

Scotland's Hearts Need More

A manifesto for the future of heart disease care





Contents

4	Foreword
6	Ambition
8	Introduction
16	The patient experience of cardiology in Scotland
20	Successes and learnings from the Heart Disease Action Plan
24	A Scotland where everyone has a healthier heart for longer: BHF Scotland's vision
28	Priority 1: A focus on preventing heart disease
34	Priority 2: Invest to diagnose heart disease sooner
38	Priority 3: Support people living with heart disease by providing more care in communities
42	Glossary
44	References

Foreword

Heart disease touches every corner of Scotland. Whether through personal experience or that of a loved one, its impact is felt in homes, workplaces, and communities across the country. Today, around 730,000 people in Scotland live with cardiovascular disease, and many more are at risk. Behind these numbers are stories of resilience, challenge, and hope.

Thanks to decades of research and innovation, remarkable progress has been made in improving the lives of those impacted by cardiovascular disease. Survival rates have improved, treatments have advanced, and awareness has grown. BHF Scotland is proud to have powered advances that have helped nearly halve the number of people who die each year from cardiovascular disease in Scotland.

But, despite this progress, we stand at a pivotal moment for those living with cardiovascular disease.

Every 30 minutes, someone in Scotland dies from cardiovascular disease. And for the first time in a generation, we have seen a sustained rise in deaths from these conditions.

This report sets out a clear and urgent call to action. It draws on the voices of those living with cardiovascular disease, the expertise of health professionals, and evidence from across Scotland's health system. It highlights the growing pressures on cardiology services, the inequalities that persist in access and outcomes, and the opportunities we must seize to prevent, diagnose earlier, and support people better in their communities.

As we approach the 2026 Scottish Parliament elections, we urge all political parties to prioritise heart health and join us in committing to the ambition reducing the rate of premature deaths from cardiovascular disease by 25% by 2035.

British Heart Foundation Scotland stands ready to work with the Scottish Parliament, Scottish Government and NHS Scotland to meet the scale of the challenge we face and the improve the lives of the people living with cardiovascular disease.

Together, we can build a Scotland where everyone has a healthier heart for longer.



Dr Sonya Babu-Narayan Clinical Director, British Heart Foundation

As clinicians, we see the profound impact that cardiovascular disease has on the lives of people across Scotland every day. However, we also see the extraordinary progress that has been made. Progress through research, innovation, and the tireless dedication of healthcare professionals to improve outcomes for those living with heart conditions.

Yet the cardiology clinical community, and the services we provide, are under greater pressures than ever before.

The rising burden of cardiovascular disease, growing inequalities in access and outcomes, and increasing pressure on diagnostic and treatment services demand urgent and coordinated action. The evidence is clear: without timely diagnosis, without equitable access to care, and without investment in prevention, we risk reversing decades of progress.

This report is a vital contribution to the national conversation on the future of cardiology in Scotland. It brings together the voices of patients, clinicians, and researchers to set out a compelling vision for change. One that is rooted in evidence, informed by lived experience, and focused on delivering better outcomes for all.

Earlier this year, the Scottish Cardiac Society, alongside BHF Scotland and a number of other clinical organisations, made a call to the Scottish Government to commit to a renewed Heart Disease Action Plan. A plan that is developed in close partnership with the clinical community, ensuring that the expertise of those delivering care is embedded in every stage of its design and implementation. Only through genuine collaboration can we build a system that is sustainable, equitable, and fit for the future.

We are committed to working in partnership with the next Scottish Parliament, Scottish Government and third sector partners across the health and care system to deliver the change that Scotland's hearts so urgently need.



Professor Adrian BradyPresident,
Scottish Cardiac Society

Ambition



Reduce premature deaths from cardiovascular disease by 25% by 2035.

Priorities



Focus on preventing heart disease

- The Scottish Government and Public Health Scotland should work to routinely publish data on the diagnosed prevalence and treatment of risk factors for heart attack and stroke including hypertension, atrial fibrillation and high cholesterol.
- Significantly invest in scaling up the detection and management of risk factors for heart attack and stroke. This should consider all opportunities to do so, including optimising the use of evidencesupported technology and maximising the use of local healthcare and community assets.
- Reduce heart disease inequalities through targeted support for deprived and high-risk communities, with investment in community care and the utilisation of evidence-supported technologies.



Invest to diagnose heart disease sooner

- The Scottish Government should create a suite of data covering the key diagnostic tests for heart disease. This should include the newly published data on echocardiography as well as other important tests such as pro-BNP, ECG, CTCA and other tests for heart diseases.
- The Scottish Government and NHS Delivery should lead a national project to establish a suitable training pathway and a Competency Framework to support the development of the cardiac physiology workforce. This should establish mechanisms to audit workforce and project future demand to futureproof this workforce.
- The Scottish Government should work to create a set of Healthcare Improvement Scotland (HIS) standards for echocardiography services to improve the consistency of service delivery across Health Boards.
- To ensure the ongoing improvement of services into the future, NHS Scotland and the Scottish Government should support all echocardiography services to achieve BSE Echocardiography Quality Accreditation, or equivalent accreditation, by 2031.



Support people living with heart disease by providing more care in communities

 NHS Scotland and the Scottish Government should support the development and piloting of a cardiology community service to move closer to communities, where appropriate, and improve the referral of patients into specialist services.



Cardiovascular disease remains a leading cause of death and ill health in Scotland.

An estimated 730,000 people are living with cardiovascular disease in Scotland today.¹ Many thousands more have risk factors for these conditions such as high blood pressure, raised cholesterol, obesity, and type 2 diabetes.

With almost 1 in every 7 people living with a cardiovascular condition, this is an issue that impacts the lives of every person in Scotland. Whether a person is living with cardiovascular disease themselves, or their partner, family member, or close friend is living with a condition, so many lives in Scotland are affected.

