



# Hearts Need More

**A call for a comprehensive  
Heart Disease Action Plan**



# Foreword

**Over the last half a century, the number of people dying from heart and circulatory diseases in the UK each year has fallen by nearly half. Unimaginable advances in treatment, coupled with significant progress on smoking rates, mean that millions more people are living longer and can spend valuable extra time with their loved ones.**

At British Heart Foundation (BHF), we are proud to have played our part in driving this positive change, but the job is far from done. Cardiovascular disease (CVD) remains one of the UK's biggest killers, and worryingly, this hard-earned progress has started to reverse.

A dedicated Heart Disease Action Plan is the mechanism urgently needed to get us back on the right track. We are calling on the UK Government to work with the cardiovascular community to set out a bold but achievable vision to improve the nation's heart health and save millions more people from the devastating impact of heart and circulatory diseases.

Much of this disease burden is preventable, so we must get serious about tackling the biggest causes of heart attacks and strokes. The new Government must not shy away from removing persistent obstacles to a healthier population, such as tobacco and our unhealthy food environment.

This will be critical to alleviate mounting pressures on the health service. We are in the grip of a heart care crisis, with record waiting lists for tests and treatments, increasing people's risk of disability or even early death. A focus on getting patients the right care at the right time has to be a priority.

None of this will be possible without further advancements in science and technology. We are on the cusp of a revolution, with fast-paced growth in the capabilities of artificial intelligence, data science and beyond. The UK's health and research systems must be fully supported to capitalise on this to deliver further transformational change for heart patients.

We estimate that the right focus and action from Government could help to avoid up to 11,000 early deaths each year from heart and circulatory diseases by 2035.

There is no insurmountable reason why we should not aspire to another century of extraordinary progress.

**A dedicated Heart Disease Action Plan will show us the way.**

**Dr Charmaine Griffiths**  
Chief Executive

**Professor Bryan Williams**  
Chief Scientific and Medical Officer





# A lost decade of progress

**Since the British Heart Foundation was established in 1961, the annual number of deaths from heart and circulatory diseases, including coronary heart disease, stroke, heart failure and vascular dementia, has fallen by nearly half. This has been one of the UK's major health success stories.**

Look at more recent years, however, and we see a worrying picture. The UK is no longer in the health care premier league and, as of 2022, more people are dying under the age of 75 from heart and circulatory diseases than at any time in the last 14 years<sup>1</sup>.

This recent trend is a clear alarm bell.

**Since 2010 we have seen improvements in premature death rates slow down and, alarmingly, start to rise again in the past three years.**

And while the reasons for this reversal in trends – a lost decade of progress – are undoubtedly complex, we believe there are some key factors at play:

- **An ageing population**  
along with the increasingly complex nature of cardiovascular diseases and people living with more than one long-term condition
- **An increasingly unhealthy population**  
living with conditions that put us at heightened risk of developing a heart or circulatory disease, such as obesity, excess weight or high blood pressure
- **Growing inequalities**  
those in the most deprived parts of England are twice as likely to die early from a heart or circulatory disease than those in the least deprived
- **The shock of the pandemic**  
and the lost opportunities to access care at its height that have contributed to record long waits for care now

We can't underestimate the challenge, but too much is at stake for us not to rise to it. As NHS England's Long Term Plan rightly set out in 2019, cardiovascular disease is the single biggest area where additional lives can be saved by the NHS. That is as true today as it was then. Sadly, the picture is worsening and we need to stop talking and start acting. It's within our grasp. Improving the cardiovascular health of our nation can help return the UK to health and prosperity.



## We must:

### 1. Prioritise prevention

We need to change the way we approach this, with a new strategy and new ways of working that address commercial determinants of ill health, embrace the digital age, and empower patients and the public.

### 2. Tackle long waits for cardiac care

The pandemic had a huge impact on non-Covid care, but waiting lists were rising before then. We need a laser focus on supporting the NHS across England to bring long waits down, including by investing in the workforce.

### 3. Embrace and facilitate a revolution in technology and data

We need to ensure the widescale adoption and use of new technologies that will transform the way we prevent, detect and treat heart disease.

### 4. Eradicate growing inequalities

It is unacceptable that too many people see worse outcomes from heart disease linked to their economic status, gender or ethnicity.

### 5. Invest in research

No new cardiovascular treatments were licensed in the UK in 2023. We must double-down on our commitment to finding the cures and treatments of the future with research investment that matches the burden of disease.

A Heart Disease Action Plan is the vehicle we need to drive this change, providing a practical framework to address the challenge of cardiovascular disease and achieving the change that will help transform outcomes for people across the UK.

