Health Innovation
Kent Surrey Sussex

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Primary Care

Heart Failure Diagnostic and Treatment Pathways

Edited and updated in July 2024 by NHS Sussex ICB – Heart Failure Steering Group in collaboration with Health Innovation Kent Surrey Sussex – CVD Team
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Endorsed by British Heart Foundation (BHF), Primary Care Cardiovascular Society (PCCS), Pumping Marvellous Foundation, Arrhythmia Alliance, AF Association
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Primary Care Cardiovascular Society
Empowering primary care to deliver the best in cardiovascular health

Pumping Marvellous
The heart failure charity

Arrhythmia Alliance

AFAssociation

Introduction

Heart failure affects over a million people across the UK with 200,000 new diagnoses every year. It is a life-limiting condition that too often causes emergency hospital admissions, poor quality of life and ultimately early death. It is possible to live well with heart failure and our Heart Failure pathways have been standardised for use in Primary Care services to facilitate referrals to diagnostic and heart failure treatment services.

Early diagnosis of people with heart failure with prompt access to integrated services and specialist care can help to cut emergency admissions, improve quality of life and give people the opportunity to live well and longer.

However, it is estimated that:

- there are a further 400,000 people with heart failure who are currently undetected, undiagnosed, and consequently missing out on life preserving treatment
- 80% of heart failure is diagnosed in hospital yet 40% of people had symptoms that should have triggered an earlier assessment in Primary Care in the months prior to hospital admission.

This document is a consolidation of the heart failure diagnostic and treatment pathways:

- If suspected unconfirmed heart failure use the **diagnostic pathway**
- If heart failure already confirmed use the treatment pathway for heart failure phenotype. Recent advances in the pharmacological treatment of heart failure have expanded the options for patients. See treatment pathways, which are in line with ESC guidelines.
  - » **HFpEF (heart failure with preserved ejection fraction: EF ≥50%)**
  - » **HFmrEF (heart failure with mildly reduced ejection fraction: EF 41-49%)**
  - » **HFrEF (heart failure with reduced ejection fraction: EF ≤40%)**

If managing a patient for an exacerbation of known heart failure, consider undertaking ECG, relevant bloods and referral back to the heart failure service/ nurse where it meets their criteria or otherwise hospital or community heart failure specialist clinic.

Always think FRAILTY

Many heart failure patients will be living with frailty. Consider risk of fall /fracture /electrolyte disturbances. Treatment must always be individualised taking into account frailty, palliative and end of life considerations and the patient's wishes.

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Abbreviations, Definitions and Coding

Definition of Heart Failure

European Society of Cardiology: Heart Failure guideline update 2023.

Type of heart failure		HFrEF	HFmrEF	HFpEF
Criteria	1	Symptom +/- signs		
	2	LVEF ≤ 40%	LVEF 41-49%	LVEF≥ 50%
	3			Objective evidence of cardiac structural and/or functional abnormalities consistent with LV diastolic dysfunction /raised LV filling pressures, including raised natriuretic peptides