Despite this impact, it is important to recognise how far we have come. Since BHF was founded in 1961, the number of people dying from cardiovascular disease each year has fallen by nearly half

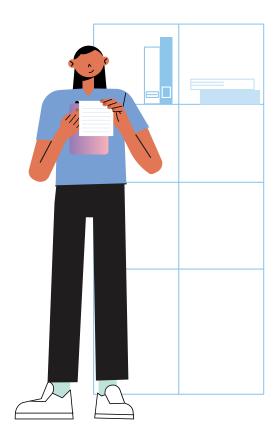
and we have seen incredible progress powered by cutting-edge research and clinical innovation. For example, where more than 7 out of 10 heart attacks in the UK were fatal in the 1960s, today, more than 7 out of 10 people survive to see their families again.

But there is much more that needs to be done. Every 30 minutes, someone in Scotland dies from cardiovascular disease. That's around 18,000 people every year.²

Recent trends are a significant concern. For the first time in a generation, the start of the 2020s saw the first sustained rise in deaths from cardiovascular disease. Moreover, between 2019 and 2023, our analysis shows that cardiovascular disease deaths in working age adults aged 20 to 64 in Scotland rose by 14% from 2,032 in 2019, to 2,324 in 2023.³

Every 30 minutes

someone in Scotland dies from cardiovascular disease.
That's around 18,000 people every year



In part due to the successful research that has improved the treatment of acute events and supporting people with chronic heart conditions, we are seeing more people living longer with cardiovascular disease. In addition, the projected ageing population and the increasing rates of obesity mean that increasing numbers of people will develop, or be at risk of developing, cardiovascular diseases in the future.

These factors mean that cardiovascular disease is projected to see the largest increase in impact of any disease group, according to the Scottish Burden of Disease Study, with a projected 34% increase in disability-adjusted life years (DALYs) between 2019 and 2043.4

The stalling of progress is having a significant impact on health outcomes in Scotland. Between 2017–19 and 2021–23, an increase in cardiovascular disease deaths has negatively impacted life expectancy at a time where the impact of other conditions, such as dementia and cancer, has lessened.⁵



The impacts of cardiovascular disease are not felt equally across Scottish communities

Across communities in Scotland there are worrying and increasing gaps in health outcomes. The gap in healthy life expectancy for males in Scotland is more than 26 years, and for females is almost 25 years.⁶

A key driver of these inequalities is cardiovascular disease. People living in Scotland's most deprived areas are more likely to have experienced a major cardiovascular event (such as a heart attack or a stroke); are significantly more likely to be admitted to hospital for a heart attack before the age of 75; and are almost twice as likely to die from a cardiovascular disease before the age of 75 as those in the least deprived areas.

Because of this, cardiovascular disease is a contributor to the stark – and growing – differences in both life expectancy and healthy life expectancy between the most and the least deprived parts of Scotland.

The inequitable impact of health-harming products, such as tobacco, alcohol, and high fat, salt and sugar food and drinks are a key driver of this health inequality. For example, the prevalence of smoking in 2023 was over four times higher amongst the most deprived areas (26%) than in the least deprived areas (6%).8

Additionally, the obesity prevalence gap has significantly increased between the most and least deprived areas in the last decade.

In this report, we discuss the steps that can be taken to improve the medical support for people impacted by these risk factors.

However, our environments also have a significant impact on our consumption of these products through the marketing, availability and promotion of healthharming products. Therefore, action is also needed to reduce their impacts.

BHF Scotland is a member of NCD Alliance Scotland, a coalition of organisations campaigning to reduce the burden of disease caused by alcohol, nicotine containing products and high fat, salt and sugar products.

In 2024, NCD Alliance Scotland published a 10-year vision for a healthier Scotland which outlined a number of policy interventions to tackle the impact of health-harming products. To reduce the impact of premature cardiovascular disease, it is important that action is taken to reduce the impact of these products and BHF Scotland calls on all parties to commit to taking the measures outlined in the 10-year vision.

People living in Scotland's most **deprived areas** are almost **twice as likely** to die from a cardiovascular disease before the **age of 75**.



Taken to heart: Inequalities in heart disease in Scotland

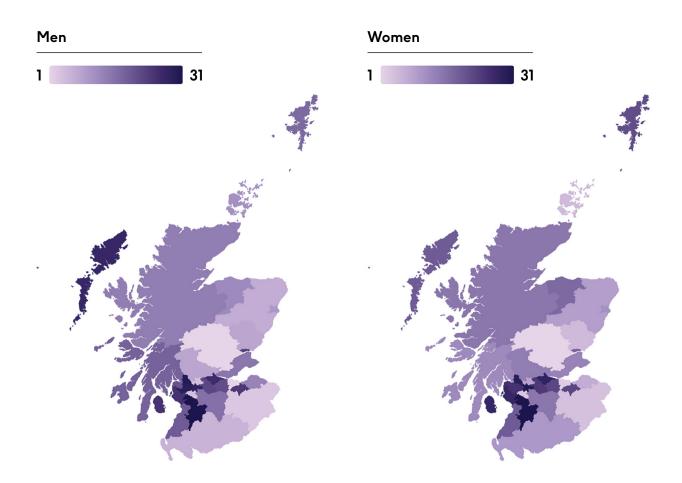
Earlier this year, the Institute for Public Policy Research (IPPR) published the findings of analysis of inequalities in CVD in Scotland. Using data from the Primary Care Intelligence Service, IPPR analysed the prevalence of cardiovascular disease across Scotland.¹⁰

They found that for both coronary heart disease (CHD) and heart failure, diagnosed prevalence is higher in the most deprived areas. GPs in the most deprived areas have 1.4 times the number of male patients aged over 10 with

coronary heart disease and it stands at 1.8 times the number of female patients compared to the least deprived areas. This gap stands at 1.5 times men with heart failure and 1.9 times for women.

This pattern is also seen in high blood pressure and diabetes, two key risk factors for heart attack and strokes.

The analysis also found significant variation between Health and Social Care Partnership (HSCP) areas. For example, East Ayrshire has the highest rates of CHD for both men and women whilst Perth and Kinross have the lowest rates for women, and the Orkney islands the lowest for men.



