

B.E.A.T HEART FAILURE

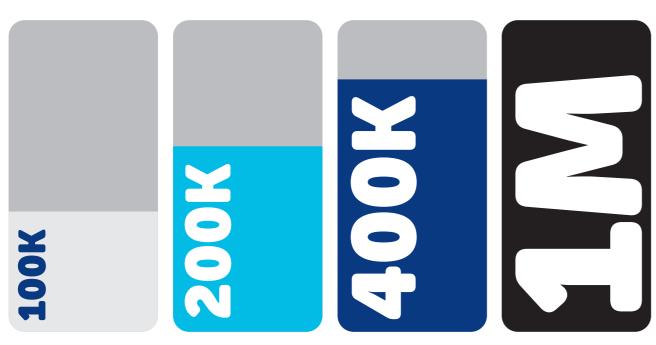
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BEAT HEART FAILURE PLAYBOOK

The narrative about how to operationalise a dramatic improvement in the time to diagnosis and treatment of Heart Failure.

HEART FAILURE REMAINS A MAJOR HEALTH ISSUE IN THE 21ST CENTURY. IT IS POORLY UNDERSTOOD BY THE **GENERAL PUBLIC, AND EVEN BY MANY NON-SPECIALISTS. APPROXIMATELY 64 MILLION PEOPLE LIVE WITH THE CONDITION WORLDWIDE.**

NUMBERS ARE INCREASING IN THE UK





Heart Failure causes one hundred thousand hospital admissions annually in the UK. The figures are staggering.



The British Heart Foundation estimates that in the UK two hundred thousand people are newly diagnosed every year.



We believe that in the UK, nearly four hundred thousand people living with Heart Failure have yet to be diagnosed.



It is estimated that more than one million people in the UK live with Heart Failure.



Heart Failure is often diagnosed late. Early diagnosis is essential. The evidence demonstrates that promptly starting Guideline-Directed Medical Therapy (GDMT) results in lower mortality, better quality of life, and significant cost savings for the NHS at a population level.



In some parts of the UK, patients are waiting over six months for a diagnosis via specialist assessment and echocardiogram and the start of GDMT. People are dying while waiting, and this is unacceptable when we have the means to improve it. This would not be allowed in a cancer diagnosis, why in Heart Failure?

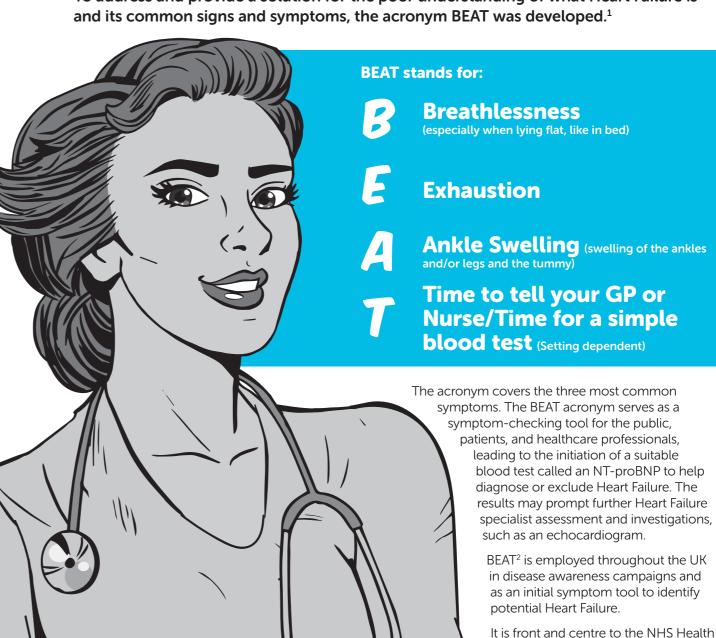
INTRODUCTION TO BEAT HF

See this publication bjgpopen.org/content/5/3/ BJGPO.2021.0006.long



In the UK, the FAST acronym for quickly recognising stroke signs and symptoms has been hugely successful and has been widely adopted and understood by the public and healthcare teams alike. This has led to improved outcomes.

