

NAVIGATING THE HEART FAILURE JOURNEY IN PRIMARY CARE: **A PERSONALISED APPROACH TO LIVING WELL**

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Heart Failure Academy Map · Version 2 · Published 28th September 2026 · Review Date September 2029 · © 2026 Leeds Teaching Hospitals NHS Trust.

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NAVIGATING THE HEART FAILURE JOURNEY: A PERSONALISED APPROACH TO LIVING WELL

INTRODUCTION

The term Heart Failure can sound alarming to someone who has just been diagnosed. It can be described as 'when the heart fails to pump the blood around the body as well as it should do, so it can't meet the demands of the body'. However do not shy away from using the term. If it is not used and later discovered by the patient in their notes it can be quite a shock.

Heart Failure – The Facts & Figures

- Heart Failure impacts nearly one million people in the UK, and this is set to double by 2040.¹
- Two hundred thousand people are diagnosed with Heart Failure every year.²
- In the UK, Heart Failure causes approximately one hundred thousand hospital admissions per year.²
- Heart Failure impacts 1-2% of the population.³ In Yorkshire, this may equate to over 112,000 people living with Heart Failure.⁴

Unfortunately, Heart Failure signs and symptoms can be missed, and so people are often diagnosed after an emergency admission to hospital, when their heart function has deteriorated.



IF WE CAN CATCH HEART FAILURE EARLY, THERE IS SO MUCH MORE WE CAN DO TO SUPPORT PEOPLE LIVING WITH HEART FAILURE.

Our aim is to enable healthcare professionals to recognise the signs and symptoms of Heart Failure, reduce hospital admissions by supporting timely diagnosis in new patients, optimising management in those with established Heart Failure, and recognising decompensation early. This benefits people living with Heart Failure by reducing unnecessary and distressing admissions and supports the NHS in using resources more efficiently.

This, in turn, enables patients to live well with their Heart Failure condition as they then have confidence that their healthcare teams are enabled around their needs. This can improve patients' and their families' confidence in self-managing their condition, leading to better health outcomes for them around their mortality and quality of life.

This booklet aligns to the Cardiovascular Disease Modern Service Framework (CVD MSF)⁵ and follows the Heart Failure Academy map (below). It aims to support you in recognising the signs and symptoms of Heart Failure, to enable a timelier diagnosis and optimisation of therapy to improve the support of people living with Heart Failure. The pages of this booklet are colour-coded to help you access information on each map stop quickly.

NAVIGATING THE HEART FAILURE JOURNEY



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LET'S TAKE A DEEPER DIVE INTO EACH OF THE MAP STOPS

1

HEART FAILURE HIDES IN PLAIN SIGHT



Heart Failure signs and symptoms can be non-specific and so they are easily missed, meaning they can hide in plain sight.

We all need to be alert to the signs and symptoms. The evidence has shown that most people are diagnosed in hospital (80%) even though often there were signs and symptoms present in primary care consultations (40%) over the preceding five years.⁶

One of the immediate priorities for the CVD MSF is to find the 'missing millions' who have one or more cardiovascular-kidney-metabolic (CVKM) risk factor(s) or condition(s) which have not been detected or managed.⁵ Once identified, we need to support adherence to reduce the risk of progression to developing new or worsening existing CVKM conditions. This includes those who are living with undiagnosed Heart Failure or in people already diagnosed with Heart Failure, ensuring that their therapy is individualised and fully optimised.

Heart Failure hides in plain sight⁶



80%

Heart Failure
diagnoses recorded
in hospital



40%

had a primary care
consultation with 1 of 3
HF symptoms recorded

What are the signs and symptoms we need to look out for and what can we do?

One thing we can do is train everyone to be alert to the BEAT[®] symptoms and escalate someone with these symptoms quickly and appropriately depending on their role.

Think BEAT[®], think Heart Failure.

Use **BEAT[®]** to identify people living with symptoms of undiagnosed Heart Failure.

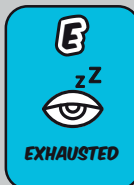
B.E.A.T[®] stands for:

Breathlessness

Exhaustion

Ankle swelling

Time to take an NT-proBNP (blood test).



Be vigilant about the BEAT[®] symptoms when you are seeing someone acutely, or consulting in any long-term condition review. This is particularly important in CVKM conditions which can lead to Heart Failure such as hypertension, atrial fibrillation, diabetes, chronic kidney disease and obesity.

Why is this important?

Primary care is where the biggest difference can be made to people living with Heart Failure. Early recognition of BEAT[®] symptoms and an appropriate NT-proBNP blood test changes everything.

Heart Failure does not discriminate.

It affects all genders and generations.

The location of Heart Failure diagnosis makes a difference on patient outcomes⁷

Five-year mortality

Five-year mortality



56%

newly diagnosed
in primary care

78%

newly diagnosed
in hospital

Older people are less likely to be diagnosed with HF in primary care⁹

≥ 75 years with HFrEF

20%
less likely

to receive a prescription for
disease modifying therapy



Compared with younger
people 55-64 years

≥ 75 years with HFrEF

48%
less likely

to receive at least
1/2 dose of GDMT

Heart Failure is more prevalent in those over 75 years of age.⁸

However, we know Heart Failure is often not spotted in young people or women. So don't just assume it is a condition of the elderly.

Women are 9% less likely to be diagnosed with HF in primary care⁹

Women with HFrEF

13%
less likely

to be initiated on disease
modifying therapy



Compared with men

Women with HFrEF

24%
less likely

to receive at least
1/2 dose of GDMT

'I was trying to work out why I was so tired, dizzy and breathless when doing what was my normal for 16 months. I knew something was wrong; I was not heard. I was told I was making myself anxious. I felt like I was making it up.'

Person living with Heart Failure in the Yorkshire area

'Sometimes spotting Heart Failure in the least prevalent age groups is like spotting a zebra in a pack of horses.'

Heart Failure clinician

If someone is breathless, don't discount it, no matter what age they are – **there is always a reason.**

What impact will this make?

When primary care teams recognise the signs of Heart Failure and act quickly, it can prevent unnecessary and distressing unplanned hospital admissions, enabling people living with Heart Failure to have a better quality of life because they start therapy earlier. This results in fewer complications, better symptom management, impacting quality of life, meaning people are less likely to die early.

What can we do?

Prevent Heart Failure in the first instance

Firstly, let's **prevent** people from getting Heart Failure.

One thing we can all do is identify and actively monitor and effectively manage people with established or emerging CVKM conditions that could lead to Heart Failure.

We need to treat hypertension, high cholesterol, diabetes, obesity, Chronic Kidney Disease (CKD), atrial fibrillation and smoking as one interconnected problem rather than separate conditions.⁵

For all these conditions we need to:

- Ensure blood pressure is monitored and well controlled.
- Check QRISK and ensure cholesterol is managed. If cholesterol is high, lower it to reduce the risk of coronary heart disease.
- Monitor the urine albumin creatinine ratio (ACR).
- Monitor HbA1c.
- For CKD and diabetes, the use of SGLT2 inhibitors reduces the progression to Heart Failure.

- For CKD, using finerenone where indicated also could reduce progression to Heart Failure.
- Ensure you provide diet, alcohol and smoking cessation advice and refer to smoking cessation services.
- Encourage regular exercise or access to cardiac rehabilitation services if appropriate.

There may be other causes of Heart Failure, including cardiomyopathy, atrial fibrillation, problems with heart valves, viral infection, anaemia, overactive thyroid, excessive alcohol consumption and some inherited conditions.



When you see people living with these conditions either in acute or long-term reviews, **be curious**, ask questions to find out whether they could be living with Heart Failure. Ask.

'Have you had any new breathlessness?' 'Are you more tired than normal?' 'Do you have any ankle swelling?' 'Do your clothes still fit well?'

'Is this normal for you?'

'How are you managing on a day-to-day basis?'

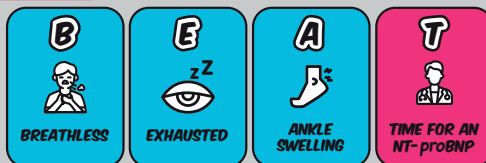
'Have you noticed you've needed to make any changes to your daily habits to accommodate breathlessness or exhaustion?' 'Can you still walk the same distances? Even if this is on an incline?'

'How are you managing exercise?' 'Does it take you the same time to walk a set distance as it used to?'

'Are you getting up in the night to go to the toilet? Has the frequency changed recently?'

'Are you still wearing the same footwear?'

Always maintain a high index of suspicion and remain alert to the **B.E.A.T®** symptoms early.



STOP 1

What else can I do?