Average age standardised rate of patients per 100 with coronary heart disease, heart failure, diabetes and hypertension by sex and Health and Social Care Partnerships in April 2025 (men, left, and women, right). Ranked from 1 (lowest prevalence) to 31 (highest prevalence).

Scotland's hearts need more: the cardiology crisis in Scotland

People affected by heart disease are facing longer waits for diagnosis and treatment. Without timely access to cardiology diagnostic services and outpatient appointments or services, patients are beginning treatment with more advanced disease, without key diagnostic information, or even experiencing acute events like heart attacks or strokes while waiting to be seen.

2024 saw the longest waiting times on record for cardiology in Scotland and the latest figures showed that more than 20,000 people were waiting for an outpatient appointment with a cardiologist in June 2025. Of these, more than half had been waiting for longer than the 12-week waiting time target and almost 600 had been waiting for more than a year.¹¹

Data around waiting times for echocardiography, a key test for heart disease, was published for the first time by Public Health Scotland in August 2025. In June 2025, 21,023 people were waiting for an echocardiogram in Scotland. Of these, 65% had been waiting for longer the 6-week target wait time, and more than 1 in 5 had been waiting for more than a year – almost 4,500 people.¹²

Supporting healthier hearts for longer: Reducing premature deaths

Over the past six decades, the UK has made huge strides in improving outcomes for people living with cardiovascular disease. However, with increasing ill health and unprecedented pressure on cardiology services, more than ever, Scotland's Hearts Need More. More focus, more investment, and more support.

Action is needed, now. That is why British Heart Foundation set out a new strategy earlier this year, with the vision of a world where everyone has a healthier heart for longer. To achieve this, by 2035 we want to see premature deaths from cardiovascular disease fall by 25% (deaths under the age of 75). We call on all political parties to join us in committing to the bold ambition, and to commit to a renewed plan to tackle cardiovascular disease in Scotland to achieve this vision.



saw the longest waiting times on record for cardiology in Scotland





The patient experience of cardiology in Scotland

In 2025, BHF Scotland established the BHF Scotland lived experience panel. Run by the Diffley Partnership, the panel consists of 100 people across Scotland living with cardiovascular disease.

The panel is designed to provide a regular snapshot of the experience of those living with cardiovascular disease. Members are regularly surveyed on their

experiences managing their conditions and engaging with the health service. To date, the panel have been surveyed three times, with the most recent taking place in June 2025.

The survey revealed the following insights into the experiences of people living with cardiovascular disease in Scotland in 2025:



People with cardiovascular disease engage with a wide range of health professionals for their condition

 Respondents reported interactions with cardiologists, cardiac physiologists, nurses, GPs, rehab specialists, psychologists, dieticians and pharmacists.



People raised concerns about accessing primary care, waits for diagnostic tests and the availability of support services

- Almost 1 in 6 respondents were waiting for a diagnostic test in June 2025.
- Around 4 in 10 thought it was difficult to access support services.
- Around 4 in 10 felt they had to wait too long to be seen or treated.



Many respondents feel able to manage their own condition, and a number utilise technology to monitor their risk factors

- More than 6 in 10 respondents felt confident in managing their conditions.
- Just over 5 in 10 use a blood pressure monitor, and around 2 in 10 use a smartwatch to help monitor their condition.



Panel members feel greater investment is needed in services for cardiovascular disease

 More than 7 in 10 of those who responded felt that cardiology services were not given enough priority and more than 8 in 10 felt that the services were underfunded.

Patient views on the future of cardiology

As part of the development of this manifesto, BHF Scotland held focus groups with those affected by cardiovascular disease. Ten people were convened from the membership of the BHF Scotland's lived experience panel and Scotland-based members of the BHF's UK-wide Lived Experience Advisory Forum.¹⁴

During the focus group sessions, we consulted with the attendees on our priorities for cardiology, as well as their broader concerns and opinions on areas for action, as people affected by cardiovascular disease today. Panel members' contributions are summarised on the next page:



Group sessions:

Panel members' contributions



Prioritising the prevention of cardiovascular disease

• Greater action and support are needed for the public on lifestyle risks such as diet, exercise, and smoking. This should focus on communication on the prevention of cardiovascular disease in deprived communities, and action to inform the public on risk factors.

Addressing inequalities in waiting times for diagnostics and treatment

- There is significant variation in waiting times for diagnosis and treatment between different areas of Scotland, with greater issues highlighted in rural areas.
- There is also frustration at the fragmented nature of care due to the lack of data sharing between primary care, secondary care, and community services. They also spoke of difficulties when receiving care across different health board areas.

Improve the support available to people pre- and post-diagnosis

- People have mixed levels of awareness of conditions pre-diagnosis and concerns with the level of support and information received following a diagnosis.
- Once informed, patients feel confident to manage their condition, but this confidence could be built sooner with better information and support on their condition and its management.

Provide more care in communities to address inequalities in access

- There is significant desire for more support services to be offered closer to home, such as cardiac rehabilitation and post-diagnostic support.
 There were also concerns about inequalities of access to cardiac rehab for those with heart disease who have not experienced a cardiac event.
- This was particularly important for those in who lived rural areas, or those with caring or other responsibilities.

Successes and learnings from the Heart Disease Action Plan

In 2021, the Scottish Government published the Heart Disease Action Plan (HDAP).¹⁵ This five-year plan is due to expire next year and as we approach the Scottish Parliament election, it is important that we build on its successes, while reflecting on where more action is needed.

In 2024, the Cross-Party Group on Heart and Circulatory Diseases published the results of its inquiry into the implementation of the HDAP,¹⁶ which highlighted several successes across the Plan's four priority areas. Key examples of these successes include the establishment of nationally agreed cardiology pathways; an audit of cardiac rehabilitation services across Scotland; the definition of the role of the Advanced Cardiology Nurse Practitioner; and the Scottish Cardiac Audit Programme (see case study on the next page). Since this publication, we have also seen significant steps taken around the prevention of heart disease through the establishment of the CVD Prevention Programme, which has taken welcome steps to addressing ongoing issues in the identification and management of risk factors.