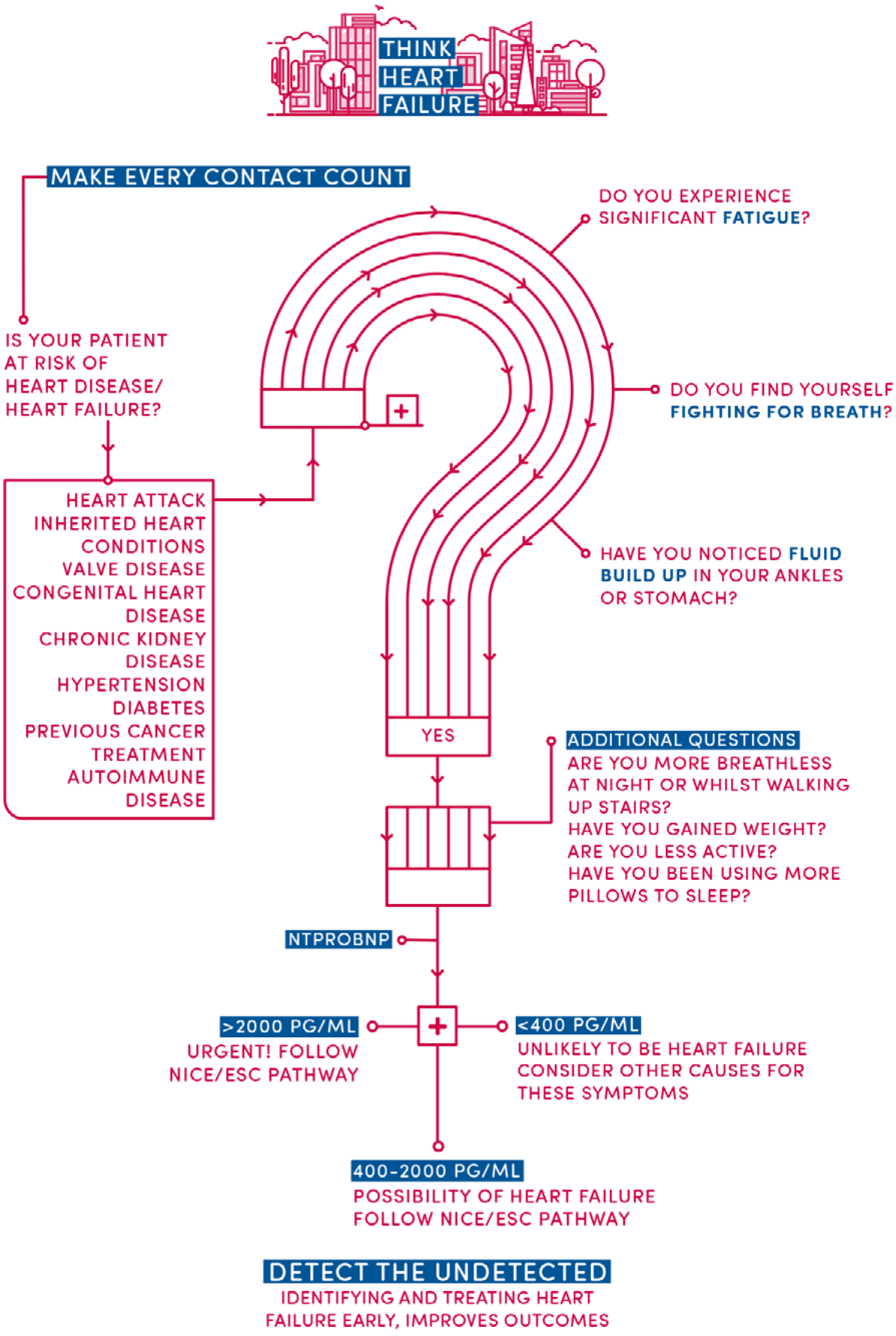
Abbreviations used

EF .....ejection fraction
LV .....left ventricular
HFrEF.....heart failure with reduced ejection fraction
HFmrEF...heart failure with mildly reduced ejection fraction
HFpEF .....heart failure with preserved ejection fraction
ACEI.....angiotensin converting enzyme inhibitor
ARB.....angiotensin receptor blocker
ARNI.....angiotensin receptor/ neprilysin inhibitor
BB .....beta-blocker
MRA.....mineralocorticoid receptor antagonist
SGLT2i.....sodium glucose cotransporter-2 inhibitor
CRT-P.....cardiac resynchronisation therapy - pacing
CRT-D .....cardiac resynchronisation therapy pacing and defibrillator
ICD .....implantable cardioverter-defilbrillator
CKD.....chronic kidney disease
IHD .....ischaemic heart disease