Identify people who may be at risk of Heart Failure in long-term reviews and from audits:

- Search the clinical systems for people who have been prescribed loop diuretics or may be at risk of developing Heart Failure so you can prioritise them for review.
- Complete 'ABCDE' case finding to find people living with CVKM risk factors or existing CVKM conditions. Check the following: **A**trial fibrillation, **A**lbuminuria, **B**lood pressure, **C**holesterol, **D**iabetes, **E**xcess weight, **e**GFR (kidney function).⁵
- Also be alert to BEAT® symptoms in people living with non-cardiovascular causes, particularly respiratory conditions or anaemia and hyperthyroidism that can contribute to or mimic Heart Failure.
- Remain vigilant for BEAT® symptoms in people who consume a lot of alcohol or use recreational drugs.
- Incorporate questions in your long-term conditions review criteria for people living with all of these conditions.

When these questions are embedded into routine consultations, they do not add workload; instead, they become part of standard practice and could contribute to Quality and Outcomes Framework (QOF) performance.

TAKE HOME

How will we find undiagnosed Heart Failure in primary care?

- 1 Be alert to the BEAT® symptoms and finding new patients showing the signs and symptoms of Heart Failure.
- 2 Use the clinical systems to search for people on loop diuretics or whose long-term conditions could progress to Heart Failure (this could include type 2 diabetes, obesity, lipid disorders, hypertension, previous MI, and AF) and check whether they are living with any BEAT® symptoms.

What do we do if someone presents with signs or symptoms suggestive of Heart Failure?

If someone presents with signs or symptoms suggestive of Heart Failure, request an NT-proBNP test to determine whether an echocardiography and specialist assessment are required, see stop 2 for a stepwise approach.



2

CHECK NT-proBNP



If someone presents with the BEAT® Heart Failure symptoms, take a comprehensive history.

Do they have symptoms of Heart Failure?

B

Breathlessness

On exertion, at rest, lying flat, a persistent nighttime cough and/or paroxysmal nocturnal dyspnoea.

E

Exhaustion

Increased fatigue, decreased exercise tolerance or taking longer to recover after exercise. Consider light-headedness or fainting too.

A

Ankle Swelling

Fluid retention in both ankles, unable to wear usual footwear, bloated feeling, or decreased appetite, abdominal swelling, or weight gain.

T

Time for an NT-proBNP Blood Test

Consider whether there are any risk factors for Heart Failure.

Does the patient have:

- Coronary artery disease, including a previous history of myocardial infarction, hypertension, atrial fibrillation and type 2 diabetes?
- A family history of Heart Failure or sudden cardiac death under the age of 40 years?
- Chronic kidney disease?
- A history of smoking, recreational drug use (including alcohol)?

Complete a clinical examination to check for signs of Heart Failure and exclude other causes of symptoms.

The following issues may indicate Heart Failure:

- Increased heart rate, confirm if new AF present?
- Increased blood pressure
- Raised Jugular Venous Pressure (JVP)
- Enlarged liver
- Tachypnoea (fast breathing)
- Basal crepitations
- Ankle oedema (bilateral)
- Ascites (fluid around the abdomen)
- Obesity

There may be other causes of breathlessness, particularly if the following are present (follow your local breathlessness pathway):

- Fever
- Unilateral ankle oedema
- Anaemia
- Chest pain
- Raised temperature (are there signs of infection?)

If the history and examination are suggestive of Heart Failure, you need to arrange an NT-proBNP which is a blood test that rules out Heart Failure.

Key Point

The NT-proBNP blood test is a screening tool so should only be used if there are signs and symptoms (as well as the medical history) suggestive of Heart Failure.

The NT-proBNP can be raised for reasons other than Heart Failure, for example, AF, COPD, PE, left ventricular hypertrophy, diabetes and acute or chronic renal disease.¹⁰

Explain to the patient

'This is a screening tool – if the NT-proBNP is raised, we'll need you to have an echocardiogram which is a heart scan, and you'll be invited to a specialist assessment.'

Next steps

Depending on the processes in your area, you may arrange or complete other investigations and tests to support the specialist assessment, or they may happen during the specialist assessment (refer to your local guidelines). These include:¹⁰

- **ECG** to look for arrhythmias and conduction disease.
- **Chest X-ray** to assess whether breathlessness is caused by fluid in the lungs or whether there is an enlarged heart or an alternative cause.
- **U&Es** in preparation for starting diuretics, to check whether there is any electrolyte imbalance from fluid overload and see how the kidneys are functioning.
- **Full blood count and iron studies** to assess iron status and check for anaemia, requesting transferrin saturation (TSAT) and serum ferritin.
- **HbA1c** to check for diabetes and establish as baseline if starting an SGLT2 inhibitor.
- **Thyroid function tests** (TFTs) to check for hypothyroidism for exhaustion, as hypo and hyperthyroidism can be a cause of Heart Failure.
- **Liver function tests** (LFTs) to see how the liver is functioning and if there is any abdominal congestion.
- **Lipid profile and QRISK** to screen for metabolic syndrome and treat if appropriate.
- **BMI** as we know obesity can cause some of these symptoms and should be managed.
- A check to see whether the **person is living with frailty**, and if so, the degree of frailty using the Rockwood Clinical Frailty Scale¹², because this will affect starting doses of medicines (illustrated on the opposite page).
- **Urinalysis**
- **Peak flow or spirometry**

Rockwood Clinical Frailty Scale



1. Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest of their age.



2. Well – People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally e.g. seasonally.



3. Managing Well – People whose medical problems are well controlled, but are not regularly active beyond routine walking.



4. Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being “slowed up”, and/or being tired during the day.



5. Mildly Frail – These people often have more evident slowing, and need help in high order Instrumental Activities of Daily Living (IADL), such as finances, transportation, heavy housework and medications. Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.



6. Moderately Frail – People who need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cueing, standby) with dressing.



7. Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem able and not at high risk of dying (within 6 months).



8. Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from minor illness.



9. Terminally Ill – Approaching the end of life. This category applies to people with a life expectancy below 6 months, who are not otherwise evidently frail.

Scoring frailty in people with dementia

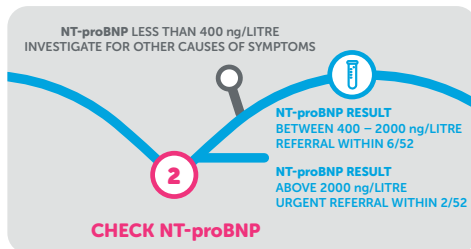
The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of recent events, though still remembering the event itself, repeating the same question/story, and social withdrawal. In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting. In **severe dementia**, they cannot do personal care without help.

Safety netting

While someone is waiting for the results of the NT-proBNP test (or while they are waiting for a specialist assessment or echocardiography) advise that if symptoms worsen, they should contact their GP, NHS 111 or A&E, depending on the severity.

NT-proBNP results

The level of the NT-proBNP result determines how quickly someone should be referred for specialist assessment and echocardiography.



NICE Chronic Heart Failure (NG106) guidelines state:

Refer people with suspected Heart Failure and an NT-proBNP level between 400 and 2,000 nanograms per litre to have a specialist assessment and transthoracic echocardiography **within 6 weeks**.

Urgently refer people with suspected Heart Failure and an NT-proBNP level more than 2,000 nanogram per litre to have specialist assessment and transthoracic echocardiography within **2 weeks**. High levels of NT-proBNP carry a poor prognosis.¹⁰

If someone is **not** already being treated for Heart Failure, an NT-proBNP result less than 400ng/L means they are less likely to have Heart Failure. You will need to review them for other causes of their breathlessness.

If there is still concern that the symptoms might be related to Heart Failure, discuss with a Heart Failure specialist.

Remain vigilant about further symptoms and the worsening of already identified symptoms.

3

SPECIALIST ASSESSMENT & ECHOCARDIOGRAPHY



During a specialist assessment, a Heart Failure consultant, registrar, or nurse specialist will take a detailed clinical history, focusing on breathlessness, associated symptoms, functional impact, and current medications.

They'll then complete a targeted cardiovascular examination, including heart sounds, blood pressure measurement, and assessment for peripheral oedema (e.g., in the ankles and legs).

Depending on your locality, there may be other key investigations on the same day (but these may be on different days depending on local services).

Pumping Marvellous have a resource called **My Marvellous Guide to Having an Echo**, but here's how you can explain this to the patient:

- **ECG:**

This is a brief recording of cardiac electrical activity to identify arrhythmias or conduction abnormalities. Electrodes are placed on the chest (after minimal clothing is removed).

- **Echocardiogram:**

This is a non-invasive ultrasound scan of the heart (similar to a baby scan) performed by a cardiac physiologist to assess ventricular function, valve pathology, and overall cardiac structure. Cold gel and a chest probe are used; the procedure may cause mild discomfort.



Patients are encouraged to take a relative or friend for support during the assessment and investigations.

Once the results are available, the clinical team will review findings, discuss the likely diagnosis, and outline initial management.

If Heart Failure is diagnosed, depending on the type, a follow-up is usually arranged with community or hospital Heart Failure specialist nurses, and/or specialist pharmacists (who are medicines experts and play a key role in optimising medicines for Heart Failure and other conditions). Pharmacists can also review medicines for other conditions and address any concerns that patients might have around medicines in general. The patient is discharged back into the care of their GP once considered stable.