# The economic argument for tackling cardiovascular disease

**Delivering game-changing health benefits by tackling cardiovascular disease will also deliver a more prosperous nation. The cost of not acting is vast. Every year, England spends an estimated £10bn on cardiovascular disease healthcare costs and the wider cost to the economy is £24bn<sup>2</sup>.**

A significant proportion of this is driven by cardiovascular disease-related economic inactivity. More working-age people are reporting long-term health conditions than ever before<sup>3</sup>, with cardiovascular disease being the fifth most commonly reported condition among people economically inactive due to poor health in the UK<sup>4</sup>. Those with long-term health conditions and their carers may be less productive due to these conditions, requiring more time off for treatment or recovery, meaning potentially long periods of time out of work. Previously, the impact of mental health and arthritis on employment has been prioritised, but cardiovascular disease should also be a key focus, with Institute for Public Policy Research analysis showing that it increases the risk of exiting employment most sharply compared to other health conditions<sup>5</sup>.

A sustained and strategic focus on combatting cardiovascular disease for good can deliver economic growth and a healthy nation.





# A new Heart Disease Action Plan should:



**1. Better prevent heart disease**



**2. Get heart patients the right care at the right time**



**3. Supercharge cardiovascular research**

# Inequalities

**The Heart Disease Action Plan we are calling for must put inequalities, and the continuous effort and investment needed to reduce them, front and centre.**

Health inequalities are the unfair and largely avoidable differences in health outcomes between different groups of people. There are very marked inequalities in heart disease risk and outcomes, particularly depending on where people grow up and live, but also according to ethnicity, gender, and other characteristics. There are very clearly evidenced links between these and social and economic conditions – the “wider determinants” of health – and heart disease can and should partly be tackled by addressing these root causes<sup>6</sup>.

Alongside these social and environmental causes, however, there are many biases at play in our health and research systems that contribute further still to unequal outcomes. In particular, research and analysis, including by the BHF, shows that for people from Black and South Asian backgrounds, people from the poorest communities, women, and people with serious mental health disorders, access to care may be reduced.

For example, women are often under-diagnosed for heart attacks, with the result that they do not always get the

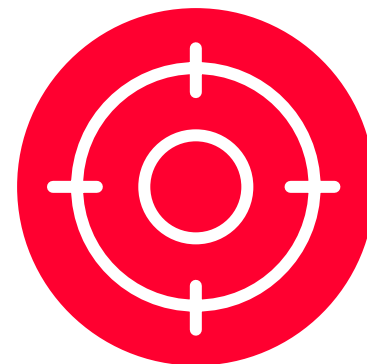
same timely interventions as men<sup>7</sup>, while people with a Black and South Asian background have been shown to experience lower access to important treatments for heart failure<sup>8</sup>. People from the most deprived communities can find it harder to access services across the coronary heart disease pathway and tend to present in a more advanced state of ill health, with a resulting lower chance of recovery<sup>9</sup>.

Beyond inequalities in provision of healthcare, smoking rates have fallen dramatically but remain highest amongst the most disadvantaged in our society<sup>10</sup>. And worrying rises in childhood obesity are happening predominantly in the most deprived parts of the population, denying millions of children a fair start in life through good health<sup>11</sup>.

When it comes to research, clinical trial participants do not reflect the diversity of the UK population that are affected by the disease, which sometimes leads to important differences in the efficacy of treatments, medicines or devices, as trials have not been representative of the populations most in need of intervention<sup>12</sup>.

Much of this problem is well-evidenced, but solutions at scale seem harder to implement. Integrated Care Boards now have a legal duty to understand health inequalities in their area and set out targets for tackling them, and NHS England have a helpful high-level framework (Core20PLUS5) showing which groups to tackle with which interventions to have the most impact on inequalities<sup>13</sup>.

If we are to truly improve outcomes in an equitable way, the UK Government must place those most unfairly affected at the core of its plans.



# Better prevent heart disease

It's a sad truth that most cases of cardiovascular disease are preventable – around 70% in the UK can be attributed to modifiable risk factors such as obesity, tobacco and air pollution<sup>14</sup>. Where you live and how much money you have still drives how likely you are to be affected by these. The goal of any Government must be to create an environment where everyone can live in good health for longer, delaying the onset of disease, whilst helping to create a stronger, more resilient population.

This is the right thing to do for people's health and wellbeing. It would also help the economy. Spending on disease prevention at a population level is cheaper than treating individuals when they become ill.