Primary Care Coding

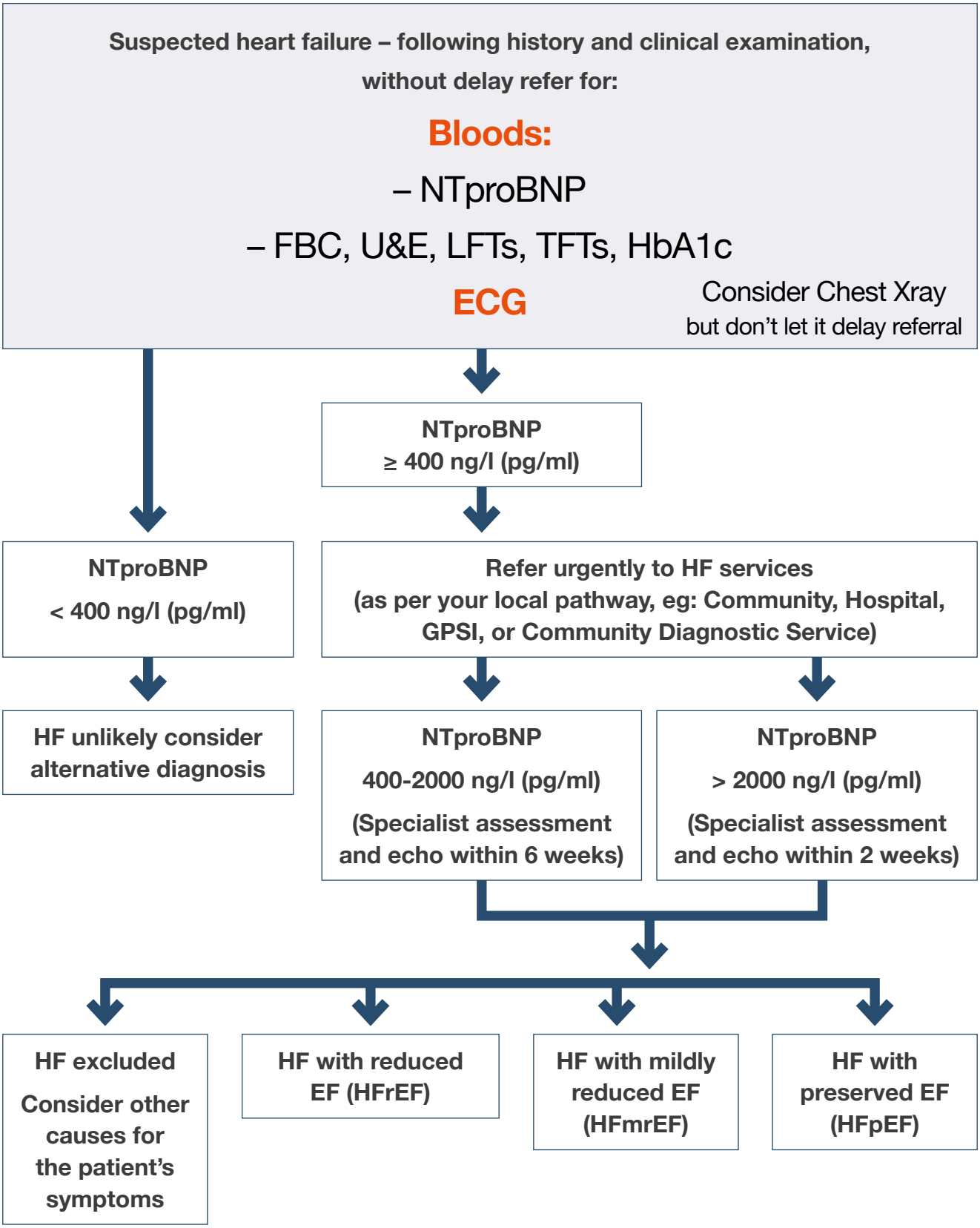
HFrEF (HF with EF≤ 40%)*	SNOMED: 703272007
AND echo shows LVSD	SNOMED: 407596008
HFmrEF (HF with EF 41-49%)	SNOMED: 788950000
HFpEF (HF with EF≥ 50%)	SNOMED :446221000

*patients with an original HFrEF diagnosis with an improved ejection fraction – i.e. more recent echo with EF>40% due to optimisation should still be considered HFrEF as per original diagnosis and must remain on their prognostic medications.



British Society For Heart Failure. Think Heart Failure (infographic) 25in25 Collaborative
https://www.bsh.org.uk/25in25

Suspected new diagnosis of heart failure in Primary Care



Expected treatment pathway for HFpEF (EF ≥ 50%)

(taking into account frailty, palliative/end of life considerations and the patient's wishes)

Confirmed diagnosis of HFpEF

Consider referral to heart failure services * – if patient unstable with heart failure requiring complex diuretic management or at risk of hospital admission with primary cause heart failure. * In keeping with local HF service provision.

Prescribe diuretics to relieve congestion / peripheral oedema

If HFpEF or type 2 diabetes and/or chronic kidney disease in line with NICE guidelines:
add SGLT2i: dapagliflozin 10mg once a day or empagliflozin 10mg once a day

Provide advice on self-management including daily weights and variable diuretic dosing

*Managing HF@Home Programme may be available

Consider spironolactone if diuretic resistance or hypokalaemia

Primary Care to identify, treat, optimise and manage other co-morbidities:

Atrial fibrillation

Hypertension

IHD

Diabetes

CKD

For HFpEF there is no evidence of prognostic benefit from ACE-I / ARB or beta-blockers but may be prescribed to treat co-morbidities.

Primary Care: HFpEF stable – Once diuretic dose is stable and symptoms improved move to heart failure review for HFpEF (including U&E at least 6 monthly).

Expected treatment pathway for HFmrEF (EF 41% – 49%)

(taking into account frailty, palliative/end of life considerations and the patient's wishes)

Confirmed diagnosis of HFmrEF

Consider referral to heart failure services * – if patient unstable with heart failure requiring complex diuretic management or at risk of hospital admission with primary cause heart failure * In keeping with local HF service provision.