4

DIAGNOSIS

Heart Failure is usually divided into three main groups (phenotypes) based on the left ventricular Ejection Fraction (EF).

HFrEF (Heart Failure with reduced Ejection Fraction)

Refers to patients whose hearts are unable to generate adequate systolic force, resulting in a reduced ability to pump blood effectively with each contraction.

HFmrEF (Heart Failure with mildly reduced Ejection Fraction)

Represents an intermediate group where systolic function is impaired but not to the extent seen in HFrEF.

HFpEF (Heart Failure with preserved Ejection Fraction)

Describes patients whose Ejection Fraction remains within the normal range, yet who still experience Heart Failure symptoms due to impaired ventricular filling and elevated filling pressures.

The Ejection Fraction (EF) is a measure of how much blood the left ventricle of the heart pumps out with each contraction, expressed as a **percentage**, (not an absolute volume) and reflects the proportion of blood ejected from the left ventricle with each heartbeat.

It is worth noting that normal is never 100%. A normal EF is usually between 55-70%.



Scan this QR code to access further information from the Pumping Marvellous Foundation about Ejection Fraction (EF).



Scan this QR code to access a video on the Heart Failure Academy website that explains how to describe the different phenotypes of Heart Failure to patients.

Classification of The Heart Failure Phenotypes

Heart Failure categories reflect different underlying pathophysiological mechanisms and therefore present differently on an echocardiogram.

Let’s think about the different phenotypes (types) of Heart Failure and what they mean.

Type	Abbreviation	Characteristics	Features on an echocardiogram	Person-centred description	Important SNOMED codes	In some systems recorded as
Heart Failure with reduced Ejection Fraction	HFrEF	EF is 40% or less	· Significantly reduced systolic function	Reduced pumping function. The heart is “not squeezing strongly enough,” so it can’t pump out sufficient blood around the body.	703272007 AND LVSD 407596008 always list both	Heart Failure with reduced Ejection Fraction
Heart Failure with mildly reduced Ejection Fraction	HFmrEF	EF is between 41% and 49%	· Mildly reduced systolic function	The heart is pumping less effectively than normal but not as severely as in HFrEF.	788950000	Heart Failure with mid-range Ejection Fraction
Heart Failure with preserved Ejection Fraction	HFpEF	EF is above 50% but symptoms of Heart Failure are evident. There are cardiac structural and/or functional abnormalities consistent with the presence of LV dysfunction.	· Left ventricular hypertrophy · A big left atrium · Elevated pulmonary artery pressure	The heart is “stiff” and so it can’t fill with enough blood. This means that even though it squeezes normally, it doesn’t pump out enough blood to meet the body’s demands, especially during exercise.	446221000	Heart Failure with normal Ejection Fraction

The echocardiogram may show other cardiac conditions which will need to be followed up by the cardiologists, the most common being valve disease, with aortic stenosis and mitral regurgitation being the most common seen.

See Appendix 1 for further information on valve disease.

Sometimes atrial fibrillation is detected, or another ‘tachy’ (fast) or ‘brady’ (slow) arrhythmia is seen and may be the cause of the symptoms the patient has. If this is the case, patients will need specialist input and review.

Top tip

The Heart Failure Specialist Team will discuss the person's prognosis in a sensitive, open and honest manner. They will be frank about the uncertainty in predicting the course of their Heart Failure. However, this may need to be revisited as the person's condition evolves.

Communicating a diagnosis of Heart Failure can be difficult. The term 'Heart Failure' can sound frightening so it is useful to explain that it simply means the heart isn't working as well as it should and is not meeting the demands of the body.

Below you will find top tips on how to discuss a diagnosis of Heart Failure:

'Before I explain the results, can I ask what you understand so far about what's been going on?'

Pause here

Then depending on the answer ask: 'How much would you like to know?'

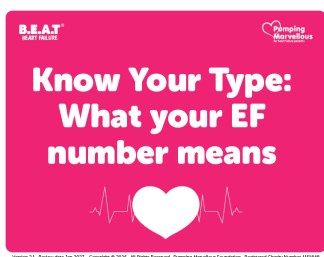
Pause here

'Your tests show that your heart isn't pumping as strongly as it should. This condition is called Heart Failure. I know that term can sound frightening, but it doesn't mean your heart is about to stop. It means it needs more support to work as well as possible.'

Pause here

'The important thing is that we now know what's causing your symptoms, and there are very effective treatments. Many people live well for many years with the right treatment and support.'

You can refer patients to the Pumping Marvellous Know Your Type: What Your EF Number Means resource.



The importance of coding

When someone is diagnosed with Heart Failure, in either a specialist clinic or during a hospital admission, it is **crucial** that the **phenotype (type)** of Heart Failure should be recorded in the hospital letter or discharge summary.

This must be recorded in the patient's record in the primary care systems using the correct coding.

Liaise with your team to ensure everyone knows how to code correctly.

1. Make sure you add the overarching QOF code (G58) which ensures the patient is added to the Heart Failure Register.
2. Add the Heart Failure SNOMED CT code 84114007.
Plus, the correct SNOMED CT for the specific type of Heart Failure that has been diagnosed.

Type	Abbreviation	SNOMED code
Heart Failure with reduced Ejection Fraction	HFrEF	703272007 AND LVSD 407596008 Always list both
Heart Failure with mildly reduced Ejection Fraction	HFmrEF	788950000
Heart Failure with preserved Ejection Fraction	HFpEF	446221000

Important: someone newly diagnosed with Heart Failure may not be discharged from a cardiology ward, and you may need to liaise further with cardiology to get all the information or further input. Be cautious to ensure the correct code is selected for the type. Each system will be different and you need to ensure you are aware of how this information will link in your system.

Correct coding will mean people get the correct treatment for the type of Heart Failure they are living with.

Code cleansing

Take the opportunity to ensure people living with Heart Failure who come to see you as part of their regular reviews are coded in the clinical systems correctly. If patients are new to the practice, ensure they are coded correctly when they are registered.

Caution: not everyone diagnosed with Heart Failure will be aware of their diagnosis. If you identify someone living with Heart Failure who is not coded correctly, it is important to establish they are aware of their diagnosis. Arrange a face-to-face appointment to discreetly check their understanding before adding the coding to the clinical system.



5

TREATMENT INITIATION



Treatment goals

The treatment goals for someone living with Heart Failure are:

- Firstly, relieve the symptoms to improve the person's quality of life.
- Improve the person's quality of life, reducing the risk of admission to hospital.
- Treat and optimise underlying conditions and comorbidities that could have contributed to Heart Failure.
- Reducing mortality by slowing down the progression of Heart Failure and reducing the risk of sudden cardiac death.

What medicines should be used?

Heart Failure treatment is highly personalised, meaning that medicines and doses are tailored to the individual.

The management of Heart Failure is different for each phenotype (type) of Heart Failure the person is living with.

Therapies used in all types of Heart Failure

- All patients with Heart Failure are likely to need loop diuretics to manage any congestion and symptoms that they might be experiencing.
- Patients with all types of Heart Failure are likely to benefit from an SGLT2 inhibitor. It is even more important to start SGLT2 inhibitors for people living with CVKM conditions in addition to Heart Failure (e.g. type 2 diabetes and CKD), which will also benefit from SGLT2 inhibitor therapy. A cost-effective option should be used and this may involve switching SGLT2 inhibitors.
- Cardiac rehabilitation is beneficial to patients with all phenotypes.

Pharmacological Management:

Heart Failure with reduced Ejection Fraction (HFrEF)

If someone is living with HFrEF the aim would be to get them onto the four pillars of therapy at the optimum tolerated doses.

Rapid uptake of the four pillars is one of the 12 priorities in the CVD MSF.⁵ They are also included in the Quality and Outcome Framework indicators.

In all patients with Heart Failure, it is essential to consider their medical history and clinical assessments, especially their blood pressure, renal function, age and frailty status, prognosis, and preferences before prescribing the four pillars.

The order in which the medicines are initiated should be based on the individual's symptoms, comorbidities and past medical history.

Key Point

The aim is to get people on all four pillars first and then begin to up-titrate to the maximum tolerated doses for the individuals.

If someone is on the smallest dose of all four pillars, they will have better outcomes than someone who is on a high dose of one or two pillars but not on the third or fourth pillar.

Treatment is typically initiated and up-titrated by the specialist team before they are discharged back into your care, but you will need to make these considerations as you titrate medicines.

Some people can feel better within days if not weeks, however for others this may take months.

Early initiation and titration to the maximum tolerated dose, for as many pillars of treatment, not only lowers the risk of deterioration or death, it also significantly reduces the likelihood of hospital admission due to worsening Heart Failure symptoms.

If someone is living with frailty or chronic kidney disease, you must titrate medicines slowly.