**It costs around £3,800 to give an additional year of good health to someone's life using public health measures, compared to around £13,500 using NHS interventions<sup>15</sup>.**

All Governments have so far failed to comprehensively act on this evidence. In part, this is because the current fiscal system does not recognise the importance of investing in prevention and the impact is long term: money is not ring-fenced and the long-term benefits are undervalued. A prevention-first approach will pay off in the longer term, but we cannot shy away from the fact that significant initial investment is needed and must be sustained.

More broadly, the shift to a prevention-first approach needs to happen across Government departments, not just in health. Departments responsible for finance, planning, food supply, advertising, environment and more, are part of the wider solution.

The UK will need bold action to protect future generations from the key risk factors for cardiovascular disease.







# We urge the Government to:

## Create a healthier food environment

Many millions are spent each year by multinational food companies to bombard us with adverts for highly processed foods and drinks that are high in fat, sugar and salt (HFSS). Beyond advertising, at every turn, these foods are often more available and affordable than healthier options. This makes it hard for many poorer households to eat a healthy diet, contributing to high rates of obesity and diet-related ill health across the UK. This entrenches health inequalities.

Around 64% of adults in the UK and around 30% of children in the UK are living with obesity or excess weight<sup>16</sup>, with childhood obesity prevalence having risen by 30% since 2006<sup>17</sup>.

**Living with excess weight or obesity is associated with 1 in 6 heart and circulatory disease deaths in the UK<sup>18</sup>.**

Often without realising it, many of us are also eating too much salt (largely because excess salt is added to processed, packaged and prepared food), contributing to high rates of high blood pressure, which is associated with around half of all heart attacks and strokes. It is estimated that reducing the UK's average daily salt intake by 40% could result in 135,000 fewer new cases of coronary heart disease by 2035<sup>19</sup>. There's no doubt this will be challenging at an individual level – up to 85% of the salt we eat is already in food when we buy it<sup>20</sup> – and government schemes to encourage the food industry to reformulate on a voluntary basis have seen limited success.

Government must be ambitious about improving everyone's health and implement the measures we know will work: a new levy on salt and sugar could prevent almost 2 million cases of chronic disease. It could also raise up to £3bn a year, which should fund programmes to enable equitable access to a healthy balanced diet<sup>21</sup>.

In addition, implementing delayed legislation to restrict TV and online advertising and price promotions on less healthy products, as well as expanding these policies to address other aspects of our food environment – such as outdoor and radio advertising, sports sponsorship, and mandatory front-of-pack labelling – will begin to break the hold manufacturers have on our diets.



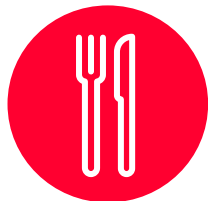
# A spotlight on salt

Everyday products like bread and pizza can contribute to our high salt intakes, because of both high salt content and how much of them we eat. Half of all pizzas sold in the UK contain a whole days' recommended salt intake<sup>22</sup>.

However, huge variation shows that there's space to reduce the salt in everyday products without compromising on taste. Some breads contain almost three times the salt of others, while the salt content of pizzas can range from 21g to less than 2g<sup>23</sup>.

*"We really need policies that make healthier foods more affordable. As someone on a restricted budget, it's hard to afford healthier options, especially when there are less healthy but cheaper options available. Shifting this is going to require long-term sustainable changes to our food environment."*

**Hayley**, 21 years old, Health Psychology Masters student, living with congenital heart disease.







## Introduce a ‘polluter pays’ tobacco levy

Despite a ban on smoking in indoor public places, restrictions on the advertising of tobacco products, and plain packaging, smoking is still one of the leading preventable causes of disease and premature death in the UK, with at least 15,000 attributable heart and circulatory disease deaths a year, and a significant contributor to health inequalities<sup>24</sup>. Indeed, around half of the difference in life expectancy between the least and most deprived in society is due to smoking<sup>25</sup>. Passing and implementing the Tobacco and Vapes Bill as quickly and effectively as possible to drive progress towards a Smokefree UK, including by raising the age of sale of tobacco, is critical. But there is still more to do.

Tobacco lobby groups often claim that the UK economy benefits from money raised through tobacco taxes. The truth is,

in 2023, smoking cost the economy up to £24.3bn, far more than the £8.7bn raised from tobacco taxes<sup>26</sup>. Given that the four biggest tobacco manufacturers each make on average £900 million a year in the UK, with a net operating profit margin of 50%, it is reasonable to expect such a harmful industry to pay for the damage its products cause through a levy on their profits<sup>27</sup>.