Prescribe diuretics to relieve congestion / peripheral oedema

If HFmrEF or type 2 diabetes and/or chronic kidney disease in line with NICE guidelines:
add SGLT2i: dapagliflozin 10mg once a day or empagliflozin 10mg once a day

Provide advice on self-management including daily weights and variable diuretic dosing

Consider spironolactone if diuretic resistance or hypokalaemia

There is some evidence that

ACEi/ARB/ARNI

BB

MRA

may have prognostic benefit in HFmrEF (this group should be considered as an extension of HFrEF cohort) and these may be offered especially if also to treat co-morbidities such as hypertension, atrial fibrillation, IHD, diabetes or CKD

Primary Care: HFmrEF stable – Once diuretic dose is stable and symptoms improved move to heart failure review for HFmrEF (including U&E at least 6 monthly).

Expected treatment pathway for HFrEF (EF ≤ 40%)

(taking into account frailty, palliative/end of life considerations and the patient's wishes)

Diuretics if fluid retention (dynamic dosing up or down).

ACEi or ARB * or ARNI &
BB licensed for heart failure (bisoprolol/carvedilol/nebivolol) &

MRA (spironolactone or eplerenone) &

SGLT2i : dapagliflozin or empagliflozin

There is no set order for introduction of these medicines however, aim to introduce all four classes early after diagnosis.

- ACEi/ARB/ARNI should be titrated to maximum tolerated dose.
- BB should be titrated to maximum tolerated dose.
- Optimisation of medicines may be managed by Primary Care with support from HF Specialist services for advice and guidance if required.
- Seek advice and guidance from HF Specialist services to make **urgent referral** if complex, unstable, or at risk of hospital admission.

*ARB only if ACEi intolerant **ARNI if recommended by HF team/cardiology
Remember to check U&Es 1-2 weeks after initiation or dose titration of ACEi, ARB, ARNI or MRA

If patient still symptomatic despite **OPTIMISED** ACEi/ARB/ARNI, BB, MRA, SGLTi seek further advice from HF Specialist team as other specialist treatments may be indicated.

This may include additional/alternative medical therapy or to be considered for device (CRT-P, CRT-D or ICD)

Primary Care

Follow up in Primary Care
Undertake 6/12 review as per NICE guidance.
Adjust diuretics as per clinical status. Ensure medicines titrated to maximum tolerated doses
Involve palliative care as required

Expected Primary Care management of decompensated Chronic Heart Failure aiming to avoid hospital admission

Confirm previous diagnosis of HF and what type (HFrEF, HFmrEF, HFpEF) with echo report.

Management of decompensated heart failure. Check U&E's, FBC and ECG to try and identify cause of decompensation and manage accordingly.

Primary Care to adjust loop diuretic as appropriate, while seeking advice from HF Specialist team. Aiming for admission avoidance but the HF nurse has access to specialist care through HF MDT if required to escalate treatment in the community with a thiazide diuretic or admit / attend for IV diuretics / Virtual ward bed.

Provide patient with information: Give patient advice sheet, advise patient to obtain weighing scales and **blood pressure monitor** to record daily weights, BP and Pulse.

Refer to HF Specialist Team:
If patient requires specialist HF assessment. Referral should include, where available:

- Copy of latest Echo results confirming Heart Failure
- Current medication list and any recent medication changes
- Blood results
- ECG.

Also GP to telephone HF Specialist Service to discuss referral if patient at risk of emergency hospital admission.

What types of support the HF Service will offer: see also CHFNS pathway Appendix 1

- Monitoring & Medicines management as per NICE guidance
- Complex diuretic management.
- Referral to appropriate agencies / MDT / services
- Liaise with Consultant-led Heart Failure MDT for specialist advice
- Consideration for further interventions
- Consideration for palliative care services

To note – GP to check referral criteria for local Community HF nursing service if commissioned.

Appendices

Appendix 1: Community Heart Failure Service Pathway

(Example pathway)

HEART FAILURE DIAGNOSIS CONFIRMED

Refer to Community Heart Failure Service
Referral should include:

- Copy of latest Echo report confirming Heart Failure
- Current medication list and any recent medication changes • Blood results.

Tel: ..... Email: .....

*GP to also telephone HF Nurse to discuss referral if patient at risk of emergency hospital admission.