Avoiding emergency admissions matters – they are distressing for patients (and their families) and can disrupt every aspect of daily life.

If you see someone living with Heart Failure with reduced Ejection Fraction, who is not on the four pillars of treatment when they have been discharged from hospital, liaise with your local Heart Failure service. If it is not clear, you will also have to ask them to clarify the sub-type of Heart Failure. Appropriate rapid uptake of the four pillars is a key priority of the CVD MSF.⁵

Heart Failure with reduced Ejection Fraction (HFrEF) NICE (NG106) says offer (give):¹⁰

Medicine class	Individual agent
ACE inhibitor or Angiotensin Receptor-Neprilysin Inhibitor (ARNI)*	Enalapril, lisinopril, perindopril, ramipril or sacubitril valsartan
Beta Blocker	Bisoprolol, carvedilol or nebivolol
Mineralocorticoid Receptor Antagonist (MRA)	Spironolactone or eplerenone (steroidal MRAs)
SGLT2i	Dapagliflozin or empagliflozin

Don't forget symptom relief with loop diuretics.

Diuretics

Furosemide or bumetanide

Practical point

Remember: if someone is taking an ACE inhibitor and you want to switch to an ARNI, advise the person to stop taking the ACE inhibitor and then start the ARNI at least 36 hours later (there is a risk of angioedema if they are used at the same time).¹¹

Check the relevant Summary of Product Characteristics (SPC) for specific information about each medicine.

Diuretic therapy

In addition to the four pillars, people will likely have been discharged with loop diuretics to help manage their symptoms.

Many Heart Failure patients are encouraged to adjust their loop diuretic dose as part of their agreed care plan with the specialist teams. This is known as diuretic flexibility, so don't be concerned if patients make small changes; they are often doing exactly what their specialist team has taught them.

The main thing to check is that they are working. Ask: 'When you take your diuretics, do they make you pee?'. If there is no diuretic effect, the dose needs adjusting.

It is important that all medicines to treat comorbidities are optimised alongside Heart Failure medications too.



Scan this QR code for more information on managing diuretics and to watch the Heart Failure Academy Diuretic Masterclass.

Specialist treatment for HFrEF

It is important to be aware that the specialist teams may also use additional medicines for people living with HFrEF if they're still symptomatic, including:

- Ivabradine (if the patient is not in AF)
- Hydralazine in combination with nitrate
- Digoxin

Please liaise with your specialist Heart Failure MDT for any queries.¹⁰

Pharmacological Management: Heart Failure with mildly reduced Ejection Fraction (HFmrEF)

For Heart Failure with mildly reduced Ejection Fraction (HFmrEF), NICE (NG106)¹⁰ says consider:

Medicine class	Individual agent
ACE inhibitor or ARB if intolerant of ACE	Enalapril, lisinopril, perindopril, ramipril Candesartan, losartan, valsartan
Beta Blocker (if the patient is in sinus rhythm)	Bisoprolol, carvedilol, nebivolol or metoprolol succinate
Mineralocorticoid Receptor Antagonist (MRA)	Finerenone (non-steroidal MRA)*
SGLT2i	Dapagliflozin or empagliflozin

And don't forget symptom relief with loop diuretics

Diuretics

Furosemide or bumetanide

Pharmacological Management:
Heart Failure with preserved Ejection Fraction (HFpEF)

It is important that all comorbidities medications are optimised alongside Heart Failure medications too.

For Heart Failure with preserved Ejection Fraction (HFpEF), consider:

Heart Failure with preserved Ejection Fraction or HFpEF accounts for 40-50% of all Heart Failure diagnoses and is associated with an older population living with multimorbidity.¹²

In addition to diuretic therapy, people living with HFpEF will need:

Medicine class	Individual agent
SGLT2i	Dapagliflozin or empagliflozin
Mineralocorticoid Receptor Antagonist (MRA)	Finerenone (non-steroidal MRA)*

*Based on trial evidence which shows a reduction in hospitalisations, NICE TA1182 recommends finerenone can be used, within its marketing authorisation, as an option to treat symptomatic chronic Heart Failure with preserved or mildly reduced Ejection Fraction in adults.¹³

There may be local variations between regions and teams on the prescribing of MRAs. You will need to follow local guidance.

Don't forget symptom relief with loop diuretics.	
Diuretics	Furosemide or bumetanide

Remember to follow a CVKM approach. It is particularly important that the CVKM comorbidities such as hypertension, type 2 diabetes, obesity and chronic kidney disease are optimised, as well as Heart Failure.⁵

We will discuss optimisation and long-term treatment options further in section 7 'Clinical Management'.

Sick Day Rules

When someone is first diagnosed with Heart Failure you need to tell them about the Sick Day Rules.

Use the **Sick Day Rules** Pumping Marvellous resource to explain:

Practical point

If someone is taking an SGLT2 inhibitor and they are not able to eat or drink or are fasting for a period, they should withhold their medicine temporarily to avoid diabetic ketoacidosis.

Sick Day Rules

It is important to note that Sick Day Rules require initiation from your Doctor, Nurse or Healthcare Practitioner.

Pumping Marvellous
The most future-ready

When you are experiencing the following symptoms, you may be at risk of becoming unwell. Please take the medicines your Healthcare Professional has ticked on the reverse of this card.

Please contact your Heart Failure Team if:

- You have not been able to eat or drink for 24 hours
- You have been sick or vomited for 24 hours
- You have been unable to take your medicines for 24 hours
- You have noticed a significant weight loss or gain
- You have noticed a significant change in your symptoms



TOGETHER WE'LL
BEAT
HEART FAILURE

Scan this QR code to download a PDF of the Pumping Marvellous Sick Day Rules resource.

6

PATIENT EDUCATION TO SUPPORT SELF-MANAGEMENT & CHOICE

It is essential to offer patients the choice on the level of support they want and need.

Heart Failure is a long-term condition that requires not only proactive clinical management, but also effective self-management by patients and their families.

When someone is newly diagnosed with Heart Failure, they will have an appointment with the specialist Heart Failure multidisciplinary team where they will:

- Discuss the diagnosis and prognosis;
- Share an explanation of relevant Heart Failure terminology;
- Discuss options and decide on treatments, share how they work, how to take them and possible side effects to be aware of;
- Discuss the risk of sudden death if applicable;
- Provide encouragement and motivation for the individual and family or carers to ask questions, and find answers;
- Provide and talk through appropriate patient information that will allow the individual to learn about the important basics of self-management in Heart Failure.

There should also be a follow-up discussion within two weeks. People newly diagnosed with Heart Failure may also want to discuss this new information further when they return to primary care.

It would be a good idea to connect with local Heart Failure services to discuss local treatment pathways so you can support individuals by signposting appropriately if you need to.

Patient choice on education matters. People learn in different ways, and not everyone wants – or needs – to absorb all the information at once. They will learn what they want, not what you want them to. Providing a range of learning options helps ensure each patient can engage in a way that works for them.

Empower self-monitoring

When patients understand the basics of self-management, their health outcomes can improve significantly. They are better able to recognise worsening symptoms, know who to contact, and act promptly to reduce the risk of hospitalisation. Their quality and length of life can also be enhanced when they understand why their medications are important, how they work, and what side effects to watch for.

New York Heart Association Scale

People newly diagnosed with Heart Failure find it helpful to classify their symptoms on the New York Heart Association scale. They use the scale as a barometer of where their Heart Failure symptoms are at a point in time. Any increase is a useful trigger to indicate they may need help from their healthcare team. You can use this as a conversation starter: "Where are you in New York?"

Where are you on the scale?

The NYHA Scale

The NYHA scale is usually used by clinicians to assess you. However as you are the only one who knows how you feel, it's a great tool to help you explain to clinicians what's been going on whilst they aren't there.

NYHA Class Symptoms

- Class 1**
No limitation of physical activity. Ordinary physical activity does not cause undue tiredness, palpitations, or shortness of breath.
- Class 2**
Slight limitation of physical activity. Comfortable at rest, but ordinary physical activity results in tiredness, palpitations, or shortness of breath.
- Class 3**
Comfortable at rest, but less than ordinary activity causes tiredness, palpitations or shortness of breath.
- Class 4**
Unable to carry out any physical activity without discomfort, tired and short of breath even at rest. If any physical activity is undertaken, discomfort is increased.

Please note: this booklet should not replace and/or substitute the interactions with and advice you are given from your healthcare professional. If you have any concerns about your condition then do discuss them with your healthcare professional at the earliest opportunity.

CLASS 1

"I can perform all physical activity without getting short of breath, tired, or having palpitations."

CLASS 2

"I get short of breath, tired, or have palpitations when performing more strenuous activities. For example, walking on steep inclines or walking up several flights of steps."

CLASS 3

"I get short of breath, tired, or have palpitations when performing day-to-day activities (for example, walking along a flat path)."

CLASS 4

"I feel breathless at rest, and am mostly housebound. I am unable to carry out any physical activity without getting short of breath, tired, or having palpitations."