To address and provide a solution for the poor understanding of what Heart Failure is and its common signs and symptoms, the acronym BEAT was developed.1



Innovation Networks'2 (HiN) two-year

Heart Failure programme of works.

 $^{\rm 1}$ Taylor C J, Hartshorne-Evans N, Satchithananda D, Hobbs FR. FASTer diagnosis: Time to BEAT heart

Sankaranarayanan R, Hartshorne-Evans N, Hornby K, Barton C. Hyland R. Campbell G. Khan N. Campbell P. Satchithananda D, Taylor C J. Earlier Detection of Heart Failure at Community Heart Health Events Using the BEAT-HF Tool. JACC Heart Fail. 2025 Apr;13(4):660-662.

failure. BJGP Open. 2021 - see QR code.

THE FOUR **COMPONENTS TO BEAT**

Disease **Awareness**

A dynamic highimpact disease awareness campaign utilising eye-catching messaging, driving the utilisation of BEAT as a symptom tool for patients and the public, as well as healthcare professionals.

Community **Heart Health Events**³

Offering blood pressure measurement. enhanced pulse checks, and, if appropriate, NTproBNP testing and cardiovascular examination to those with BEAT symptoms.

BEAT Pharmacies

Offering blood pressure measurement, enhanced pulse checks, and, if appropriate, NTproBNP testing and cardiovascular examination to those with BEAT symptoms in a community pharmacy setting.



BEAT to TREAT⁴

From BEAT symptom recognition to diagnosis and treatment within 60 minutes. A pathway that speeds up diagnosis and the start of Guideline-Directed Medical Therapy (GDMT) for those with BEAT symptoms, using an NT-proBNP test as a rule-out tool for Heart Failure and an Al ECHO for patients with NT-proBNP over 400ng/L, with prompt Heart Failure specialist assessment:



Further tests, investigations and management by the HF team.



Full hospital or community-based echocardiogram.



Up-titration and optimisation of GDMT - STRONG HF rapid up-titration if appropriate.



³ Sankaranarayanan R, Hartshorne-Evans N, Hornby K, Barton C, Hyland R, Campbell G, Khan N, Campbell P, Satchithananda D, Taylor C J. Earlier Detection of Heart Failure at Community Heart Health Events Using the BEAT-HF Tool. JACC Heart Fail. 2025 Apr;13(4):660-662.

⁴ Sankaranarayanan R, Hartshorne-Evans N, McLean L, Jones J, Salla M, Chakrabarti B, Hadcroft J, Pritchard C, Smith A, Lam CSP. Early Detection of

COMPONENT ONE: AWARENESS OF HEART FAILURE AND THE BEAT SYMPTOM TOOL

From a public perspective, the BEAT methodology is a simple, memorable, relevant and positive acronym that describes the key symptoms of Heart Failure and action of informing your GP or nurse that maybe they should test for Heart Failure. Across the medical profession, the T in BEAT means Time for an NT-proBNP test. Our overall ambition is for BEAT to be recognised by all, just like FAST (Facial drooping, Arm weakness, Speech difficulties, and Time to call 999) is for stroke. It puts a spotlight on the appropriate stakeholders to consider testing for Heart Failure.

BEAT stands for:



Breathlessness (especially when lying flat, like in bed)



Exhaustion



Ankle Swelling (swelling of the ankles and/or legs and the tummy)



Time to tell your GP or Nurse/Time for a simple blood test (Setting dependent)

Three of the common risk factors for Heart Failure are high blood pressure, diabetes and a previous heart attack. If you have any of these conditions and are experiencing the symptoms of Heart Failure then visit your GP surgery.

WHAT WE'VE ACHIEVED SO FAR...