Case Study: Scottish Cardiac Audit Programme



The Scottish Cardiac Audit Programme (SCAP) was commissioned in 2021 as a key action of the HDAP. SCAP initially focused reporting on data previously submitted to the National Institute for Cardiovascular Outcomes Research (NICOR), including key surgical procedures and performance indicators for congenital heart disease. This process allowed for the audit to support key cardiology services across Scotland through quarterly reports for services which allow them to benchmark nationally.

Since this first publication, SCAP has expanded its work to include a wider range of services that had previously not been audited. These areas include structural heart disease interventions, and data on heart failure pathways and cardiac imaging will be included in the report published later this year.

SCAP is also currently scoping new national audits of other parts of the cardiology system including heart failure, inherited cardiac conditions, cardiac rehabilitation and familial hypercholesterolaemia.

As it continues to expand, SCAP has the potential to provide significant benefits for the improvement of cardiology services. However, in its inquiry into the implementation of the HDAP, the Cross-Party Group on Heart and Circulatory Diseases found that the rate of this expansion is limited by the resources available to undertake the audit.

With significant data gaps existing in many areas of heart disease care, from risk factors to diagnostics, it is crucial that SCAP continues to be supported to enable services to improve.

These examples have enabled critical improvements to the infrastructure for service improvement, particularly through data audit and agreed national standards. These successes form the foundation of our recommendations for the next steps in improving cardiology care. With these new tools available to aid service improvement, we are passionate about ensuring that they are fully utilised to create tangible improvements in cardiology care that can be directly experienced by people affected by heart disease.

Despite these successes, the inquiry also identified key concerns that the scale of implementation has been limited by a lack of available resource to maximise efficiency and the roll out of innovation across Scotland's Health Boards.

Our discussions with clinicians in the development of this strategy has also underlined these concerns. Those we spoke to discussed significant frustrations with the lack of support on a health board, regional and national level to ensure that adequate service improvement can take place.

In recent years, pilot projects have taken place which have demonstrated effectiveness including an innovative project to utilise AI-assisted echocardiography to reduce waiting times and a pilot of a national service for SCAD, a form of heart disease that predominantly affects women. A number of these projects have either ended following pilot stage or have not been effectively rolled out nationally due to a lack of sufficient funding being assigned locally and nationally to support service improvement.

To ensure that the ambitions set out in this document, and the needs of people with heart disease, can be better met, it is crucial that the Scottish Government, Scottish Parliament, and NHS Scotland acknowledge the significant impact that heart disease has on the people, communities and even economy of Scotland. Efforts must be made to address this condition, with proportional investment and focus to its costs.

To ensure that the the needs of people with heart disease can be better met, efforts must be made with investment and focus proportional to its costs to people and society

A Scotland where everyone has a healthier heart for longer:

BHF Scotland's vision

Earlier this year, British Heart Foundation published a new organisational strategy which set out our goals to create a world where everyone has a healthier heart for longer.

As a medical research charity, we are doing our part to realise this vision by funding cutting edge research into cardiovascular disease. We are the largest independent funder of cardiovascular research in the UK, and we are currently investing £52 million into lifesaving research across Scotland.

However, we also play an important role in working with the clinical community. In this capacity, we support improvements to the care of people affected by cardiovascular diseases through collaboration with NHS Scotland and the funding of innovative projects via the BHF Innovation Fund.

In 2021, BHF Scotland developed a draft 'Heart Disease Plan for Scotland' over 18 months alongside clinicians.¹⁷ We welcomed the Scottish Government incorporating many of the identified areas for action in the final Heart Disease Action Plan. We have been delighted to support the Scottish Government in implementing their Heart Disease Action Plan.

The Heart Disease Action Plan has enabled several projects supporting the improvement of patient care, but with services under record pressure, more must be done.

That's why we have been consulting with clinicians and people affected by heart disease to develop a set of priority areas for the continued improvement of heart disease care.

These are driven by our knowledge of services that support people with heart disease, as well as our knowledge of where action can have the greatest impact on outcomes. This work focuses on cardiology services and the treatment of heart disease. However, some of the measures proposed have the potential to support people with other cardiovascular diseases and long-term conditions.

We are the largest independent funder of cardiovascular research in the UK, and we are currently investing

£52 million

into lifesaving research across Scotland



Case Study:

Psychological support for patients with implantable cardioverter defibrillators (ICDs)



Depression and anxiety are highly prevalent in ICD patients, especially in those who experience shocks. Psychological assessment, monitoring, and therapy should be offered to ICD patients and their partners as part of routine care, however; access to such support is not equitable across Scotland.

Through the BHF Innovation fund, we are aiming to establish and test the efficacy of a remote Clinical Psychology Service, and range of digital resources for implantable cardiac defibrillator recipients in the West of Scotland. This will be delivered through a matched-stepped care model, where the intensity of treatment scales with the level of psychological distress identified.

Case Study:

Patient information and support pilot



Having access to quality assured and trusted health information can help patients and their families to better understand a diagnosis, upcoming test, or next steps following an event such as a heart attack. BHF has a clear ambition to make their health information and support offer available to every family in need at point of need.

BHF Health information points have been installed at the Queen Elizabeth University Hospital Glasgow and Forth Valley Royal Hospital as part of an initial test phase, providing patients and their families ease of access to both printed and digital health resources. Feedback and uptake have been extremely positive, with planned activity to roll this out in primary and secondary care settings across Scotland.

Our priorities

We are committed to working collaboratively to achieve these ambitions, and call on all political parties to join us in committing to prioritise heart disease through a renewed and fully funded Heart Disease Action Plan that addresses the following priority areas:



Priority 1: Focus on preventing heart disease

It is estimated that around 75% of cardiovascular disease deaths are attributable to modifiable risk factors like high blood pressure, high cholesterol, tobacco use and overweight and obesity.¹⁸ These factors are often preventable.

To reduce pressure on secondary care services, and enable people in Scotland to live longer, healthier lives, we must further focus on the prevention of disease.