Urgent referrals

Telephone contact within 1 working day and home or clinic review within 2-10 working days*

- Patients in an exacerbation of heart failure.
- Recent hospital admission / discharge with primary diagnosis of heart failure.
- In need of specific heart failure palliative care management if required

Non-urgent referrals

Telephone contact and clinical assessment review from a CHFNS within 4 weeks*

- Stable patients requiring titration of evidence-based medication as per NICE guidance for heart failure.
- Patients requiring education and guidance with self management strategies

Patients then become part of the active heart failure specialist service caseload

Unstable

Home review within 2 working days*

- Patient in exacerbation or high risk of exacerbation
- Recent hospital discharge

Stable

- Optimised on evidenced based heart failure medication
- Personalised care plan in place
- No exacerbations of heart failure or medication changes within the past 3 months

- Monitoring & Medicines management as per NICE guidance
- Complex diuretic management.
- Referral to appropriate agencies / MDT / services
- Liaise with Consultant-led MDT- Heart Failure for specialist advice
- Consideration for further interventions (CRT / Ultrafiltration)

HF Nurse will refer back to GP / practice nurse for on-going heart failure review as per NICE guidelines / QOF**

If patient decompensates with HF again refer back to HF service as per this pathway.

Consider palliation if appropriate (see palliative care pathway)

*Normal working days are Monday – Friday 9am-5pm except bank holidays

**Gp to refer housebound patients to District Nursing team / Community Matrons if required for Integrated chronic disease review for heart failure management, heart failure review as per NICE guidelines / QOF.

Note – *GP to check referral criteria for local Community HF service if commissioned.

Appendix 2: Specialist re-assessment and possible treatment options for HFrEF

ARNI (sacubitril + valsartan / Entresto®)

Sacubitril + Valsartan contains the combination of sacubitril (a neprilysin inhibitor) and the angiotensin receptor blocker valsartan. When compared with an ACEI it has been shown to improve life expectancy and reduce the likelihood of hospital admission in patients with HFrEF.

It has been approved by NICE as an alternative to ACEI in patients with symptomatic HFrEF. NICE recommend that treatment with sacubitril + valsartan should be initiated by a heart failure specialist with access to the multidisciplinary heart failure team.

Depending on blood pressure and dose of current ACEI/ARB the starting dose is 24/26mg twice a day or 49/51mg twice a day which is then titrated to the maximum tolerated dose (target dose 97/103mg twice a day.

To reduce the risk of angioedema any ACEI must be permanently discontinued at least 36 hours prior to the initiation of sacubitril + valsartan.

Any ARB (other than the valsartan in Entresto®) must be permanently discontinued but a break in treatment is not needed.

Monitor renal function, electrolytes (Na+, K+) and blood pressure and for signs of angioedema (as you would for ACEI/ARB therapy).

Potassium binders

In patients where hyperkalaemia prevents introduction/optimisation of ACEI/ARB/ ARNI a potassium binder - patiromer (Veltassa®) or sodium zirconium cyclosilicate (Lokelma®) may be considered.

SGLT2 inhibitors

The SGLT2i dapagliflozin (10mg once and day) and empagliflozin (10mg once a day) are both licensed and NICE approved for use in HF with or without type 2 diabetes (avoid in type 1 diabetics) and in CKD. See the treatment pathways for **HFpEF**, **HFmrEF** and **HFrEF** for place in therapy.

Seek further advice if required from heart failure specialist /cardiology

Advice from a diabetes specialist may be required if the patient is on insulin (reduction in insulin dose likely needed) or any concern over diabetic management, in particular those patients on oral agents that may cause hypoglycaemia – eg sulphonylureas.

Ivabradine

Ivabradine is approved by NICE and may be considered for patients with HFrEF, NYHA II-IV symptoms, in sinus rhythm with heart rate ≥75bpm despite the maximum tolerated dose of beta-blocker licensed for heart failure.

Note: up-titration of the beta-blocker to target dose should be considered first.

Target doses of beta-blocker are bisoprolol 10mg/day, carvedilol 25mg bd (or 50mg bd if weight over 85kg) or nebivolol 10mg/day.

The dose range for ivabradine is 2.5-7.5mg twice a day.

Digoxin

Digoxin is particularly useful for rate control in heart failure patients with atrial fibrillation (AF) and may be prescribed by the Primary Care team.

It can also be used, in low dose, as an adjunct for symptomatic relief for patients in sinus rhythm. Careful dosing is required in renal impairment.

Hydralazine + Nitrate

This combination is occasionally used for patients intolerant of ACEi and ARB or in addition to ACEi/ARB in symptomatic patients. Typically doses are: hydralazine 25mg twice /three times a day up to max 75mg three times a day + isosorbide dinitrate 10-40mg bd.

Implantation of a cardiac device

Some patients may meet the criteria for device therapy. Eligibility will depend on degree of LV impairment and ECG findings based on QRS duration. An informed discussion with a specialist is required before any patient is listed for a cardiac device.

