Heart Failure Guidance Summary for GPs

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The regional heart failure guidance is available online at

https://occg.info/heart-failure

The below is a top-line summary of the guidance written for use in primary care. Hyperlinks will go to the online full version

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- 1. Diagnosis and initial treatment of heart failure, including BNP testing
- 2. Expected treatment pathways for patients with
 - Heart failure with a reduced ejection fraction (HF-REF)
 - Heart failure with a preserved ejection fraction (HF-PEF)
- 3. Checklist for regular review of patients with heart failure

Other advice is available online, including:

- HF referrals and clinics
- Medications and local heart failure formulary
- <u>Renal issues in patients with heart failure</u>
- List of all GP pages on Oxfordshire HF website

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Diagnosis and initial treatment of heart failure

History and examination suggestive of possible heart failure (further information)

Arrange initial tests (further information on tests)

- Bloods: NT-proBNP, U&E, LFT, TFT, FBC
- ECG
- Do not request open access echocardiogram
- Consider in addition to help with severity / differentials
 - Chest x-ray
 - Urinalysis
 - Spirometry or peak flow

NT-proBNP greater than 2000ng/L

Consider initial treatment of fluid overload or breathlessness with diuretics, or of fast atrial fibrillation with beta blockers or digoxin. See further information below.

If symptoms are severe, especially if paroxysmal nocturnal dyspnoea or lung crepitations, consider referral to medicine at JR or Horton for inpatient / ambulatory assessment.

Refer <u>urgently</u> to Heart Failure clinic via ERS, Target to be seen within 2 weeks

NT-proBNP greater than 400ng/L, but less than 2000ng/L

Refer to Heart Failure clinic via ERS, Target to be seen within 6 weeks

NT-proBNP less than 400ng/L

Reconsider diagnosis of HF Further advice

NT-proBNP testing

Blood testing for B-Type Natriuretic Peptide (BNP) is a key step in the diagnostic pathway for heart failure. This is now recommended by NICE as the first investigation when heart failure is suspected on clinical grounds.

N-Terminal B-Type Natriuretic Peptide (NT-proBNP) testing is now available to all GPs in the region via the OUH FT pathology labs and has replaced the previously used assay (as of 6 November 2019). The normal and abnormal ranges are different. Unlike BNP, NT-proBNP is not subject to the issue of degradation with falsely low readings if the sample is delayed in transit. Nonetheless, samples need to reach the lab within 24h. Please send an serum sample (yellow/gold top tube – note this is a change from BNP).

Considerably more advice, including tips for using NT-proBNP testing in clinic practice, is available online.

Expected pathway for patients with Heart Failure with reduced ejection fraction (HF-REF; Left ventricular ejection fraction <40%; severe LV systolic dysfunction)

Diagnosis should be made only after an echocardiogram, with input from a cardiology specialist.

 Commence HF disease modifying therapies: ACEi / ARB and beta blockers Diuretics if needed Titrate ACEi / ARB and beta blockers to maximum tolerated dose 	Identify and treat comorbidities Hypertension Renal Dysfunction Diabetes Pulmonary Disease Ischaemic Heart Disease Anaemia
If remains symptomatic (any breathlessness or other HF symptoms): Start Mineralocorticoid Receptor Antagonist (eplerenone for most men, spironolactone for women)	Community Heart Failure Nurses can assist with medication titration and education. Cardiac Rehabilitation is indicated
If remains symptomatic: Please refer back to hospital HF clinic for review and consideration of other HF therapies (eg Sacubital / Valsartan, Ivabradrine, cardiac resynchronisation therapy, intravenous iron infusion)	Once diagnosis made and medications introduced and uptitrated, likely to be discharged out of hospital care back to community care.

Although we appreciate this is not funded, NICE suggest a 6-monthly review for all patients with heart failure – **see suggested template for review**.

Expected pathway for patients with Heart Failure with preserved ejection fraction (HF-PEF; LV ejection fraction >40%)

Diagnosis should be made only after an echocardiogram, with input from a cardiology specialist.

No evidence for disease modifying therapies in HF-PEF Prescribe diuretics to relieve symptoms and signs of fluid overload	Identify and treat comorbidities Hypertension Renal Dysfunction Diabetes Pulmonary Disease Ischaemic Heart Disease Anaemia
Consider addition of Mineralocorticoid Receptor Antagonist (eplerenone for most men, spironolactone for women) to assist diuresis	Community Heart Failure Nurses are not currently commissioned to see these patients. No evidence for cardiac rehabilitation Once diagnosis made, likely to be discharged out of hospital care back to GP care.

Whilst we can discuss or see these patients if they continue to be problematic, as there are no additional available therapies we are unlikely to be able to add to the above.

Although we appreciate this is not funded, NICE suggest a 6-monthly review for all patients with heart failure – see suggested template for review

The term heart failure with a 'moderately reduced' or 'mid-range' ejection fraction (HF-mREF) is sometimes used for patients with an ejection fraction of 40-50%. At the current time there is no robust evidence that these patients should be treated differently to other patients with HF – PEF, although we would have a low threshold for the use of ACE inhibitors / ARBs.

General Practice Heart Failure Review Template

Symptoms	 Are symptoms stable? Are they still symptomatic? If so escalate treatment as per <u>pathways above</u> Are they becoming fluid overloaded or dehydrated? Record weight, BP and pulse Check and record pulse rhythm using a code
Medication review	 For Heart Failure with a reduced ejection fraction: <u>ACEi / ARB at maximum tolerated licenced dose</u>? If not titrate up unless BP less than 90 systolic or side effects <u>Beta blocker at maximum tolerated licenced dose</u>? If not titrate up unless BP less than 90 systolic or side effects <u>Mineralocorticoid Receptor Antagonist (MRA; e.g. Eplereonone for men or Spironolactone for women)) at maximum tolerated licenced dose</u>? For Heart Failure with preserved ejection fraction: <u>No evidence for disease modifying therapies</u> Titrate diuretics to symptoms and oedema
Bloods	Renal function, potassium, sodium, haemoglobin stable?
Comorbidities and risk factors	 Hypertension, Diabetes, Atrial fibrillation Smoking cessation Alcohol intake Cognitive status and nutritional status
Other tests and treatments	 Flu / pneumococcal vaccine is recommended for all HF patients Annual ECG: if QRS width is newly >130ms (3.25 small squares) then refer for reassessment in hospital HF clinic (to consider Cardiac Resynchronisation Therapy) Consider resuscitation status and advanced care planning