Priority 2: Invest to diagnose heart disease sooner

We are seeing a crisis in the diagnosis of heart disease in Scotland. Long waits for diagnosis are having a significant impact on those experiencing them and leading to poorer outcomes. With almost 4,500 people waiting more than a year for an echocardiogram in June 2025, urgent action is needed to create a sustainable diagnostic service for those with suspected and worsening heart disease.



Priority 3: Support people living with heart disease by providing more care in communities

To continue to improve cardiology services in Scotland, new models of care should be explored to improve patient experience and integrate services closer to communities, where appropriate. These must be developed with the needs of patients at the centre, allowing them to receive support from fit for purpose services closer to home, while allowing secondary care centres to focus on delivering acute and specialist services.

Priority 1:

A focus on preventing heart disease



Recommendations

- The Scottish Government and Public Health Scotland should work to routinely publish data on the diagnosed prevalence and treatment of risk factors for heart attack and stroke including hypertension, atrial fibrillation and high cholesterol.
- Significantly invest in scaling up the detection and management of risk factors for heart attack and stroke. This should consider all opportunities to do so, including optimising the use of evidence-supported technology and maximising the use of local healthcare and community assets.
- Reduce heart disease inequalities through targeted support for deprived and high-risk communities, with investment in community care and the utilisation of evidence-supported technologies.

For many, heart disease is preventable. Yet hundreds of thousands of people are at increased risk of heart disease and stroke in Scotland, and the number is growing.

Risk factors for cardiovascular disease (such as high blood pressure, raised cholesterol, nicotine containing product use and obesity) are creating a ticking time bomb of future ill health that is threatening to devastate families and pile unsustainable pressure on our health system.

These risk factors very often have established, cost-effective treatments, such as support to make lifestyle changes and medications. However, many people are currently undiagnosed or untreated – it's estimated that up to 1.1 million people in Scotland live with undetected or uncontrolled high blood pressure.¹⁹

Investing in prevention is essential to reduce illness and ease pressure on acute services. Risk factors for cardiovascular disease are widespread. Nearly 1 in 3 adults in Scotland have high blood pressure, 20 and thousands more have raised cholesterol. These factors contribute to more than half of heart attacks and strokes, and are also linked to other conditions like diabetes and kidney disease.

Scottish Government's Health and Social Care Service Renewal Framework²¹ set out five principles for renewal. The first of these is prevention, with a commitment to 'address prevention across the continuum of care'. The Population Health Framework also includes five drivers, with the creation of a prevention focused system at their heart. This system includes a commitment to preventative investment.

This focus is welcome, and we encourage the Scottish Government to continue to build on the work being undertaken in the Chief Medical Officer's CVD Prevention Programme.²² To do so, we recommend action is focused in three areas:

- improving data collection
- expanding community detection
- evidence-based utilisation of health technologies



It's estimated that up to

1.1 million

people in Scotland live with undetected or uncontrolled high blood pressure

Data

Work to improve the detection and management of risk factors is currently limited by the poor availability of data around their prevalence and treatment. There is currently no system to gather and publish data on a national basis on many cardiovascular risk factors, including high blood pressure and high cholesterol.

This lack of data has a significant impact on efforts to improve services. For GP practices and clusters, a lack of routine data gathering, and lack of audit for detection and treatment, increases the administrative burden required of clinicians to undertake quality improvement. On a national level, it also prevents the improvement of detection and treatment through innovation and research.

To support the improvement of services, it is crucial that urgent action is taken to establish a system to collect data on risk factors. This system could follow the example of the Cardiovascular Disease Prevention Audit (CVDPREVENT) in England,²³ which extracts data from GP records on a range of risk factors and allows for analysis at levels from individual practice to national.

Community detection

Significant focus and sustained investment are also needed to improve the detection of risk factors, particularly in deprived communities.

At present, as many as half of all adults with high blood pressure are undetected, and we know that similar issues are likely to exist across other risk factors. With primary care under pressure from increased demand, GPs and other professionals are not able to routinely test at risk populations for these conditions.

Additionally, with many people living with these conditions having no symptoms, many do not present to medical settings. We know that people in deprived communities at highest risk of having a cardiovascular risk factor are the least likely to engage with medical services. This is a significant driver of inequalities in detection and treatment, which in turn contributes to greater premature ill health from cardiovascular disease.

To address this, proactive outreach in community settings is essential. Efforts to reshape healthcare in Scotland must prioritise engaging high-risk communities where they are, with services tailored to overcome barriers linked to socioeconomic inequality.

As many as half of all adults with high blood pressure are undetected





Utilising evidence-based technology to empower supported self-management

To realise improvement in the supported self-management of risk factors, it is important that we take advantage of the available and emerging evidence-based technologies to empower people living with these conditions.

Where appropriate, this technology has the potential to allow the public to monitor their own risk factors and report the results in a way that empowers patients, while also reducing the appointment burden on primary care.

A key example of this is the telemonitoring of high blood pressure that is currently being delivered through the ConnectMe programme by the Scottish Government.²⁴ 1.2 million GP appointments are taken up for blood pressure management alone in Scotland each year (with many more appointments where blood pressure is measured). In August 2025, the Scottish Health Technologies Group recommended that home blood pressure monitoring (HBPM) should be available for patients with suspected and diagnosed hypertension using validated upper arm cuff monitors. Following such recommendations it is crucial that investment is made to ensure that all those who could benefit have access to these cost-effective technologies.

Any work to improve the detection of risk factors must take learnings from the ConnectMe programme to utilise any well-evidenced emerging tech to improve supported self-management.

1.2 million GP appointments are taken up for blood pressure management alone in Scotland each year

Case Study: ConnectMe



ConnectMe²⁷ is a digital programme that allows people to measure their own blood pressure at home and report readings through an app, text messaging or an automated phone call. This programme is now used by over 100,000 people across Scotland and has saved over 400,000 primary care appointments – saving £15 million over 10 years.

However, further roll out is limited by the availability of home blood pressure monitors for patient use. These monitors are inexpensive and through investment have the potential to free up a significant number of appointments in primary care.