This may be cardiac resynchronisation therapy (CRT-P) an implantable cardio-defibrillator (ICD) or cardiac resynchronisation therapy + implantable cardio-defibrillator (CRT-D).

Intravenous Iron Infusion

Many heart failure patients are not anaemic but have low iron stores and there is some evidence that repletion of iron can improve patient's symptoms/quality of life. Oral iron supplements are usually ineffective.

Criteria for intravenous iron is determined by the haemoglobin level along with assessment of ferritin and total iron saturation results.

This can be offered as a day case attendance according to local pathways.

Please note if a patient is anaemic do not refer to the heart failure team for IV iron – this should be investigated in line with clinical need.

NOVARTIS

Primary Care Cardiovascular Society

Driving primary care to deliver the best in cardiovascular health

Top tips for reviewing patients with Chronic Heart Failure in a virtual consultation

Use these top tips to get the most out of your virtual consultations with your adult patients who have been diagnosed with chronic heart failure with reduced ejection fraction

1 Consultation preparation

- What is the reason for the consultation?
- Review the patient's clinical record
- Any recent cardiac decompensation, hospitalisation or contact with the HF services?
- Have they had any recent blood tests?
- Any recent relevant investigations?

2 Encourage the use of technology

TOP TIP

- If patient doesn't have a smartphone could they borrow one (e.g. from family member or carer)?

- Is patient using a phone, smartphone or computer?
- Consider the use of video to enhance the consultation

3 Assessment and presenting history

- Have they noticed a change in ADL, increased fatigue or change in exercise tolerance, e.g. NYHA? If exercise tolerance has changed is it gradual or sudden?
- Are they breathless while lying flat or wake in the night feeling breathless?
- Have they had newly developed or worsening of ankle swelling or increases in weight?
- Have they been aware of palpitations?

TOP TIPS

- Do they have a home BP monitor? If so, record BP and pulse
- Ask questions regarding appropriate ADL e.g. have they taken the bins out?/ been gardening?/walked the dog?
- Do they have scales? If so, record weight
- Do they have any other co-morbidities that may affect these symptoms e.g. COPD?

4 Virtual examination- practical examples

- Can the patient move around or say a complete sentence without being breathless?
- Can you observe rate of breathing or signs of oedema?

TOP TIPS

- Ask patient to go and get something from another room to observe breathing
- Consider asking the patient or relative to test for pitting oedema
- Can the patient move the camera to show different parts of their body?

5 Medication review

- How well is the patient managing their drugs? Are they compliant?
- Has their medication been optimised?

TOP TIPS

- Is there a family member or carer who can give an additional perspective?
- Consider the use of a dosette box

6 Next steps

- Following the patient assessment & examination use the information below to guide your next steps.

No cause for concern

Set a next review date

- If there is no worsening of symptoms or signs
- If medication appears optimised
- If patient is reassured

TOP TIP

Remind patient of how to identify early signs of their condition worsening and when they should be seeking advice

Seek further advice

Call or refer to HF specialist team or cardiologist

- If patient's symptoms or signs have worsened, e.g. minor change in NYHA class, consider increasing diuretic medication whilst seeking advice
- If concerns over adherence to medication
- Consider further tests whilst pending advice: U&E, eGFR, FBC & ECG etc.
- Consider reviewing patient again in 48-72 hours

Urgent action needed

Act immediately, e.g. seek emergency specialist advice, call 999

- If patient has chest pain and severe breathlessness
- If there is a significant change in NYHA class
- If patient has acute decompensation (hypoxia, hypotension and tachycardia)

HF= Heart failure, ADL = activity of daily living, BP = blood pressure, COPD = Chronic obstructive pulmonary disease, U&E = Urea & electrolytes, eGFR = estimated glomerular filtration rate, FBC = full blood count, ECG = electrocardiogram, NYHA = New York Heart Association

NYHA symptom grading
NYHA I - No symptoms
NYHA II - Mild symptoms (e.g. walking)
NYHA III - Marked limitation
NYHA IV - Severe limitation (e.g. at rest)

This infographic has been developed and funded by Novartis. It has been produced in collaboration with Dr Majid Akram and Dr Jim Moore. This infographic is endorsed by the Primary Care Cardiovascular Society (PCCS).

224999 July 2022

This document is an aid and not a replacement to clinical judgement.

Top tips for Heart Failure Specialist Nurses when reviewing patients with Chronic Heart Failure in a virtual consultation

Use these top tips to assist your virtual consultation with adult patients who have been diagnosed with chronic heart failure with reduced ejection fraction. Following clinical triage, balance of risk may favour face-to-face review.