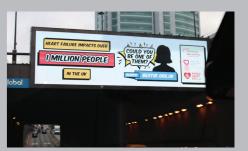
Over 68 million impressions across social media and out-of-home advertising such as digital billboards.





100,000s of patient materials delivered to NHS teams across the UK.





Celebrity-voiced radio campaigns on Classic FM and LBC Radio, plus interviews on BBC radio.

COMPONENT TWO: COMMUNITY HEART HEALTH EVENTS

We have run over 30 Community Heart Health Events, across diverse socio-economic footprints, that have proven to be very effective and well received within local health economies. We have collaborated with the Health Innovation Networks, Integrated Care Boards, NHS Acute and Community health teams, Primary Care Networks, local health organisations, and the third sector. By the end of 2025, we will have seen over 10,000 people. We found a third of people attending had high blood pressure, and around 2% had a new diagnosis of atrial fibrillation. Those with an NT-proBNP over 400 equated to 1.74%.

We offer heart health checks to people over 40 years of age. We provide blood pressure and enhanced pulse checks. If the person displays the BEAT symptoms, they undergo a cardiovascular examination and are offered a point-of-care NT-proBNP (to either rule out or help diagnose Heart Failure).

Directed by local NHS health teams, patients with elevated blood pressure and/ or suspected AF were given a letter to hand to their GP. As we collaborated with the local Heart Failure teams, those with an elevated NT-proBNP were referred for further tests and investigations with the Heart Failure service. Patients without an elevated NT-proBNP were given a letter to give to their GP for further assessments.

It should be noted that each individual site may have managed the patient pathway differently to meet local needs.

See our publication JACC-HF www.beathf.org.uk/wp-content/uploads/2025/05/ JACC-Report.pdf









See our publication JACC-HF

Harring Harri

"Deprivation has a big impact on heart health in Liverpool, which is why BEAT HF events with Pumping Marvellous are so important. They give people the knowledge, support and confidence to live well with Heart Failure – reminding us that small changes can make a big difference."

Mrs Gayle Rooke – Long-Term Conditions Delivery Manager

Cheshire and Merseyside ICB, Liverpool Place Team

Sankaranarayanan R, Hartshorne-Evans N, Hornby K, Barton C, Hyland R, Campbell G, Khan N, Campbell P, Satchithananda D, Taylor C J. Earlier Detection of Heart Failure at Community Heart Health Events Using the BEAT-HF Tool. JACC Heart Fail. 2025 Apr;13(4):660-662.

"Early detection saves lives and improves outcomes. At our first Hove neighbourhood screening event with the Pumping Marvellous Foundation in June, over 800 people responded to an invitation for heart health screening and our cardiology specialists found:

- 33 people needing referral to a Heart Failure clinic
- 250 people with undiagnosed cardiovascular risk factors

Thanks to Dr Nick Hartshorne-Evans DUniv BEM for his powerful insights on why we must diagnose Heart Failure earlier – and the barriers we need to overcome as systems to do this better."

Lisa Douglas Head of Clinical Outcomes – West Sussex

"Working alongside Pumping Marvellous to support these events has brought significant benefits to our communities. We've been able to raise awareness of Heart Failure symptoms not only among the public but also with nonspecialist healthcare professionals, helping to highlight one of the most urgent long-term health challenges we face.

These events are also strengthening collaboration across the health and care system. By bringing together primary care teams, Heart Failure specialists, local authorities, and voluntary and community sector organisations, we're supporting a 'shift left' approach – encouraging more joined-up, preventative care that's delivered closer to home."

Lucy Marquis –
Transformation Clinical
Lead for Integrated Care:
Community Nursing, LTC
& Therapies, Midlands
Partnership University NHS
Foundation Trust

"It has been a pleasure to support our excellent cardiology teams and Pumping Marvellous for the Heart Health Event! Together, we inspired over 400 community members to show their hearts some love by getting a check-up. We identified cases of atrial fibrillation, high blood pressure, and Heart Failure before they led to acute problems. We look forward to facilitating more events as we continue to prioritise prevention and bring healthcare to our communities."