YOUR TELEPHONE NUMBERS

GP's Name

Heart Failure Nurse's Name

GP's Telephone Number

Heart Failure Nurse's Telephone Number

☎ 01772 796542

🌐 www.pumpingmarvellous.org

✉ hearts@pumpingmarvellous.org

🌐 beathf.org.uk

🔍 Search 'Pumping Marvellous Foundation' for our page

🔍 Search 'Help for Hearts' for our support community group

➡ Search 'Pumping Marvellous'



Visit our campaign site
BEAT HF®

Their score should be documented in their records at each review, referencing specific activities they can manage, so their condition can be assessed in future consultations.

Empowering patients to monitor their condition using the Symptom Checker

People living with Heart Failure should also recognise when to get help. This traffic light system is useful with simple, practical tips.



GREEN - KEEP WATCH

Your weight has not increased/has increased by 4lb/2kg over 3 days but you agree with the statements below:

HOW AM I?

You are no more breathless than usual.
Your ankles are no more swollen than usual.
Any other conditions you have are no worse than usual.*

You are as active and mobile as you normally are.
Your main carer's health is unchanged.



You are no more breathless than usual.



Your ankles are no more swollen than usual.



All of your other medical conditions are OK.



You are as active and mobile as you normally are.



Your main carer's health is unchanged.

WHAT SHOULD YOU DO?

There is no need for a review by the Heart Failure specialist team/GP/Practice Nurse apart from your regular reviews. However, you should be reviewed at least twice a year. *Other conditions means other medical problems that you and your GP are already aware of and that you are already treated for.

MAKE SURE YOUR HEALTHCARE TEAM WHO GAVE YOU THIS SYMPTOM CHECKER HAVE TALKED YOU THROUGH IT TO CHECK YOUR UNDERSTANDING



AMBER - STAY ALERT

Your weight has increased/had increased by 4lb/2kg over 3 days and/or one of the statements below is true:

HOW AM I?

You are feeling more breathless than usual.
Your tummy and/or legs are more swollen than before.
You are breathless at night or need more pillows to sleep on.

You are unable to be as active as usual/you are a bit more muddled than usual.**
Any of your other conditions are worsening.
Your main carer is becoming more ill and is unable to help look after you as much as before.



You are feeling more breathless than usual.



Your tummy and/or legs are more swollen than before.



You are breathless at night or need more pillows to sleep on.



You are unable to be as active as usual/you are a bit more muddled than usual.



Any of your other conditions are worsening.



Your main carer is becoming more ill and unable to help look after you as much as before.

WHAT SHOULD YOU DO?

Try simple measures to improve your symptoms **and/or** consider a sooner appointment with the Heart Failure specialist team/GP/Practice Nurse if you feel it is necessary.

****This means that if you are not able to do as much as you would normally do, or are becoming a bit more confused because of; pain, unsteadiness/falls, worsening Heart Failure symptoms, worsening of another condition you have, or developing a new problem, then it is important to contact one of the medical team looking after you.**



RED - TAKE ACTION

If your symptoms continue to worsen over 3 days, or you have any of the problems below:

HOW AM I?

Over these last 3 days your breathlessness/leg swelling are worsening and/or you are far less able to be as active as normal or look after yourself.

You have symptoms of an infection and/or you feel very unwell.***

Any of your other medical conditions are continuing to worsen.

You have blacked out.

You have worsening or new angina.****

You have become confused about your medications.*****

Diarrhoea and vomiting for more than 24 hours.

Continuing to feel unwell without a clear cause - especially if you take a medicine which ends in 'flozin'.

Your carer becomes very ill/has been admitted to hospital and is unable to take care of you.



You have symptoms of an infection and/or you feel very unwell.



You have blacked out.



Any of your other medical conditions are continuing to worsen.



You have become confused about your medications.



My medication has been reduced/stopped and I am not sure why/ my Heart Failure team is unaware.



You have worsening breathlessness or leg swelling or are unable to be as active as usual.



You have worsening or new angina.



Your carer becomes very ill/has been admitted to hospital and is unable to take care of you.



You have had diarrhoea or vomiting for more than 24 hours.

WHAT SHOULD YOU DO?

Consider urgent advice from your GP or Heart Failure service. If you feel unwell call **111**. If you feel very unwell call **999**.

***Symptoms of infection: temperatures, sweats, new cough, change in colour of your usual sputum, pain on passing water, diarrhoea/vomiting, increasing falls or loss of balance.

****Angina is one kind of heart-related chest pain. Please discuss your chest pains with your GP if you are unclear as to whether they are angina or not.

*****Confused about medication: in terms of specific doses/why you take specific medications or whether you are uncertain you have taken today's medication correctly.

Contact your medical team if you are on a tablet ending in 'flozin' and you have had prolonged vomiting or you are feeling unwell without an obvious cause. Very rarely these drugs can cause a condition called 'ketoacidosis' that your medical team should be able to test for. It is a very rare but serious complication of this group of drugs.

The **My Marvellous Symptom Checker** helps people identify where they are on the New York Heart Association scale and how to self-manage their symptoms using a traffic light system.

A diagnosis of Heart Failure can be overwhelming – not only because of the questions it raises, but also because patients are often unsure about what comes next. Clear information about further treatment options, such as cardiac rehabilitation, cardiac devices, and access to palliative and end-of-life care, can help them navigate the path ahead. Always remember, patients should have a choice of how they receive patient education and when.



Key Point

Every person living with Heart Failure should receive safe, reliable, and accessible information to help manage their condition. If they have not been given this support, it should be proactively offered.

You can request information from the following organisations.

The Pumping Marvellous Foundation

Email

hearts@pumpingmarvellous.org

Number

01772 796542



Website

www.pumpingmarvellous.org



Listen to/watch podcasts and videos here

<https://www.youtube.com/@PumpingMarvellous/videos>



View patient information here before ordering

<https://pumpingmarvellousorg/community-hub/support-guides/>



Order patient information here

<https://pumpingmarvellous.org/nhs-team-order-form>

British Heart Foundation

Email

heretohelp@bhf.org.uk

Number

0300 330 3322



Website

www.bhf.org.uk



7

CLINICAL MANAGEMENT

The primary care team will take over routine management of Heart Failure as soon as it has been stabilised and medicine management is optimised. Heart Failure management and optimisation is a key area that primary care pharmacy teams can focus on.

Community pharmacists can also provide advice and support people living with Heart Failure who have been started on a new medicines as part of the New Medicines Service.

Clinical management in primary care will involve a team approach:

i) Review after starting or changing medicines

Reviewing the patient after each Heart Failure medicines dose change.

ii) Recalling for a regular long-term conditions review

Recalling the person at least every 12 months (although NICE recommends every six months) for a full review of the person's Heart Failure care and updating the clinical record accordingly. Deciding on changes as

part of a shared decision-making, fully documented in the clinical record and communicated with the specialist Heart Failure MDT in all care settings.

iii) Referring if necessary for a specialist Heart Failure review

Arranging access to specialist Heart Failure services.

iv) Provide access to cardiac rehabilitation

At each consultation, the team needs to make sure a patient is coded correctly.

Each area will have its own Heart Failure standard operating procedures, but the best outcomes will come from a person-centred, holistic review, with the patient fully engaged in the process.

Let's talk about what happens at each stage:

i) REVIEW AFTER STARTING OR CHANGING MEDICINES

When you make any medicines changes, review the patient within two weeks for a clinical Heart Failure review.

Key checks in the consultation will include the following (although ensure to refer to local guidance where available):

Fluid status: have a look at their weight trend and check for ankle oedema. If present, record how high up the leg the oedema reaches.

Exercise tolerance and activity levels: see if there is any change in how far they can walk or how active they feel day-to-day.

Observations: check BP both sitting and standing (postural hypotension is a common cause of hospital admission in older people) and take a note of heart rate and rhythm.

Bloods: U&Es, LFTs, FBC depending on what medicine has been started – check individual medicine's Summary of Product Characteristics (SPC).

U&Es: ACEI, ARNIs, ARBs and MRAs can all affect someone's renal function and potassium levels. Local guidance should be followed if there is a rise in serum creatinine of more than 50% or potassium concentrations increased to >5.5mmol.

Remember: these medicines can cause transient rises in creatinine and are ultimately reno protective.

LTFs: check LFTs to see whether there is any abdominal congestion and whether it has improved.

FBC and iron studies: check Hb, transferrin saturation (TSAT), and serum ferritin to check improvement with iron therapy.

Heart rate (HR) on beta blockers: check heart rate (if taking a beta blocker).

If someone's HR drops to below 50 beats per minute then they should have a 12-lead ECG.

ii) REGULAR LONG-TERM CONDITIONS REVIEW

Regular Heart Failure reviews are a key area primary care pharmacy teams can support. NICE NG106 states people living with stable Heart Failure should be monitored at least every 6 months.

The long-term review should start with a good chat about how the patient is feeling.