1 Is this patient suitable for review?

- Gain consent for VR and document clearly
- Manage expectations of the review e.g. length, what it will entail
- Do you have all the information required i.e. bloods, BP, HR, weight, etc.?
- Do they have a device that can be monitored remotely? e.g. implanted or telehealth device. If so, request readings ahead of review
- Do you need an interpreter? If so book three-way call
- Any recent contacts with a HCP? What information is available?

TOP TIPS

- If patient requires bloods or BP check, is it possible to obtain these prior to the virtual consultation?
- Is the patient using a phone, smartphone or computer? If not, could they borrow one (e.g. from family or carer)?
- Consider the use of video to enhance the consultation

2 Assessment checklist

- PND
- Orthopnoea
- Weight gain
- Oedema
- Bloating
- Palpitations
- Chest pain
- Episodes of syncope or presyncope?
- Appetite and fluid intake
- Exercise level on flat/incline
- Increased fatigue
- NYHA classification

TOP TIPS

- Ask questions regarding appropriate ADL e.g. have they taken the bins out?/ been gardening?/ walked the dog?
- Do they have any other co-morbidities that may affect these symptoms e.g. COPD?
- Ask patient if they feel that anything has changed?

3 Virtual examination – practical examples

- Can the patient move around or say a complete sentence without being breathless?
- Can you observe rate of breathing or signs of oedema?

TOP TIPS

- Ask patient to go and get something from another room to observe breathing
- Consider asking the patient or relative to test for pitting oedema
- Can the patient move the camera to show different parts of their body?

4 Medication review

- How well is the patient managing their drugs? Are they adherent?
- Has their medication been optimised? If not, can adjustments be made?

TOP TIPS

- Is there a family member or carer who can give an additional perspective?
- If accessible, check GP/pharmacist records to see if Rx have been collected

5 Next steps

- Following the patient assessment and examination use the information below to guide your next steps

No cause for concern

Set a next review date

- If there is no worsening of signs or symptoms
- If medication appears optimised, discharge to GP with management plan for primary care monitoring

TOP TIPS

- Ensure patient has self-care advice, e.g. use of BP monitors, device wearables, home weighing scales, online support groups, remote downloadable education for device patients etc.
- Ensure patient has contact details for HF service should symptoms deteriorate

Follow-up review required

Where appropriate:

- Assess need for F2F review and need for other services
- Advise medication changes if necessary and inform GP promptly
- Advise GP if other co-morbidities need to be considered
- Advise of repeat bloods and arrange
- Ensure timely FU appointment is arranged
- Patients for escalation to advanced/specialist therapies will need F2F FU following MDT discussion
- Ensure patient has self-care advice and contact details for HF service should symptoms deteriorate

Urgent care needed

- For significant or worsening clinical features of HF decompensation which is difficult to manage at home, consider discussing admission or urgent secondary care assessment with HF cardiologist or physician on call
- Dial 999 if severe signs and symptoms with acute haemodynamic compromise, e.g. severe breathlessness, chest pain, palpitations and syncope

ADL = activity of daily living, BP = blood pressure, COPD = Chronic obstructive pulmonary disease, CRT = cardiac resynchronisation therapy, F2F = face to face, FU = follow up, HF = Heart failure, HR = heart rate, MDT = multidisciplinary team, NYHA = New York Heart Association, PND = paroxysmal nocturnal dyspnoea, Rx = prescription, VR = virtual review

NYHA symptom grading
NYHA I - No symptoms
NYHA II - Mild symptoms (e.g. walking)
NYHA III - Marked limitation
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225002 July 2022

Primary Care Heart Failure Patient Advice Sheet

Follow up: you may be referred by your GP to be seen in the cardiology outpatient clinic or remain under your GP for ongoing management of heart failure. Some patients may also be referred to a heart failure specialist service. You will be told by your GP what follow up to expect.

Monitoring your blood pressure and pulse: you should obtain a home **blood pressure monitor** (HBPM), take regular readings and keep a record of your blood pressure, pulse rate, and if your pulse feels regular or irregular so you can share them with your doctor or nurse when you have a review.

Monitoring your weight: weigh yourself every morning. If your weight goes up suddenly by 2 – 4 pounds (about 1 kilo) in 2 days you could be retaining fluid.

Worsening of symptoms and self management of diuretics: if you notice a worsening of your breathlessness, have more ankle swelling, or notice a sudden weight gain, you may need a change to your diuretic treatment. If your doctor or nurse has advised you then self manage by taking an extra diuretic for **3 days** (for example: Furosemide 20mg – 40mg tablet **OR** Bumetanide 0.5mg – 1mg tablet), or telephone your doctor or nurse to discuss.