Dr Titilopemi Oladosu – General Practitioner Clinical Lead – Integrated Urgent Care Clinical Steward/Lead Cardiovascular-Renal-Metabolic Health, Respiratory, and Long-Term Conditions

"I would like to thank everyone who attended last week's BEAT Heart Health Event which was held at the Forum in Norwich. We had support from 9 HF nurses from NNUH, 1 HF nurse from JPH, 5 community HF nurses, 3 physiologists from NNUH and myself, reviewing 428 Norfolkians with the amazing hard work of the people from Pumping Marvellous.

Of the people attending, 157 had high blood pressure and were recommended to see their GP, 5 had a new irregular heartbeat and were recommended to see their GP to get blood thinners to prevent strokes, 5 had slow heartbeats and will probably require pacemakers and 4 had abnormal blood tests suggesting they are likely to have Heart Failure.

It has also spawned baby events which the NNUH/JPH team are thinking of running at e.g. Afri-Fest to get to harder to reach and under-served groups.

Happy to provide any further detail required."

Dr Kristian Skinner – Consultant Cardiologist with a specialism in Heart Failure, Norfolk and Norwich University Hospitals NHS Foundation Trust

Sankaranarayanan R, Hartshorne-Evans N, Hornby K, Barton C, Hyland R, Campbell G, Khan N, Campbell P, Satchithananda D,
Taylor C 1 Farlier Detection of Heart Failure at Community Heart Health Events Using the BEAT-HE Tool, 14CC Heart Fail 2005

COMPONENT **THREE: BEAT PHARMACIES**



Earlier identification of Heart Failure through

supporting "from months to minutes" objectives.

Decreased pressure on primary care and diagnostic

Improved patient engagement via accessible

Supports NHS Long-Term Plan ambitions for

integrated, preventative cardiovascular care.

Reduced time to diagnosis and treatment,

services by filtering non-HF presentations.

There is an increasing focus on the role of community pharmacy in the prevention and early detection of cardiovascular disease (CVD).6

Pharmacies are ideally placed to identify early signs and symptoms of Heart Failure (HF) due to their accessibility, regular patient contact, and integration within primary care.

The BEAT Pharmacy model combines patient symptom assessment, known clinical history, and NT-proBNP pointof-care testing (POCT) to support rapid identification and referral of patients with suspected Heart Failure.

Symptom Identification



Patients presenting with BEAT symptoms (Breathless, Exhausted, Ankle swelling, Time to speak to a healthcare professional) are identified in pharmacy



tool alongside existing comorbidities and medication history.

Benefits

community-based testing.

community intervention.

Alignment with NHS Priorities.

Testing



Eligible patients are offered NT-proBNP POCT (point-of-care testing) at a designated BEAT Pharmacy.



Results are available within minutes. supporting immediate clinical decision-

Referral and Follow-Up



Raised NT-proBNP: Referral to GP for onward referral to the Heart Failure multidisciplinary team for confirmatory diagnostics (e.g. echocardiography).



If symptoms still suggestive of Heart Failure, referred back to GP to consider alternative tests or for specialist