A “polluter pays” levy on the tobacco industry, also known as a Smokefree Fund, could raise an estimated £700 million per year to fund a strategic approach that will deliver vital tobacco control measures and stop smoking services<sup>28</sup>. This investment makes good financial sense: it is estimated that for every £1 invested in stop smoking services, £2.37 will be saved on treating smoking-related diseases and reduced productivity<sup>29</sup>. The United States has already successfully implemented a similar policy which has raised millions to fund activities such as enforcement, scientific research and public education.

## Introduce a new Clean Air Act

When people are exposed to dirty air, air pollutants can travel through the lungs, deep into the bloodstream and into the heart, increasing the risk of developing heart disease or stroke. There’s a short-term impact too: exposure to elevated levels of pollutants can increase the likelihood of a heart attack or stroke in vulnerable people within 24 hours<sup>30</sup>.

There are no safe levels of air pollution, but the limits set by the Environment Act 2022 allow for dirtier air than World Health Organization recommendations. Government must go further to improve air quality and protect public health by introducing a Clean Air Act for England, with provision to lower the legal limits for air pollutants to those recommended by the WHO.

A structured plan with interim, time-bound goals will be crucial to achieving these targets. For example, National Action Plans must set out the steps to create awareness and support for people and businesses to transition to more clean air-friendly behaviours. Better monitoring of health-harmful pollutants in the form of a national monitoring framework is also critical to build accountability and ensure compliance, and to aid public awareness.

The BHF has invested around £6 million in research since the early 2000s to help understand the impact of air pollution on our heart and circulation.

**It’s estimated that up to 14,000 heart and circulatory disease deaths in the UK are attributable to air pollution each year<sup>31</sup>.**



# Get heart patients the right care at the right time

**Timely, specialist care is critical to prevent disability and premature death from cardiovascular disease. However, a perfect storm of record high NHS waiting times, missed opportunities to identify and treat cardiovascular disease risk factors, and an overstretched cardiac workforce are all putting countless lives at risk.**

At the end of June 2024, cardiac waiting lists in England were at their highest total on record at over 425,000<sup>32</sup>. Rising lists are being driven by an increased need for care – something exacerbated by the direct and indirect effects of the Covid-19 pandemic and an ageing and sicker population. This is compounded by an NHS that can't keep up, with the cardiac workforce facing burnout, shortages, and a lack of the infrastructure and equipment they need. Urgent and emergency care is struggling too, with ambulance response times for heart attack and stroke consistently above target<sup>33</sup>. Every second counts in a crisis, and we cannot accept rising waits as the status quo.

**Getting to grips with this heart care crisis must be a priority.**





# A spotlight on heart failure

Heart failure is a complex clinical syndrome where the heart muscle can't pump blood around the body as well as it should. It's estimated that over one million people in the UK have heart failure, with 200,000 new diagnoses every year<sup>34</sup>. Moreover, prevalence of heart failure is predicted to double from one to 2 million over the next two decades<sup>35</sup>.

Early detection and appropriate management of heart failure have long been a challenge. Despite the significant focus on improving early diagnosis in the community, approximately 400,000 people with heart failure are living without an appropriate diagnosis<sup>36</sup> and up to 80% of cases are diagnosed late, after admission to hospital<sup>37</sup>.

This means that people are missing out on the treatment and support, including cardiac rehabilitation, which could vastly improve their quality of life. Patients have told us that care is fragmented, systems are confusing to navigate, and siloed teams prevent effective communication<sup>38</sup>.

Avoiding these soaring forecasts will require better management of risk factors such as hypertension, diabetes and chronic kidney disease (CKD), and better health across the population, with a focus on obesity and salt intakes. We also have to improve the diagnosis and management of heart failure, shifting care away from hospital to the community.

This is why we support the British Society for Heart Failure's 25in25 initiative, bringing together 60+ organisations to promote prevention in local communities and earlier detection<sup>39</sup>.







# We urge the Government to:

## **Ensure more people living with risk factors for heart attack and stroke are found and treated**

Millions of people are living with risk factors for cardiovascular disease like hypertension and high cholesterol; many of whom do not know it, and are consequently, not having their condition appropriately managed<sup>40</sup>. These people risk ending up on the ever-growing waiting lists for elective care, or worse, experiencing an emergency, exacerbating pressure on the NHS and their chance of a reduced quality of life.

The potential gains from improving the number of people diagnosed and managed are huge. It's been estimated that if just 80% of people in England with diagnosed high blood pressure were on optimal treatment, around 16,000 heart attacks and strokes would be prevented in just three years with savings to the NHS of £180 million<sup>41</sup>.