To utilise this technology to its maximum, it is crucial to invest into blood pressure monitors that enable more people to engage with the programme, particularly in deprived areas.

ConnectMe already supports a range of remote monitoring pathways outwith CVD, such as asthma. With emerging technologies allowing for the digital monitoring of further risk factors, it is important that the Scottish Government and NHS Scotland acts to build on the success of the ConnectMe programme across other risk factors.

Priority 2:

Invest to diagnose heart disease sooner



Recommendations

- The Scottish Government should create a suite of data covering the key diagnostic tests for heart disease. This should include the newly published data on echocardiography as well as other important tests such as NT pro-BNP, BNP, ECG, CTCA and other tests for heart diseases.
- The Scottish Government and NHS Delivery should lead a national project to establish a suitable training pathway and a Competency Framework to support the development of the cardiac physiology workforce. This should establish mechanisms to audit workforce and project future demand to futureproof this workforce.
- The Scottish Government should work to create a set of Healthcare Improvement Scotland (HIS) standards for echocardiography services to improve the consistency of service delivery across Health Boards.
- To ensure the ongoing improvement of services into the future, NHS Scotland and the Scottish Government should support all echocardiography services to achieve BSE Echocardiography Quality Accreditation, or equivalent accreditation, by 2031.

Cardiology diagnostic services are under more pressure than ever

2024 saw cardiology waiting lists reach a record level. Although welcome progress has been made in recent months, data from Public Health Scotland shows that in June 2025, more than 20,000 people were waiting to see a cardiologist in Scotland.

Despite the welcome improvements in outpatient waiting times, our discussions with patients and clinicians, as well as our research, have identified a significant ongoing crisis in another part of the heart disease pathway: diagnostics.

Data around waiting times for echocardiography, a key test for heart disease, was published for the first time by Public Health Scotland in August 2025. In June 2025, more than 21,000 people were waiting for an echocardiogram.

More concerningly, more than one in five (4,425) of those waiting for this key test had been waiting for more than a year. This is more than double the number of people that had waited more than a year for one of the Scottish Government's 8 "key diagnostic tests" combined.

It is also an increase from the less than 10,000 people that were waiting in March 2020.²⁸ It is clear that current services are struggling to meet the demand for diagnostic testing, and action is needed urgently to support these diagnostic services to become sustainable.



Cardiology diagnostic performance data is crucial to service improvement

There is a significant lack of available data on the performance of cardiology services in Scotland. Data on waiting times for most cardiology diagnostic tests are not currently routinely reported by Public Health Scotland, and no test for heart disease is part of the Scotlish Government's suite of 8 key diagnostic test waiting times. Scotland is the only nation of the UK to not publish data on waiting times for all heart disease diagnostic tests.

Work is being done through the Scottish Cardiac Audit Programme to improve the routine reporting of service data, but it is crucial that investment is prioritised to expand this important programme at speed. Data is vital to allow accurate service and workforce planning, and to prevent inequalities in service for patients in different areas of Scotland.

August 2025 saw the first publication of diagnostic data for Scotland, with Public Health Scotland publishing data on waiting times for echocardiography, 24 hour ECG and 24 hour blood pressure monitoring.²⁹

The newly published echocardiography data highlights significant variation between health boards, with some health boards having almost no waiting lists, while almost all people waiting more than a year were located in three health boards.

This new data publication is welcome and will be crucial in supporting services and health boards to address these waiting times through ongoing investment and support to meet the increasing demand for echocardiography.

However, the current lack of published data across other key diagnostic tests means that issues in individual services are not identified efficiently, and are not visible outwith health boards, leading to a build-up of significant waiting lists. To address this, it is crucial that data for the diagnosis of heart disease is published routinely.

Waiting for a test is an anxious time for both the patient and their family and, in June 2025, more than 1 in 5 people waiting for a diagnosis of heart disease were having to wait more than a year. Clinicians have told us of the impacts of these waits, noting that people are often at a more advanced stage of disease by the time of diagnosis, and the need to sometimes treat without this key diagnostic information. Both factors mean that people with heart disease are receiving non-optimal or more aggressive treatment, which has impacts on their condition and broader wellbeing.

The cardiac physiology workforce needs urgent support to improve service outcomes

The delivery of echocardiograms and other cardiology diagnostic tests is performed by a specialist workforce: cardiac physiology. Cardiac physiologists are responsible for the delivery of a number of diagnostic tests for heart disease, including echocardiography, ambulatory ECG monitoring, and exercise tolerance tests.

BHF Scotland has held discussions with this key workforce, which have highlighted the ongoing impact of significant long-term shortages in trained physiologists on the ability of services to meet demand.

The Scottish Government has made commitments to address this through the funding of additional training places in 2021. However, significant workforce planning issues in health boards for cardiac physiology has affected the availability of roles for these graduates.

Additionally, there is currently no pathway for cardiac physiologists to be trained in Scotland. The only dedicated training course for cardiac physiologists in Scotland ended this year.

Ongoing work to audit the workforce and project demand is being led by the Scottish Government's Chief Scientific Officer. There are also ongoing discussions to establish a new training pathway. However, this work needs to be supported to urgently address the ongoing issues and create a sustainable solution.

Issues of data availability, workforce audit, and planning are amplified by a lack of agreed standards for cardiac physiology in Scotland, as well as a lack of oversight of performance. The British Society of Echocardiography offer quality accreditation to services and NHS Scotland should support all health boards to meet this standard.

In addition, it is important that the Scottish Government and NHS Scotland work with the cardiac physiology workforce to agree a set of standards for this crucial diagnostic service. This process should be led by Healthcare Improvement Scotland³⁰ to establish standards for services that all health boards can support and implement.

Cardiac Physiology is not currently a statutorily regulated workforce in the UK. While practitioners can register with the Academy for Healthcare Science, there is not legal requirement for this. This is important as such statutory regulation can be an important vehicle for improving of services through the establishment of standards. Consideration should be given to whether regulating cardiac physiology could help to reduce variation in diagnostic services across Scotland.