Symptom check

It is worth running through the **BEAT**[®] type symptoms to get a sense of how things are going:

- **Breathlessness** – any change, even subtle.
- **Pillows** – how many pillows do they need to sleep with and is that more or less than usual?
- **Exercise tolerance**
 - How far can they walk before getting breathless, and has that improved or worsened?
 - What is their current NYHA classification?
 - Are they still managing their usual walk, or avoiding hills they used to manage?
 - Can they still manage the housework?
- **Tiredness** – is there any noticeable fatigue creeping in?
- **Eating** – are they managing to eat well?
- **Ankle/leg swelling** – can they still get their normal shoes and socks on and is the swelling new or different for them?
- **Weight** – is their current weight normal for them?
- **Check their legs for signs of oedema** – if there is any leg oedema present, record how high it travels up the leg and check whether they have a flexible diuretic plan in place.

Review bloods

Review bloods, U&Es, LFTs, FBC, Transferrin saturation (TSAT) and serum ferritin.

Bloods (U&Es, LFTs, FBC depending on what medicine has been started) – check individual medicines Summary of Product Characteristics (SPC).

U&Es – ACEI, ARNI, ARBs and MRAs can all affect someone's renal function and potassium levels. Local guidance should be followed if there is a rise in serum creatinine of more than 50% or potassium concentrations increased to >5.5mmol.

LFTs – Check LFTs to see whether there is any abdominal congestion and whether it has improved.

HbA1C – To check whether they have developed diabetes as a comorbid condition.

Thyroid Function Tests – To screen for hypo or hyperthyroidism, both can cause or worsen Heart Failure symptoms.

FBC and iron studies – Check Hb, Transferrin saturation, and serum ferritin.

In HFrEF, consider iron deficiency if the patient is symptomatic after the four pillars medicines are optimised.

Also check the urine albumin to creatinine ratio (ACR) as part of the regular review.

Scan this QR code to access Pumping Marvellous's Iron Deficiency Guide, which helps to explain iron deficiency further.



Optimise medicines

How are they managing their medicines day-to-day?

- Are they taking all their medicines as prescribed?
 - Have they had a recent admission to hospital? If so, were any Heart Failure medicines stopped temporarily and not restarted? If not, are there any reasons why they shouldn't be restarted?
- Is their Heart Failure treatment optimised?
 - Are they on all the possible therapeutic options for their Heart Failure phenotype?
 - Could the doses of their medicines be optimised further? Have they started on any new medicines for other conditions

that could affect their Heart Failure treatment?

- How are they coping with their diuretics? Do they have a flexible diuretic plan from the specialist teams? Are the diuretics effective? Are there any issues with timing or side effects?
- In HFrEF, if someone is exhausted have a look at their recent bloods and keep iron deficiency in mind if they are still symptomatic despite optimising their medicines.
- As well as Heart Failure treatments, remember to follow a CVKM approach and optimise or treat any other related risk factors.

Practical point

People who have been living with Heart Failure for a long time may not have been offered the most up-to-date, evidence-based treatments. Make time to discuss all the options with them so they can make informed decisions about their own care.

Vaccinations

At each long-term review, check whether the patient has had their annual influenza vaccination and are up-to-date with their COVID vaccinations.

Everyone living with Heart Failure should have a vaccination against pneumococcal disease (this vaccination is only needed once).

Ensure older adults, depending on their age, have had their RSV and shingles vaccines.¹⁴

Communication

Ensure all aspects of the review are recorded in the correct Heart Failure template in the clinical system. If you are not sure, check. When appropriate, maintain good communication with the specialist MDT.

Peer-to-peer support

Many people living with Heart Failure value support from those who are experiencing the same symptoms. Check whether there is a Heart Failure face-to-face support group in the area. If not, consider making this a topic for your Patient Participation Group in your surgery.

Contraception and pregnancy

If someone is living with Heart Failure (and of childbearing age) they should ensure they use contraception to avoid an unplanned pregnancy.

If someone is thinking about having a baby, they should discuss this with the specialist Heart Failure team.

Lifestyle advice

Adopting a healthy lifestyle, exercising, eating healthily, reducing alcohol intake or abstaining, plus stopping smoking, are all important lifestyle modifications. Don't forget to reinforce the importance of adopting a healthier approach.

Anxiety and depression

People living with Heart Failure may feel anxious or depressed. At the regular long-term review, make sure you ask how they are feeling and offer appropriate support. Assess whether they need further specialist help, and if so, consider a referral to the Mental Health Team.

If they are not already enrolled in cardiac rehabilitation, this may help them.

Coding

At each consultation, make sure the person is recorded in the clinical system on the Heart Failure register and check that the type of Heart Failure they are living with is correctly coded.

Driving

Many people with Heart Failure will be able to drive a car. However, they must inform the DVLA when diagnosed with Heart Failure. There are usually no restrictions unless someone has recently had an ICD implant or ICD activation.



Flying

Most people living with Heart Failure will be able to travel by air, although depending on their NYHA classification, there may be a need for oxygen assessment and medical assistance during the flight.



iii) SPECIALIST HEART FAILURE REVIEW

More complex Heart Failure reviews will be completed by the specialist MDT.

In a specialist Heart Failure review, the patient will have a clinical evaluation based on their history and current symptoms; an assessment to look at what medicines can be optimised.

Alternative therapy the specialist MDT may consider is advanced Heart Failure therapy, typically starting with device therapy.

Device therapy

If someone living with Heart Failure with reduced Ejection Fraction (HFrEF) is still unwell, despite being on optimised guideline-directed medical therapy (four pillars), device therapy is a further option the Heart Failure specialist teams could consider.

It comes in two components. People living with HFrEF may have one or both aspects fitted:

Cardiac Resynchronisation Therapy (CRT)

Sometimes in Heart Failure the heart's electrical system becomes out of sync, meaning the heart squeezes unevenly. CRT uses a special pacemaker to help both sides of the heart beat together again, which can improve symptoms, keep people out of hospital, and help them live longer.

Implantable Cardioverter Defibrillator (ICD)

An ICD is like a safety net for the heart. It constantly watches heart rhythms and, if a dangerous rhythm happens, it can step in within seconds to correct it and prevent sudden cardiac arrest.

On referral the specialist team will usually repeat an echocardiogram to identify if cardiac device therapy is appropriate when the patient is:

- Optimised on medical therapy, and;
- Has a persisting Ejection Fraction of less than 35%.

Key Point

In primary care, if someone has persisting left ventricular impairment (HFrEF less than or equal to 35%) despite being on optimised medical therapy, then refer them back into their specialist MDT to see whether cardiac device therapy would be an option.

For further information on cardiac device therapies see Appendix 2.

Consideration of advanced therapies

For the small number of people eligible for advanced interventions – such as Left Ventricular Assist Device (LVAD) implantation or cardiac transplantation – these signs (worsening Heart Failure symptoms despite being on optimised therapy) should also trigger timely referral and evaluation. However, most patients will not be candidates, making early, sensitive advance care planning essential.

For more information on advanced therapies visit Appendix 3.

iv) CARDIAC REHABILITATION

Why is cardiac rehabilitation important?

Cardiac rehabilitation (CR) is important for everyone living with Heart Failure because it directly addresses the physical, emotional, and clinical challenges of living with the condition.

Cardiac rehabilitation is an evidence-based intervention. Improving access to cardiac rehabilitation is one of the 12 priorities of the CVD MSF.⁵



When should it be started?

After assessment, and when the individual feels ready. Some may want to start soon after diagnosis, others may want to start when they feel more stable.

Cardiac rehabilitation matters because it:

- Improves symptoms and quality of life.
- Reduces hospital admissions.
- Builds understanding and confidence for patients and their families.
- Enables people to self-manage.
- Produces personalised care.
- Helps with mental health and emotional wellbeing.
- Encourages long-term healthy lifestyle changes.
- Helps people with ongoing support.
- Helps integrate advanced care planning when appropriate.

'I was referred to this service by the Heart Failure nurse and have just completed the 8-week course. Before attending, I was at the lowest point in my life – I had stopped doing things I enjoyed, such as walking and cycling, due to a lack of confidence. From the outset, the course was a breath of fresh air. It encouraged me to challenge myself in a safe environment while learning how to listen to my body. These tools were immediately useful outside the sessions, helping me regain confidence and return to a more normal life. This program has made a real difference to me and my family, and everyone involved should be proud of the work they do.'

Heart Failure Patient

Here's what happens in cardiac rehabilitation:

Patients will learn about:

- Why cardiac rehabilitation is important
- What their medications do
- How to pace activity
- How to monitor symptoms
- How to respond if things worsen
- How to keep their heart as healthy as possible (self-manage)



STOP 7

How to refer

Cardiac rehabilitation needs to be individualised based on pre-existing fitness levels. Some people will prefer face-to-face cardiac rehabilitation; others may prefer virtual support.