There are examples of how cardiovascular disease risk factors have been prioritised in recent years: NHS England's Core20PLUS5 approach to inequalities includes hypertension and cholesterol as clinical priorities; the BP@Home remote management programme has shown promising improvements for some patients<sup>42</sup>; the CVDPREVENT audit of primary care is supporting local systems to deliver targeted support to areas of unmet

need<sup>43</sup>; and the Community Pharmacy Blood Pressure Checks service is enabling hypertension case-finding in community pharmacies, closer to the patients who need it<sup>44</sup>.

These programmes are steps in the right direction, but are often curtailed by short-term funding cycles, an inability to scale more widely, a lack of public awareness around risk factors, and infrastructure and workforce challenges.

The time is right for the UK Government to support an approach that goes beyond incremental change and embraces advances in technology, capitalising on innovations in data science, behavioural sciences, and digital technology and AI to stimulate development of a new model of care in cardiovascular prevention. Looking outside of primary care, and learning from low-cost innovations seen internationally, often in low-income countries, we see huge potential to transform the detection and management of these risk factors and deliver transformative change.

**In the UK, it's estimated that up to 8 million people are living with undiagnosed or uncontrolled high blood pressure<sup>45</sup>.**





## Maximise capacity to deal with cardiac waiting lists

Record numbers of people are waiting over 18 weeks for potentially lifesaving elective heart tests and treatment – breaching the targets set out in the NHS Constitution. The cardiac waiting list in England has risen significantly since 2020 and remains consistently and shockingly high<sup>46</sup>.

Increases are propelled by complex and interconnected drivers, including an ageing population. Stubbornly high need for cardiac services, reflected in high referral rates (bucking the trend of overall referrals decreasing), as well as persistently long waiting lists for echocardiograms<sup>47</sup>, indicate that diagnostic supply and demand is likely one driver behind delays to care. However, a lack of granular data across the cardiac pathway makes it difficult to confidently identify specific pinch points in waiting lists.

Many patients are also telling us that

they are not being sufficiently supported while they wait for care. This can result in those waiting becoming more unwell and likely requiring additional and more complex care.

Proposed solutions to tackling waiting lists including increased use of private sector capacity, and maximising staff and hospital theatre time through evening and weekend work are welcome, but will not be a silver bullet, and must not come at the expense of wider reforms, along with sustainable NHS investment and the necessary workforce.

Alongside these immediate initiatives, we need longer-term measures to see real and equitable change in waits for heart care. This includes building on pockets of innovation, such as use of remote monitoring to support patients while they wait<sup>48</sup>, ensuring they are fit for treatment and avoiding unnecessary cancellations and delays. Above all, Government must prioritise cardiac waiting lists, and provide systems with sustained funding

for the resource, leadership, and action required to make progress.

## Ensure the cardiology workforce is fit for now and the future

Throughout their care and treatment, people living with cardiovascular disease are supported by a diverse range of health professionals across the system. This includes thousands of cardiologists, cardiac nurses, physiologists and other cardiovascular healthcare professionals who provide specialist care across the country. However, staff shortages, issues around recruitment and retention, and evolving patient demand are all major challenges to delivering heart care when it is needed.

However, we don't have enough specific data around roles, subspeciality, demographics and working patterns to support good workforce planning and wider improvements. Where good data does exist, it is often not publicly accessible<sup>49</sup>.

In 2023, BHF set out to address some of these gaps through our cardiac workforce census, which captured key insights into specialist cardiac roles in secondary care in England. This highlighted demographic differences in working patterns, potential retirement hot spots within cardiac care, and gender disparities in specialty areas<sup>50</sup>.

Collecting, collating, and analysing data like this at a specialty and subspecialty level will be vital for robust planning to meet future patient demand, and must be a foundation of the next iteration of the NHS Long Term Workforce Plan (LTWP). The previous Government committed £2.4 billion of funding for the LTWP running to 2028/29<sup>51</sup>. We need to see sustainable, long-term funding beyond this, alongside commitment to a structured workforce plan to train, retain and develop the careers of staff across the entire cardiovascular workforce including cardiac physiologists, pharmacists, physiotherapists and psychologists.

# Supercharge cardiovascular research

Over the past 60 years the UK has led the way in cardiovascular disease research, pioneering breakthroughs that have transformed heart attack care, showed that statins save lives, and identified the faulty genes that cause inherited conditions such as hypertrophic cardiomyopathy, amongst countless others. BHF has been at the centre of these efforts as the UK's largest independent funder of cardiovascular disease research.

