innovation Network, Atrial fibrillation: Detect, Protect, Perfect programme, https://thehealthinnovationnetwork.co.uk/programmes/cardiovascular-disease/atrial-fibrillation/

113 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

114 NHS Greater Manchester Integrated Care Partnership, Preventative care saving lives: life-saving NHS Greater Manchester programme preventing heart attacks and strokes, 15 October 2025, https://gmintegratedcare.org.uk/health-news/preventative-care-saving-lives/

115 NHS Greater Manchester Integrated Care Partnership, Preventative care saving lives: life-saving NHS Greater Manchester programme preventing heart attacks and strokes, 15 October 2025, https://gmintegratedcare.org.uk/health-news/preventative-care-saving-lives/

116 Health Innovation Manchester, Atrial fibrillation: detect, protect and perfect, https://healthinnovationmanchester.com/our-work/atrial-fibrillation-detect-protect-and-perfect/

117 Health Innovation Manchester, Hundreds of people benefit from implementation of wide-ranging health and care innovations across Greater Manchester, April 2019, https://healthinnovationmanchester.com/news-archive/health-care-innovations-spread-in-gm-apr2019/

118 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

119 Future Health Research, Atrial fibrillation literature and evidence review, March 2026.

120 Future Health Research stakeholder interview programme, August to September 2026, conducted on a background, non-attributable basis. See appendix for details.

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