Check what services are available and how to refer in your locality. Not all areas will have the same cardiac rehabilitation provision for Heart Failure.

There are different digital technologies¹⁵ available to support cardiac rehabilitation. Check your local availability.

Cardiac rehabilitation from the Pumping Marvellous Foundation is a NICE-approved digital cardiac rehabilitation platform that has free access for life, for patients and the NHS.

To support your patients, read this web page and order the yellow cardiac rehabilitation booklet so you can facilitate the onboarding process.

To request healthcare professional access to the digital platform, email: hearts@pumpingmarvellous.org.





ADDITIONAL MANAGEMENT THAT SHOULD BE OFFERED



ADVANCE CARE PLANNING

Everyone living with Heart Failure should have the opportunity to have advance care planning conversations to support their choice and wishes.

A person-centred approach needs to be adopted; some patients may experience their greatest level of need at the point of diagnosis, while others may experience this at any point throughout the illness trajectory.

Healthcare professionals can start the conversation early by focusing (at every contact) on what is important for that individual to live well with Heart Failure. Supporting people to live well with Heart Failure and other existing conditions is integral to an advance planning approach.

Further advance care planning conversations can be challenging but it is vital to have these conversations while people are well enough and have the mental capacity to make decisions about their own care.

'Advance care planning enables choice'

If this process is done well, it can bring peace and comfort to the individual living with Heart Failure. It can help families and carers by enabling choice and ensuring clarity on individual's wishes so they can be carried out.

What needs to happen in advance care planning in people living with Heart Failure?

If you notice signs of advanced Heart Failure this should prompt proactive discussions about:

- Goals of care and treatment priorities
- Preferences for future hospital admissions
- Decisions around ICD deactivation (where relevant)
- Symptom-focused and palliative approaches
- Completing a RESPECT form to formalise the patient's wishes

When should we have advance care planning conversations?

Depending on your role, the SPICT (Supportive & Palliative Care Indicators Tool) criteria or the Gold Standard Framework Proactive Identification Guidance can help you identify people who might benefit from an advance care plan due to deteriorating health in any condition.

In Heart Failure specifically, several clinical features can suggest a worsening prognosis in people living with Heart Failure:

Clinical deterioration despite optimised therapy

This may present as:

- Progressive or persistent symptoms despite optimised guideline-directed medical therapy. At this stage we may have to reduce therapy if it is not as well tolerated.
- Frequent hospital admissions for decompensations.
- Recurrent need for diuretic up-titration or adjustment.

Evidence of end organ dysfunction

- Worsening renal function
- Deteriorating liver function. These changes often reflect rising venous pressures and advanced disease.

Arrhythmia burden and device events

- New or worsening arrhythmias
- ICD shocks or therapies, which may indicate electrical instability and disease progression.

Markers of advanced Heart Failure

- Cachexia
- Increasing frailty
- Declining functional capacity
- Markedly elevated NT-proBNP (as part of specialist support)
- Persistently reduced albumin and/or sodium levels

REDMAP FRAMEWORK

R EADY

- CAN WE TALK ABOUT YOUR HEALTH AND CARE?

E XPECT

- WHAT DO YOU KNOW/ WANT TO TELL OR ASK ME?

D IAGNOSIS

- WE KNOW/DON'T KNOW

M ATTERS

- WHAT IS IMPORTANT TO YOU/YOUR FAMILY?

A CTIONS

- WHAT WE CAN DO/ THIS WILL NOT HELP

P LAN

- LET'S PLAN AHEAD FOR WHEN/IF

Adapted with permission from the SPICT Programme Team, University of St Andrews
Future care planning (REDMAP) <https://learn.nes.nhs.scot/60446>

Active Heart Failure care should not stop for advance care planning to begin.

How can I start advance care planning conversations?

- In general, Heart Failure advance care planning principles should include early identification of high-risk patients through comprehensive assessment at each long-term review. This will determine the appropriate goals of care, evidence-based therapies, levels of unmet need, ongoing care, support and management.
- Be person-centred. Future care planning conversations should start with 'What matters now?' and progressively and naturally move towards 'What may matter going forward?' making every contact matter.
- Ensure all future care planning conversations are well documented so the whole team is aware.
- It is essential to ensure excellent communication and collaborative working with the multidisciplinary team to optimise care throughout. Patients and their families should be active partners in the decision-making process.
- Maximise the benefits from the transfer of cross-specialist knowledge, skills and expertise between professional groups working across a range of different care settings.



Scan this QR code to learn more and watch the Heart Failure Academy Advance Care Plan presentation.



PALLIATIVE CARE SERVICES

SPICT can help identify people with deteriorating health due to life-shortening conditions so they can be offered early palliative care and future care planning.

Once you have identified someone who may need palliative support, you should liaise with your local palliative care or hospice services who will offer a broad range of support and may have specific Heart Failure palliative care support.

Familiarise yourself with local symptom management guidance for people living with advanced Heart Failure.

Contact your local palliative care team for further information you can share with people living with advanced Heart Failure.

What actions can primary care take to manage patients experiencing decompensated Heart Failure characterised by an increase in BEAT® symptoms and clinical indicators of deterioration?

- Educate the whole team to be alert to the symptoms of deteriorating Heart Failure and how to escalate appropriately.
- Seek advice if unsure and communicate with the specialist team.
- Proactively manage other comorbidities.
- Review the patient's flexible diuretic plan for additional diuretic therapy. Consider whether additional diuretic therapy and a referral back to the specialist team might be required.
- Refer to the specialist Heart Failure team for review.

Summary

There is so much we can do to help people living with Heart Failure.

Develop an awareness of Heart Failure as a team: use the **Navigating the Heart Failure Journey** map (attached to the front of this booklet) to encourage everyone to recognise the signs and symptoms of Heart Failure, ensure a timely diagnosis and get the right treatment at the right time.

- Teach everyone in the team to do their bit (non-clinical as well as all members of the clinical MDT).
- Ensure everyone in the team knows how to escalate people with the BEAT® symptoms appropriately.
- Once diagnosed add the patient to the Heart Failure register (including patients new to the practice), then add the correct Heart Failure SNOMED code for the Heart Failure phenotype the person is living with in their record, ensuring:
 - They are invited for regular review.
 - QOF points are generated.
 - As well as optimising Heart Failure treatments, we follow a CVKM approach, optimising and treating any other related risk factors or conditions.

Most importantly: they get the right treatment at the right time.

APPENDIX 1

Common types of valve disease

The two most common valve problems are aortic stenosis (narrowing of the aortic valve) and mitral regurgitation (leakage of the mitral valve).

Aortic stenosis (AS) affects up to 4% of over 65s and can be related to congenital abnormality such as bicuspid valve or degenerative valve disease (and less commonly rheumatic valve disease). Severe aortic stenosis needs specialist assessment and often treatment which might be surgical or transcatheter valve replacement/implantation.¹⁶

Mitral valve regurgitation (MR) is also quite common affecting up to 2% of the population. It can be the result of mitral valve prolapse, ischaemic heart disease as well as rheumatic valve disease. MR can be classed as primary or secondary with treatment ranging from surgical valve repair, replacement or Mitraclip tethering the leaflets. In some cases of secondary MR, treatment leading to improved remodelling of the left ventricle can improve MR.¹⁷

Other types of valve disease

Mitral stenosis (narrowing of the mitral valve) is less common but more common in areas where there is a high incidence of rheumatic disease and can present in a younger adult population. Treatment may include balloon mitral valvotomy or surgical replacement.

Aortic regurgitation (AR) is seen in up to 1-2% of the population and can be caused by a bicuspid aortic valve, aortic dilatation, infective endocarditis or degenerative valve disease (as well as rheumatic disease). Medical treatment might be effective in managing early stages of AR but surgical or transcatheter intervention is often required in severe cases.¹⁸

Tricuspid regurgitation (TR) is very common in mild to moderate forms and often well tolerated. It is often a result of left heart disease (LVSD), pulmonary hypertension and right ventricular dilatation/impairment. Initially, treatment is medically based.

APPENDIX 2

Cardiac devices for Heart Failure

Cardiac pacing devices used in Heart Failure include Cardiac Resynchronisation Therapy (CRT) and Implantable Cardioverter Defibrillators.

Cardiac Resynchronisation Therapy (CRT)

Is a biventricular pacing therapy for patients with Heart Failure and reduced Ejection Fraction (HFrEF) with ventricular dyssynchrony, usually highlighted by a wide QRS from left bundle branch block (or QRS >150 ms).

It delivers synchronised impulses to both ventricles via leads in the right atrium (not if in AF), right ventricle, and coronary sinus (left ventricle), restoring coordinated contraction. CRT improves systolic function, reduces left ventricular remodelling, alleviates symptoms, increases exercise capacity, decreases hospitalisations, and lowers mortality in appropriately selected patients on optimal medical therapy.