But looking at overall funding, cardiovascular research has suffered from a lack of investment relative to disease burden.

**In 2019, cardiovascular, stroke and blood disorders accounted for just over 13% of all years lived with a disability or lost to premature death in the UK. Despite this, together they received only 7% of public and charity research funding in 2022.**

Half of this investment is provided by the BHF<sup>52</sup>. We see how this lack of prioritisation translates into treatments for patients: 15 new drugs were approved by MHRA in 2023, 6 for oncology, none for cardiovascular disease<sup>53</sup>.

The UK's advanced research infrastructure, including the UK Biobank, Our Future Health and Health Data Research UK, coupled with an ability to carry out research in partnership with patients within the NHS, should mark the UK out as an international destination for world-leading research. But barriers remain for clinical research despite a new legal duty on the health service to facilitate and promote it. Additionally, we are hampering our ability to attract the top research and innovation talent from outside the UK through the introduction of ever-increasing visa costs and more restrictive immigration rules.







# We urge the Government to:

## **Increase investment in UK research and development and ensure funding for cardiovascular research matches its impact on society**

The UK is lagging behind its international competitor science nations in terms of overall research and development (R&D) investment<sup>54</sup>. This has been exacerbated by inflation, which has almost wiped-out increases in government spending on R&D since 2021<sup>55</sup>. Without a significant increase in the levels of R&D funding by the next Government, the UK will be unable to match its ambitions to be a leading nation within the G7 for science and innovation. But where this investment goes is also important.

BHF invests over £100 million in new research every year, but we cannot solve the growing challenge of cardiovascular disease alone. To ensure heart patients continue to benefit from the best and most innovative treatments, we need to

see public investment in R&D increase, enabling a boost in cardiovascular disease research funding as a priority.

To achieve this, Government should work with research councils and funders to define a plan to increase cardiovascular disease research funding within the development of a new Industrial Strategy. A joined-up approach, clearly outlining cardiovascular disease as a priority area, is needed to ensure there is no shortfall over the next decade and to safeguard the future of UK cardiovascular research and drive advances against some of the country's biggest killers.

**BHF invests over  
£100 million  
in new research  
every year.**







## **Build clinical research capacity in the NHS**

Evidence shows that a research-active NHS delivers huge value to both patients and staff: patients have improved outcomes, lower mortality rates and increased confidence in their care<sup>56</sup>. And likewise, engaging in clinical research can improve job satisfaction, boost morale and reduce burnout amongst healthcare staff<sup>57</sup>. It also benefits the economy: for every patient recruited onto a commercial clinical trial between 2016 and 2018, the NHS in England received £9,189 from life sciences companies, and £5,813 was saved where a trial drug replaced the standard of care treatment<sup>58</sup>.

However, NHS staff report having insufficient time, funding, and training to undertake research; inadequate organisational support; and limited opportunities to engage with research<sup>59</sup>.

Some staff even report having to take annual leave to conduct research. In a 2023 census of the cardiac workforce, 84% of consultant cardiologists were reported to have no weekly programmed activities dedicated to clinical research. This builds on a recent House of Lords inquiry into clinical academics in the NHS, which concluded that clinical research careers were under threat due to issues around poor career progression, pay, and pensions<sup>60</sup>.

To achieve the mandate set out in the 2022 Health and Care Act, the healthcare workforce needs more training, support and time to engage in research. This should include access to research skills training and protected research time for research-engaged clinicians.

## **Ensure the UK is an attractive place to carry out research**

In order to cement the UK's position as a global leader in R&D, it is crucial that careers in UK R&D are attractive to talented individuals and teams from different countries. As of March 2024, 24% of BHF award holders reported that they did not hold British or British Dual nationality status, and as such, were international researchers that likely required visas to work in the UK. For BHF, as with other major funders of health research, continuing to attract this workforce to the UK is critical.

However, in reality, the UK is at risk of losing out on international talent due to the cost of UK visas and changes to immigration rules. High visa costs are consistently cited by researchers as the reason for the UK being less attractive as a place to work and live than competitor

nations. Analysis indicates that a family of four coming to the UK on a five-year Global Talent Visa under new changes is liable to pay around £20,980 upfront, compared to £100 if they were going to Germany, or £250 in the US<sup>61</sup>.

The Department for Science, Innovation and Technology should work with the Home Office to review the impact the UK's visa offering has on the recruitment of international research and innovation staff. This review should look to assess the impact of upfront visa costs, explore how to spread the cost of the Immigration Health Surcharge more evenly across the lifetime of the visa, bring overall cost in line with our international comparators and simplify the application system to reduce the administrative burden on researchers. The Home Office should also seek to implement the improvements to the Global Talent Visa from its annual review.