Direct Access Cases



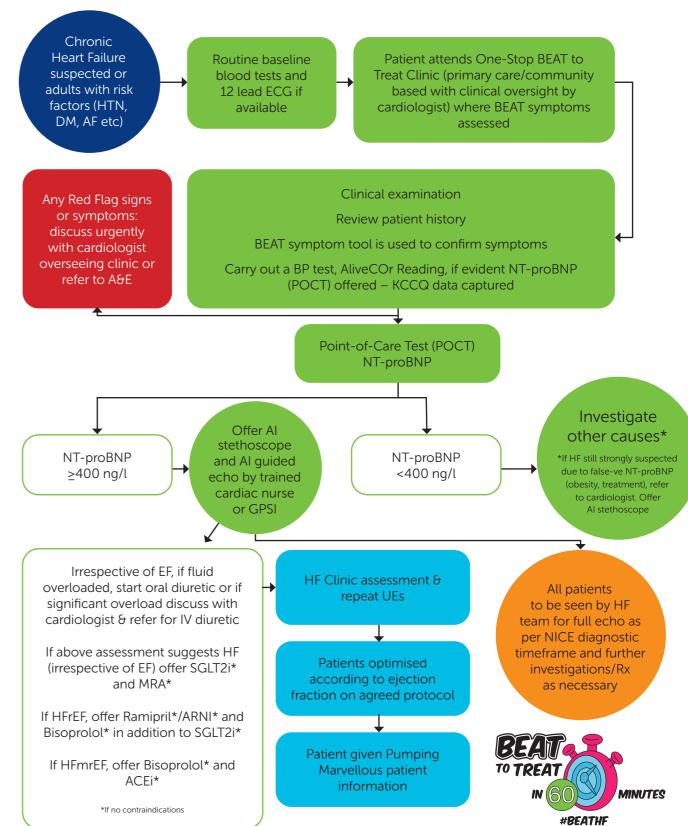
Individuals presenting to the pharmacy without prior GP referral but demonstrating relevant BEAT symptoms and risk factors may also be tested.



Referral pathway remains consistent results shared with GP and onward referral initiated if required.

COMPONENT FOUR: CLINICAL PATHWAY





⁶ www.rpharms.com/england/nhs-transformation/nhs-10-year-plan-and-pharmacy

The BEAT to TREAT initiative aims to enhance Heart Failure diagnosis and treatment by recognising key symptoms, facilitating early detection, and expediting care. BEAT's (Breathlessness, Exhaustion, Ankle Swelling, Time to tell your GP/Nurse) objective is to swiftly initiate appropriate medication/treatments; potentially improving patient outcomes and reducing hospitalisations.



BEAT Methodology:

Elaboration:



BEAT:

This acronym identifies key symptoms of Heart Failure, encouraging patients to seek medical attention.



Symptoms:

Breathlessness, exhaustion, and ankle swelling are significant signs that can indicate Heart Failure.



Action:

The acronym encourages patients to inform their doctor (GP) or nurse about these symptoms. BEAT is also a symptom checker tool for non-specialists to think: "Could this be Heart Failure?"



Rapid Treatment Initiation:



Goal:

This initiative aims to enhance the efficiency of diagnosing and treating Heart Failure using the BEAT symptom tool, POCT NTproBNP and ECHO AI.



Early Detection:

Recognising the signs of Heart Failure early can enable timely interventions.



Timely Treatment:

The aim is to commence suitable treatment promptly, ideally within 60 minutes, to enhance patient outcomes.



Improved Outcomes:

Timely and effective treatment can result in decreased mortality, enhanced quality of life, and a reduced likelihood of hospitalisation.



Benefits of BEAT to TREAT:



Faster Diagnosis:

The initiative seeks to minimise delays in diagnosing Heart Failure.



Guideline-Directed Medical Therapy (GDMT) Medications:

Prompt initiation of appropriate medications can greatly enhance patient outcomes.



Reduced Hospitalisations:

Early intervention can aid in preventing or minimising the need for hospitalisation.



Improved Quality of Life:

Timely and effective treatment can result in a higher quality of life for individuals with Heart Failure.



Key Components of Heart Failure Treatment:



Medications:

A variety of medications can assist in managing symptoms, enhancing heart function, and alleviating fluid retention.



Cardiac Rehabilitation:

Cardiac rehabilitation should be offered to all clinically appropriate patients with a diagnosis of Heart Failure.



Cardiac Devices:

Implantable devices such as ICDs (Implantable Cardioverter Defibrillators) and CRT (Cardiac Resynchronisation Therapy) can assist in controlling heart rate and rhythm, improving clinical and patient outcomes.