Waiting for a diagnostic test is an **anxious time** for both the **patient** and their **family**



Priority 3:

Support people living with heart disease by providing more care in communities



Recommendation

 NHS Scotland and the Scottish Government should support the development and piloting of a cardiology community service to move closer to communities, where appropriate, and improve the referral of patients into specialist services.

Triage — Primary and secondary care are under significant pressure and evidence shows that a proportion of referrals to secondary care are not necessary. To reduce this pressure, a community care service could allow specialist trained medical staff to triage non-urgent patients awaiting diagnosis or treatment. This service could also provide support to help patients wait well and improve their health via community assets.

Care and Support – Currently, there is limited ongoing support for people living with heart disease long-term. A community care model could provide a self-referral point of contact, for those living with diagnosed heart disease to access advice and support, utilising community assets to support people to live healthier lives.



Secondary care treatment services for those experiencing acute events and for those who have received a diagnosis of heart disease remain of a high standard, as evidenced by the outcomes reported by the Scottish Cardiac Audit Programme.

However, discussions with people affected by cardiovascular disease and clinicians have highlighted the need for services to better provide long-term support, and the need to improve the patient experience at the interface of primary and secondary care.

A community care service in Scotland

The Scottish Government's Health and Social Care Service Renewal Framework³¹ highlighted community care as a key principle for the future of the health service in Scotland. This principle aims to provide accessible, seamless, and equitable care across settings, with hospitals focusing on the most acute and complex levels of care.

In line with this vision, BHF Scotland is committed to supporting the Scottish Government and clinical community to develop a model of care to provide cardiology services in the community, where appropriate. This will have a particular focus on improving the diagnosis and triaging of patients, as well improving support for patients living with heart disease as a long-term or co-morbid condition.

BHF Scotland will be working with health professionals from across cardiology and primary care throughout 2025 to further develop what community-based cardiology could look like. This work will speak to a range of health professionals to understand what could be provided safely and effectively at a community level, and the health professional roles that would be required to provide these services.

Our discussions so far have highlighted interest from both primary and secondary care to improve communication between both systems, with the view of empowering more patient care to take place in communities.

Prevention:

As previously discussed, a key priority for BHF Scotland is the prevention of heart disease through action to improve the diagnosis and management of risk factors. Currently, primary care pressures mean that people with risk factors such as high blood pressure and high cholesterol are too often not being diagnosed or optimally treated for their condition.

Community-based services, ranging from pharmacies to community centres, could present an opportunity for awareness raising, targeted monitoring and the management of people at increased risk of developing heart disease. This could also allow for the creation of stronger connections between healthcare and community-based assets for wellbeing, such as exercise and other services.

Diagnostics and triage:

There is an urgent need to improve communication between primary and secondary care services, highlighted in our discussions with clinicians across both systems. A significant impact of ineffective communication is currently demonstrated by the triage of patients in primary care with potential symptoms of heart disease.

For example, research shows that some patients referred for diagnostics are referred for tests unnecessarily, with one research project in England showing that 20% of referrals were for indications not listed in the guidelines set out by the British Society for Echocardiography.³²

Discussions have highlighted how the utilisation of structures, such as a local cardiology lead in a GP cluster (or other geography) and the regular holding of MDTs with specialist staff to discuss complex referrals could both reduce unnecessary referral in the short term and build expertise in primary care. This could allow for better support for patients and reduce the number of unnecessary referrals for investigation, reducing pressure on secondary care services.

It could also create a space where those with non-typical or complex symptoms can be assessed by health professionals with more specialist training in cardiology, providing reassurance for those who would otherwise be waiting for a diagnostic test.

Ongoing support for those living with heart disease:

The provision of care in the community has been widely highlighted as an important step in improving the patient experience. As many treatment services for heart disease become more specialised, with scientific advances in genomics and other areas developing new techniques and medicines, it is important that specialist centres continue to be supported to provide patients with world leading care.

It is also important to consider how non-urgent services, particularly those that provide support and ongoing care, can be provided closer to people's communities where appropriate and how tele-consultation can support better access to care.

To receive specialist care, some patients, namely those in rural and island communities must travel significant distances. Our engagement with people affected by heart disease shows that this is difficult for many patients, especially for those with care responsibilities, among others, and creates significant inequalities in care.

This likely reduces the engagement of patients with the health system, reducing the chance of changes in their condition being picked up, potentially leading to acute events that require significant health service resource and can have significant impact on the patient's quality of life. It is therefore important that work is undertaken to understand what services could be more optimally delivered for communities who experience inequalities in access to care.

A community-based cardiology service could allow patients to access more specialised support, whether from a GP, nurse, pharmacist, or other health professional, in a place closer to home. Here, people could be supported to live well with their condition following a diagnosis, or people with a heart disease diagnosis could self-refer, should non-urgent symptoms change, to receive advice and be triaged either to local services such as pharmacy or support services or referral into specialist pathways.



Glossary

C

Cardiac rehabilitation

An individualised exercise, education and support programme built around your personal circumstances and needs following a heart attack, heart surgery or a diagnosis such as heart failure.

Cardiology

A medical specialty focused on the diagnosis, treatment, and management of diseases and conditions affecting the heart and blood vessels, also known as the cardiovascular system.

Cardiovascular disease (CVD)

Also called heart and circulatory disease, is an umbrella name for conditions that affect your heart or circulation. These include heart attacks, heart failure, stroke and vascular dementia.

Community care

The range of health and social care services provided outside of hospitals and primary care core services, designed to support individuals with their needs within their own homes and communities.

Congenital heart disease

A fault or problem with the heart that's there from birth. This means it develops in the womb, before a baby is born.

Ε

Echocardiogram

An echocardiogram, also known as an echo, is an ultrasound scan used to look at the heart and nearby blood vessels. It is similar to ultrasound scanning used in pregnancy because it uses sound waves to build up a picture of your heart.

F

Familial hypercholesterolaemia (FH)

An inherited condition here your liver can't process cholesterol properly. This leads to a high level of cholesterol in your blood.

Н

Heart failure

A condition where your heart cannot pump blood around your body as well as it should.