**“Through my work leading research teams, I’ve seen firsthand how research can lead to innovative cardiovascular treatment for patients. However, there are currently too many barriers facing clinical staff who want to get involved in research. To deliver more research within the NHS, clinical staff must be given more time, training, support and opportunities to get involved.”**

**Professor Andre Ng**  
President,  
British Cardiovascular Society





# Why we need a new approach: Dorothea's story

**Dorothea, 73, from Chelmsford, battled symptoms of breathlessness for years before tests revealed she had critical aortic stenosis, a condition which restricts blood flow and puts extra strain on the heart.**

In mid-October 2023 she was told she needed urgent open heart valve replacement surgery – but what followed was eight months of delays. Dorothea reached the stage where she could barely walk.

She was finally admitted to hospital for the operation in May after a routine echo scan.

“The sonographer told me he was dumbfounded I’d been left in this state,” she explains.

“Being fobbed off every time I made a phone call was so hard. I felt like I’d become just a statistic. The time I had to wait meant I really deteriorated.”





# British Heart Foundation

Far too many of us have felt the pain of losing someone we love to a heart or circulatory disease. That's why the British Heart Foundation exists. We power groundbreaking research to save and improve lives, bring hope to families, and keep hearts beating across the UK.

# References

1. British Heart Foundation, [Heart & Circulatory Disease Statistics 2024](#), 2024
2. Shah K, The Societal Cost of Cardiovascular Disease in the United Kingdom, 2019/20 analysis for British Heart Foundation, 2023.
3. The Health Foundation, [What we know about the UK's working-age health challenge](#), 2023
4. Thomas C, [Broken Hearted: A spotlight on cardiovascular disease](#), 2024
5. Ibid.
6. Michael Marmot, [Health equity in England: the Marmot review 10 years on](#), 2020
7. British Heart Foundation, [Bias and Biology: How the gender gap in heart disease is costing women's lives](#), 2019
8. British Heart Foundation, [Research reveals ethnic minority heart failure patients at much higher risk of death than White patients](#), 2024
9. British Heart Foundation and The Strategy Unit, [Visualising Socio-Economic Inequalities in CHD Progression and Pathways](#), 2022
10. Office for National Statistics, [Deprivation and the impact on smoking prevalence. England and Wales: 2017 to 2021](#), 2023
11. Office for Health Improvement & Disparities, [Health Inequalities Dashboard: statistical commentary, March 2023](#), 2023
12. European Heart Journal, [Improving representativeness in trials: a call to action from the Global Cardiovascular Clinical Trialists Forum](#), 2023
13. NHS England, [Core20PLUS5 \(adults\) – an approach to reducing healthcare inequalities](#), Accessed 1 August 2024
14. Institute for Health Metrics and Evaluation, [Findings from the GBD 2021 Study](#), 2024
15. The Health Foundation, [Investing in the Public Health Grant: what it is and why greater investment is needed](#), 2024
16. British Heart Foundation analysis of UK health surveys, [UK Factsheet](#), 2024
17. The Food Foundation, [A neglected generation: Reversing the decline in children's health in England](#), 2024
18. British Heart Foundation analysis of Global Burden of Disease (GBD) 2019 UK estimates
19. British Heart Foundation & Health Lumen, [Salt: Modelling the potential impact of a reduction in salt consumption on hypertension, coronary heart disease and stroke in the population of the United Kingdom from 2021 to 2035](#), 2022
20. Public Health England, [Salt targets 2017: Second progress report A report on the food industry's progress towards meeting the 2017 salt targets](#), 2020.
21. Recipe for Change, [Evidence briefing 1: Health and economic benefits of an upstream sugar and salt levy](#), 2023
22. Action on Salt, [The nutritional quality of pizzas](#), 2023
23. Action on Salt, [The salt content of packaged pre-sliced bread](#), 2023
24. British Heart Foundation, [UK Factsheet](#), 2024
25. Jha P, Peto R, et al. Social inequalities in male mortality, and in male mortality from smoking: indirect estimation from national death rates in England and Wales, Poland, and North America, *The Lancet*, 2006; 368(9533):367-70