Implantable Cardioverter Defibrillators (ICD)

ICDs are used in patients with Heart Failure and reduced Ejection Fraction (HFrEF) who are at high risk of life-threatening ventricular arrhythmias. The device continuously monitors cardiac rhythm via leads in the heart and delivers rapid electrical therapy – either antitachycardia pacing or a high-energy shock – when ventricular tachycardia or fibrillation is detected, restoring normal rhythm.

ICDs do not improve Heart Failure symptoms or the heart's pumping function but are

highly effective in preventing sudden cardiac death, making them a key therapy for primary or secondary prevention in selected HFrEF patients despite optimal medical therapy.

Despite optimising therapy, someone may continue to deteriorate. It is particularly important for those with ICDs to consider whether the risk of the device outweighs the benefit. Recurrent shocks will occur if their ventricle is failing and this can be painful and psychologically traumatising. Therefore, an ICD will not be used forever and will need to be deactivated at some point in the future.

For many people when it is identified that they are moving towards end of life, there will be a conversation about whether it would be appropriate to consider deactivating the shock function of their ICD device to prevent distress to the patient and those around them as their condition deteriorates.

Often when ReSPECT – not for CPR – is considered, ICD deactivation should be discussed.

Practical point

If you notice that someone living with an ICD is deteriorating, they should be referred to the specialist team to have a review.

Maintenance of devices

People who have a device implanted will have regular reviews in the pacing clinic to make sure the device is working correctly and will have documentation to show they have a device. The battery in their device will deplete. It will usually last between 8–10 years. Replacing the battery is a similar procedure to the initial implant.

APPENDIX 3

ADVANCED HEART FAILURE

Left Ventricular Assist Device (LVAD)

An LVAD is a mechanical pump implanted in patients with advanced Heart Failure to support the function of a failing left ventricle. It draws blood from the left ventricle and pumps it directly into the aorta, maintaining systemic circulation and reducing the workload on the weakened heart. LVADs can be used as a bridge to transplant and bridge to recovery. Outside the UK, LVADs are used as destination therapy in patients who are ineligible for transplantation. Clinically, LVADs improve cardiac output, relieve symptoms of severe Heart Failure, enhance exercise capacity and quality of life, and reduce hospitalisations, but require careful anticoagulation management and carry risks of infection, thrombosis, and device malfunction.

Further specialist advanced care

Depending on their age and prognosis, someone could be referred for a cardiac transplant which would involve a waiting list for cardiac transplant. This is highly specialised and will be in a tertiary centre. Advice will be provided directly from the specialist teams and tertiary centres.

Cardiac transplantation

Is a surgical procedure in which a failing heart is replaced with a healthy donor heart in patients with end-stage Heart Failure who remain symptomatic despite optimal medical and device therapy. It is indicated for severe, refractory Heart Failure, often with reduced Ejection Fraction, and may also be considered in selected cases with intractable ventricular arrhythmias or cardiogenic shock.

The procedure restores normal cardiac function, improves exercise capacity, quality of life, and survival, but requires lifelong immunosuppressive therapy to prevent graft rejection and careful long-term monitoring for complications such as infection, coronary allograft vasculopathy, and malignancy.



**To learn more,
watch the Heart
Failure Academy
Advanced Heart
Failure presentation.**



Use this QR code
to access the
Heart Failure
Academy website.

On the Heart Failure Academy home page use the grey tabs to access the following resources:

- **The Heart Failure Academy Map**

The Navigating the Heart Failure Journey Map provides bite-sized video learning to support the multidisciplinary team to upskill in recognising the signs and symptoms of Heart Failure to ensure referral for a timely diagnosis and the right treatment at the right time.

- **Events**

Access this tab to book upcoming face-to-face events, online workshops and webinars.

- **Heart Failure presentations**

The Heart Failure Academy's library of recorded presentations holds a host of useful videos and recordings of previous webinars.

- **Telegram**

Access the Telegram group tab to join the Heart Failure Academy Telegram Group. This is an opportunity for non-specialists to connect with specialist Heart Failure colleagues across Yorkshire and the Humber for rapid answers to Heart Failure questions.

REFERENCES

1. Watt T, Raymond A, Rachet-Jacquet L, Head A, Kypridemos C, Kelly E et al. [Health in 2040: projected patterns of illness in England](#). The Health Foundation. 2023.
2. British Heart Foundation [Heart Failure: A blueprint for change](#) 2020.
3. M.R. Cowie, D.A. Wood, A.J.S. Coats, S.G. Thompson, P.A. Poole-Wilson, V. Suresh, G.C. Sutton, [Incidence and aetiology of heart failure; a population-based study](#), European Heart Journal March 1999 Vol 20 (6): 421–428.
4. [Yorkshire population growth rates](#). Accessed 21 Aug 2026.
5. Department of Health and Social Care and NHS England [Cardiovascular disease \(CVD\) modern service framework](#) July 2026.
6. Bottle A, Kim D, Aylin P, Cowie MR, Majeed A, Hayhoe B. [Routes to diagnosis of heart failure: observational study using linked data in England](#). Heart. 2018 Vol 104(7):600–605.
7. Koudstaal S, Pujades-Rodriguez M, Denaxas S, Gho JM, Shah AD et al. [Prognostic burden of Heart Failure recorded in primary care, acute hospital admissions, or both: a population-based linked electronic health record cohort study in 2.1 million people](#). Eur J Heart Fail. 2017;19(9):1119–1127.
8. National Institute for Health and Care Excellence (NICE). [Clinical knowledge summary \(CKS\): Chronic Heart Failure](#) March 2026.
9. Nadarajah R, Farooq M, Raveendra K et al. [Inequalities in care delivery and outcomes for myocardial infarction, Heart Failure, atrial fibrillation, and aortic stenosis in the United Kingdom](#) The Lancet Regional 2023.
10. National Institute for Health and Care Excellence (NICE). [NICE guideline \[NG106\]: Chronic heart failure in adults: diagnosis and management](#) Updated September 2025.
11. Electronic medicine compendium (emc). Entresto 15mg/16mg capsules <https://www.medicines.org.uk/emc>
12. NHS England [Heart Failure with preserved Ejection Fraction: pathway support tool](#) November 2024.
13. National Institute for Health and Care Excellence (NICE). [NICE technology appraisal guidance \[TA1182\] Finerenone for treating chronic heart failure with preserved or mildly reduced ejection fraction](#) August 2026.
14. NHS [Vaccinations and when to have them](#) accessed 18 August 2026.
15. National Institute for Health and Care Excellence (NICE). [HealthTech Guidance \[HTG764\]: VA ECMO for severe acute heart failure in adults](#) Updated 22 October 2025.
16. Supino PG, Borer JS, Preibisz J, Bornstein A. The epidemiology of valvular heart disease: a growing public health problem. Heart Fail Clin. 2006; 2: 379–393.

17. Figlioli G, Sticchi A, Christodoulou MN, Hadjidemetriou A, Amorim Moreira Alves G, De Carlo M, Praz F, Caterina RD, Nikolopoulos GK, Bonovas S, et al. [Global Prevalence of Mitral Regurgitation: A Systematic Review and Meta-Analysis of Population-Based Studies](#). Journal of Clinical Medicine. 2025; 14(8):2749.
18. Lucas Uchoa de Assis, Giulio M Mondellini, Mark MP van den Dorpel, Jenna van Niekerk, et al. [Incidence and Pathology of Aortic Regurgitation](#) Interv Cardiol 2025 20:e07.

NATIONAL SOCIETIES AND ORGANISATIONS

British Society for Heart Failure (BSH) – <https://www.bsh.org.uk>

British Cardiovascular Society (BCS) – <https://britishcardiosocietysociety.org.uk>

British Association for Cardiovascular Prevention and Rehabilitation (BACPR) – <https://www.bacpr.org>

British Association for Nursing in Cardiovascular Care (BANCC) – <https://www.bancc.org.uk>

British Heart Valve Society (BHVS) – <https://bhvs.org>

British Heart Rhythm Society (BHRS) – <https://bhvs.com>

British Society of Echocardiography (BSE) – <https://www.bsecho.org>

Centre for Pharmacy Postgraduate Education (CPPE) – <https://www.cppe.ac.uk>

Primary Care Cardiovascular Society (PCCS) – <https://pccsuk.org>

Primary Care Pharmacy Association – <https://www.pcpa.org.uk>

National Charities

Arrhythmia Alliance – <https://heartrhythmalliance.org/aa/uk/>

Blood Pressure UK – <https://www.bloodpressureuk.org>

British Heart Foundation – <https://www.bhf.org.uk>

Cardiomyopathy UK – <https://www.cardiomyopathy.org>

Heart Research UK – <https://heartresearch.org.uk>

Heart Valve Voice – <https://heartvalvevoice.com>

Somerville Foundation – <https://sfhearts.org.uk>





My notes



**We'd really appreciate your feedback
about what you thought of this resource.
Scan the QR code below.**



**Thanks from the team at the
Heart Failure Academy and the
Pumping Marvellous Foundation.**

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