High blood pressure

When the pressure of blood running through the arteries is consistently too high it can have negative effects on the cardiovascular system.

High cholesterol

When you have too much of a fatty substance called cholesterol in your blood, which can increase the risk of having a heart attack or stroke.

I

Implantable devices

Devices placed inside the body to treat heart conditions. These devices, including pacemakers and implantable cardioverter defibrillators (ICDs), help regulate the heart's rhythm and improve its pumping function.

Inherited cardiac conditions

A group of heart conditions that are passed on through families.

P

Primary care

Health care provided in the community. It is usually the first point of contact for patients and involves providing care for common illnesses and long-term conditions.

R

Risk factor

Something that increases your risk of developing a disease or condition.

S

Secondary care

Medical care provided by a specialist, usually upon referral by primary care.

References

- BHF estimate based on Scottish Health Survey 2023 data using NRS population estimates; includes congenital heart disease in children
- BHF analysis of latest UK mortality statistics: NRS (2023 data)
- 3. BBC News (2023). Cardiovascular Disease Deaths Rising. Available at: https://www.bbc.co.uk/news/articles/cjdzemkkek4o
- ScotPHO (2022). Scottish Burden of Disease Study. Available at: https://www.scotpho.org. uk/comparative-health/burden-of-disease/ overview
- National Records of Scotland (2023). Life Expectancy in Scotland 2021–2023. Available at: https://www.nrscotland. gov.uk/publications/life-expectancy-in-scotland-2021-2023
- National Records of Scotland (2021). Life Expectancy in Scotland 2019–2021. Available at: https://www.nrscotland. gov.uk/publications/healthy-lifeexpectancy-2019-2021/
- BHF (2023). Cardiovascular Inequalities in Scotland: An Analysis. Available at: https:// www.bhf.org.uk/what-we-do/our-research/ heart-statistics/health-inequalities-research/ cardiovascular-inequalities-in-scotland-ananalysis
- 8. Scottish Government (2024) Scottish Health Survey 2023. Available at: https://www.gov.scot/collections/scottish-health-survey/
- NCD Alliance Scotland (2024). NCD Prevention: A Commercial Determinants of Health Approach. Available at: https:// www.bhf.org.uk/-/media/files/what-wedo/in-your-area-scotland-pages/ncd/ncdprevention-a-commercial-determinants-ofhealth-approach-2024-report.pdf
- IPPR (2025). Taken to Heart: Inequalities in Cardiovascular Disease in Scotland. Available at: https://www.ippr.org/articles/taken-toheart

- Public Health Scotland (2025). NHS Waiting Times – Stage of Treatment. Available at: https://www.publichealthscotland.scot/ publications/nhs-waiting-times-stage-oftreatment
- Public Health Scotland (2025). Diagnostic Waiting Times – 26 August 2025. Available at: https://publichealthscotland.scot/ publications/nhs-waiting-times-diagnostics
- BHF (2025). Strategy Document. Available at: https://www.bhf.org.uk/-/media/files/whatwe-do/our-strategy/bhf-strategy-final.pdf
- 14. British Heart Foundation. Impact of patient and public involvement on BHF's work. Available at: https://www.bhf.org.uk/howyou-can-help/shape-our-work/patient-andpublic-involvement-impact
- 15. Scottish Government (2021). Heart Disease Action Plan. Available at: https://www.gov.scot/publications/heart-disease-action-plan
- 16. Cross-Party Group on Heart and Circulatory Diseases (2024). Cross-Party Group Inquiry into the Implementation of the Heart Disease Action Plan. Available at: https://www. bhf.org.uk/what-we-do/in-your-area/ scotland/campaigning-and-influencing-inscotland/cross-party-group-inquiry-into-theimplementation-of-the-heart-disease-actionplan
- 17. BHF (2021). Heart Disease Plan for Scotland. Available at: https://www.bhf.org.uk/-/ media/files/what-we-do/bhf-scotlandmanifesto-report.pdf
- 18. Global Burden of Disease Study (GBD) Scotland estimates 2021
- BHF analysis of Public Health Scotland GP SPIRE patient prevalence data 2023
- 20. BHF analysis of Scottish Government (to 2024) Scottish Health Survey 2023
- 21. Scottish Government (2025). Health and Social Care Service Renewal Framework. Available at: https://www.gov.scot/publications/health-social-care-service-renewal-framework



- 22. NHS Scotland. CVD Prevention Programme Toolkit. Available at: https://rightdecisions.scot.nhs.uk/national-cardiovascular-disease-cvd-prevention-and-risk-factors-toolkit
- 23. CVDPREVENT (England). Available at: https://www.cvdprevent.nhs.uk
- 24. TEC Scotland. Connect Me Programme.
 Available at: https://www.tec.scot/
 workstreams/connect-me
- 25. PLOS Medicine (2020). Blood Pressure Management in Scotland. Available at: https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1003124
- 26. Scottish Health Technologies Group (2025). Home Blood Pressure Monitoring Advice. Available at: https://shtg.scot/our-advice/home-blood-pressure-monitoring-for-people-with-suspected-or-confirmed-hypertension
- 27. TEC Scotland (2024). Connect Me BP at a Glance. Available at: https://www.tec.scot/ wp-content/uploads/Connect-Me-BP-at-aglance-July-2024.pdf
- 28. BHF Scotland Freedom of Information Request of all 14 Health Boards in Scotland
- 29. Public Health Scotland (2025). Diagnostic Waiting Times 26 August 2025. Available at: https://publichealthscotland.scot/publications/nhs-waiting-times-diagnostics
- 30. Healthcare Improvement Scotland. Clinical Standards. Available at: https://www. healthcareimprovementscotland.scot/clinicalguidance-for-professionals/standards
- 31. Scottish Government (2025). Health and Social Care Service Renewal Framework. Available at: https://www.gov.scot/publications/health-social-care-service-renewal-framework
- BMJ Heart (2024). Echocardiography Referral Guidelines. Available at: https://heart.bmj. com/content/110/Suppl_6/A8