26. Landman Economics for Action on Smoking & Health, [Total and net costs of smoking to public finances, England and UK: 2023](#), 2024
27. All Party Parliamentary Group Smoking and Health [Manifesto for a Smokefree Future](#), 2023
28. Featherstone HJ, [Establishing a Smoke-free 2030 Fund](#), 2021
29. Pokhrel S, Owen L & Coyle K et al. [Costs of disinvesting from stop smoking services: an economic evaluation based on the NICE Tobacco Return on Investment model](#), *The Lancet*, 2016; 388(2):S95
30. Shah ASV, Lee KK & McAllister DA et al. [Short term exposure to air pollution and stroke: systematic review and meta-analysis](#) *BMJ*, 2015; 350:h1295
31. World Health Organization Global Health Observatory, [Air pollution deaths by country \(2019 estimates\)](#), accessed 27 Aug 2024
32. NHS England, [Consultant-led Referral to Treatment Waiting Times Data 2024-25](#), 2024
33. NHS England, [Ambulance Quality Indicators Data 2024-25](#), 2024
34. British Heart Foundation, [UK Factsheet](#), 2024
35. The Health Foundation, [Health in 2040: projected patterns of illness in England](#), 2023
36. British Society of Heart Failure (BSH) estimate, reported in ["NHS faces 'ticking bomb' with number of heart failure patients set to soar"](#), *The Observer* 23 Jun 2024
37. Bottle A, et al. [Routes to diagnosis of heart failure: observational study using linked data in England](#) *Heart* 2018;104:600-605
38. British Heart Foundation, [Heart Failure: a blueprint for change](#), 2020
39. British Society for Heart Failure, [25in25](#), accessed 2 Aug 2024
40. British Heart Foundation, [England Factsheet](#), 2024
41. UCL Partners, [The size of the prize- Helping the NHS to prevent heart attacks and strokes at scale](#), 2023.
42. McManus R J, et al. [Home and Online Management and Evaluation of Blood Pressure \(HOME BP\) using a digital intervention in poorly controlled hypertension: randomised controlled trial](#) *BMJ* 2021;372:m4858
43. NHS England, [Cardiovascular Disease Prevention Audit \(CVDPREVENT\)](#), 2024
44. NHS England, [Over 10,000 NHS pharmacies begin treating people for common conditions](#), 2024
45. British Heart Foundation, [UK Factsheet](#), 2024
46. British Heart Foundation, [Heart care waiting list rises again, bucking overall trend](#), 2024
47. NHS England, [Monthly Diagnostics Data 2024-25](#), 2024
48. UCL Partners Health Innovation. Remote monitoring in cardiac surgery evaluation, 2024
49. British Heart Foundation, [Characteristics of the UK cardiovascular workforce](#), 2022
50. British Heart Foundation, [The Heartbeat of Heart Care: Cardiac Workforce Census 19 June 2023](#), 2024
51. NHS England, [NHS Long Term Workforce Plan](#), 2023
52. UK Clinical Research Collaboration, [UK Health Research Analysis 2022](#), 2023
53. Papapetropoulos, A., et al. [Novel drugs approved by the EMA, the FDA, and the MHRA in 2023: A year in review](#). *Br J Pharmacol* 2024; 181(11), 1553–1575.
54. IPPR, [UK lags £62 billion behind in R&D as its global share of investment falls, IPPR reveals](#), 2022
55. Research Professional. [Inflation undermined 2022 boost to UK government R&D spending](#), 30 Apr 2024
56. National Institute for Health and Care Research, [Embedding a research culture](#). Accessed 1 Aug 2024
57. Wenke RJ, Mickan S, Bisset L. A cross sectional observational study of research activity of allied health teams: is there a link with self-reported success, motivators and barriers to undertaking research? *BMC Health Serv Res* 2017; 107, 114.; Shanafelt TD, West CP, Sloan JA, et al. Career fit and burnout among academic faculty. *Arch Intern Med* 2009;169(10):990-5
58. National Institute for Health and Care Research, [Impact and Value of the NIHR Clinical Research Network 2019](#) (infographic summarising key findings), 2019
59. Peckham S, Eida T, Zhang W, et al. [Creating Time for Research: Identifying and improving the capacity of healthcare staff to conduct research](#), 2021
60. Brown, Baroness., [Letter from Baroness Brown of Cambridge to the Rt Hon Steve Barclay MP, Secretary of State for Health and Social Care](#), 2023.
61. Campaign for Science and Engineering, [The negative impact of increased visa fees](#), 2023.





**British Heart  
Foundation**

**bhf.org.uk**

British Heart Foundation Greater London House 180 Hampstead Road London NW1 7AW

Company registration number: 699547 Registered charity number: 225971 Scottish Registered Charity Number: SCO39426