Heart Valve Surgery:

Heart surgery might be needed to repair or replace damaged valves or to enhance blood circulation to the heart.



Lifestyle Changes/Self-Management:

Embracing a healthy lifestyle, which includes a balanced diet, regular exercise, and cessation of smoking, can aid in managing Heart Failure.



Palliative Care:

An important component in the management of treatments and the provision of holistic support e.g. emotional, psychological, social, and spiritual needs.

HOW WE CAN HELP YOU ENABLE BEAT IN YOUR HEALTH SYSTEM

BEAT is a multi-component solution designed to raise awareness of Heart Failure and improve the time to diagnosis, which we know enhances health outcomes for patients and the healthcare system.

We offer the following resources:

- BEAT disease awareness pack distributed to your destinations
- BEAT disease awareness campaign via Pumping Marvellous social media channels
- BEAT disease awareness campaign via targeted public billboard media
- BEAT disease awareness via targeted radio campaign

- BEAT disease awareness via targeted broadcast media
- C BEAT Heart Health Event targeted to your audience
- **BEAT** Pharmacy implemented in your local community pharmacies
- C BEAT to TREAT GP Hub or Community Hub
- BEAT bespoke combination campaign

Engage with us at the start by emailing hearts@pumpingmarvellous.org

NHS Objective	BEAT to TREAT Contribution
Shifting diagnosis and management from hospital to community as per the Government's 10-year plan	Detects Heart Failure at the earliest opportunity within the community.
Integrated care and system collaboration	Seamless referral between Primary Care Team and Heart Failure teams.
Population health improvement	Targets at-risk individuals with known comorbidities and symptoms.
Innovation and digital adoption	Utilises validated digital BEAT tools, POCT and AI ECHO technology.

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OTHER RESOURCES BY THE PUMPING **MARVELLOUS FOUNDATION**

The leading Heart Failure patient information for self-management in the NHS

Resources for all patients:

Heart Failure at Home pack



My Guide to Cardiac Preparing for an Rehabilitation



Appointment with your Doctor or Nurse



Know Your Type: What your EF **Number Means**

My Guide to **Heart Failure with** preserved Ejection Fraction (HFpEF)

My Symptom Checker



Resources for patients with Heart Failure with reduced Ejection **Fraction (HFrEF):**

Big Pocket Guide





My Guide to Medicines My Guide to having a **Cardiac Device**



To see all our patient resources, visit our support guide page here:

gr.pumpingmarvellous.org/ Educate



You can order our resources if you are an NHS team here: qr.pumpingmarvellous.org/



CREDITS AND BEAT TEAM





Huge thanks to all the patients, carers, and healthcare professionals who have contributed their insights to develop BEAT. We wish to thank the NHS Health Innovation Network for adopting BEAT and recognising it as an innovative programme. We'd also like to thank our BEAT HF team, who tirelessly prioritise the patient when discussing BEAT.

Dr Fozia Ahmed Consultant Cardiologist

Gaynor Campbell ANP Heart Failure Nurse

Corinne Hudson Patient Educator

Dr Rajiv Sankaranarayanan Consultant Cardiologist

Dr Rudolf Duehmke Consultant Cardiologist Dr Dargoi Satchi

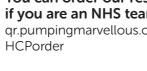
Honorary Professor of Community Cardiology at Keele University and Midlands Partnership University Foundation Trust

Professor Clare Taylor MBE GP and Professor of General Practice

Pumping Marvellous Team



BEAT HF is a trademark of Pumping Marvellous Foundation, Preston, UK and Professor Clare J. Taylor





NOTES

Firstly need to contact Pumping Marvellous - +44 (0)1772 796542 or hearts@pumpingmarvellous.org

NOTES

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THINK HEART FAILURE.	

CONTACT US

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- f Search 'Pumping Marvellous Foundation' for our page
- f Search 'Help for Hearts' for our support community group

Can you help us by donating or fundraising?

We rely on contributions to help us provide vital services. Thank you!