If you do self-manage for 3 days and your symptoms have not improved after 3 days then telephone your doctor or nurse for a review.

Activity: try to be as active as your condition allows. Walking is good and can be built into your daily regime. If you get breathless during exercise, you should slow down or stop.

Rest: if you have oedema (swelling) in your legs it will help when resting to elevate your legs on a footstool. If your breathing feels more difficult lying flat in bed try increasing the amount of pillows you use.

Diet: it is important to reduce the amount of salt in your diet as it can make you retain water. Do not add salt at the table and avoid cooking with it. Avoid salty foods such as Marmite, Bovril and crisps. Convenience foods are also particularly high in salt. In addition we recommend a 'healthy diet': reduce the amount of saturated fat, aim to eat at least five portions of fruit and vegetables a day, and eat fish twice a week.

Alcohol: drinking too much can sometimes make your heart failure worse so drink no more than 1 or 2 units of alcohol a day. Some patients will be advised to have none.

Medication: you will be started on a number of medicines that will improve your symptoms and are a key part of your treatment. It is important to continue taking the medication unless instructed differently by your doctor or nurse. If you have any problems taking your medicines or getting supplies please speak to your doctor, nurse or pharmacist.

Smoking: if you smoke, stop smoking. If you would like a referral to a smoking cessation service who can support you though this process please talk to your doctor or nurse.

Vaccines: make sure you have an annual flu vaccine, Covid booster and a one-off vaccine for pneumonia.

Support: If you have any questions please ask your doctor or nurse. Further information can also be found in the **resource page** where the **British Heart Foundation Heart Failure hub** and the **Pumping Marvellous Foundation** hold all their resources for patients and families.

Benefits: You may be eligible to claim for Attendance Allowance which is for people over State Pension age who need help due to illness or disability. It is a non-means-tested tax-free weekly payment. **Find out more and apply here:**

Driving & transport: **check your eligibility and apply for a blue badge here.**

Heart Failure Patient – Self Management

Contact your heart failure nurse/GP if you are concerned.

If you are no longer seeing a heart failure specialist team/nurse but were discharged on the patient-initiated follow-up pathway (PIFU) you my be able to self-refer back to the service.

The symptom checker is a useful guide on what to look out for and what to do: http://qr.pumpingmarvellous.org/SymptomSM

This guide is also available in Welsh, Bengali, Polish, Punjab and Urdu.

GREEN - KEEP WATCH

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

- 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.

JOIN OUR PATIENT AND CARER COMMUNITY - SCAN WITH YOUR DEVICE HERE

AMBER - STAY ALERT

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

- You are feeling more breathless than usual.
- Your 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.

RED - TAKE ACTION

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

- 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 are 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 very unwell, call **999**.

This Marvellous Symptom Checker has been put together by the Pumping Marvellous Foundation and developed with NHS heart failure teams and patients from Staffordshire. For details of any terms you don't understand please visit the patient academy on the Pumping Marvellous website.

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Resources for Clinicians and Patients

British Heart Foundation

For patients:

- BHF patient support information
- British Heart Foundation: Living with heart failure booklet
- Heart Failure Matters patient information

Plus BHF helpline info:

Call* **0300 330 3311** open weekdays 9am – 5pm, Saturdays 10am – 4pm. Or email at hearthelpline@bhf.org.uk and BHF nurse will get back to you as soon as possible. **costs are the same as calling a home or business landline.*

For healthcare professionals:

- BHF professional information (Not HF specific)

Pumping Marvellous Foundation

For patients:

- Resources for people living with heart failure

Contact **01772 796542** or email hearts@pumpingmarvellous.org

For healthcare professionals:

- NHS Teams patient information order form

Cardiomyopathy UK

- http://www.cardiomyopathy.org

NICE Guidelines

- NICE Chronic Heart Failure Guideline – 2018 (ng106)

UCLPartners Proactive Care Frameworks

- UCLPartners CVD resources

Provide a platform for optimising clinical care and self-care for people with these high-risk conditions, supporting primary care teams to do things differently and at scale. They are free and can be downloaded directly into a practices clinical system and help identify the individuals who would benefit from a review and possible referral.

The following slide packs include pathways and resources to support clinicians treating patients with single or multiple cardiovascular conditions.

- Atrial Fibrillation
- Heart Failure
- Hypertension
- Lipid management including Familial Hypercholesterolaemia
- Type 2 Diabetes

Primary Care Cardiovascular Society (PCCS) CVD Academy

- About the academy

For clinicians:

The Academy provides PCCS members with a variety of different educational resources in cardiovascular disease. Each module is CPD accredited and you can download a certificate directly from the Academy.