

MANAGEMENT OF HEART FAILURE PATIENTS IN PRIMARY CARE

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What is Heart Failure

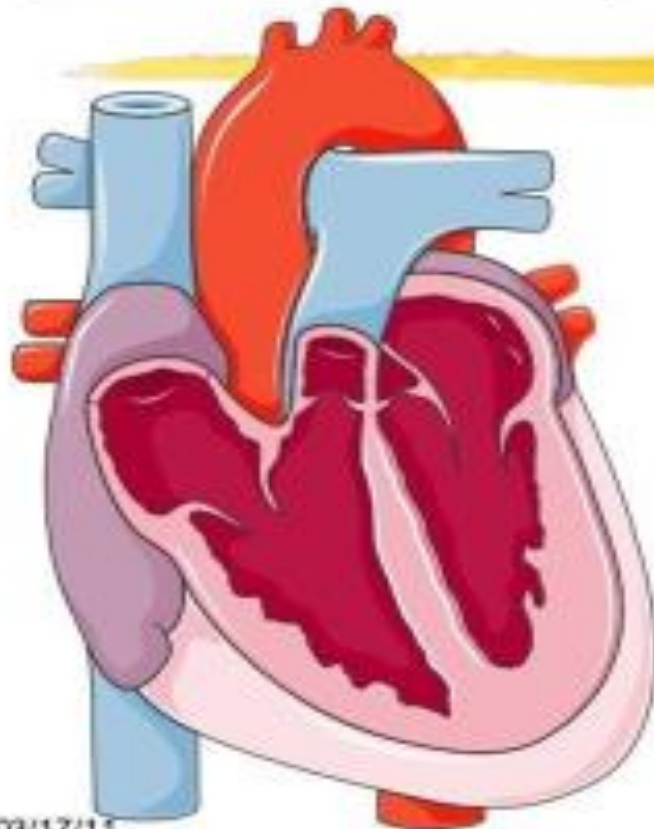
- The heart is a powerful muscle that delivers blood and oxygen around the body through a regular pumping action.
- Heart Failure is the term used to describe a set of symptoms that occur when the heart fails to deliver as much blood and oxygen around the body as it should.

Normal Heart and Heart Failure

NHS

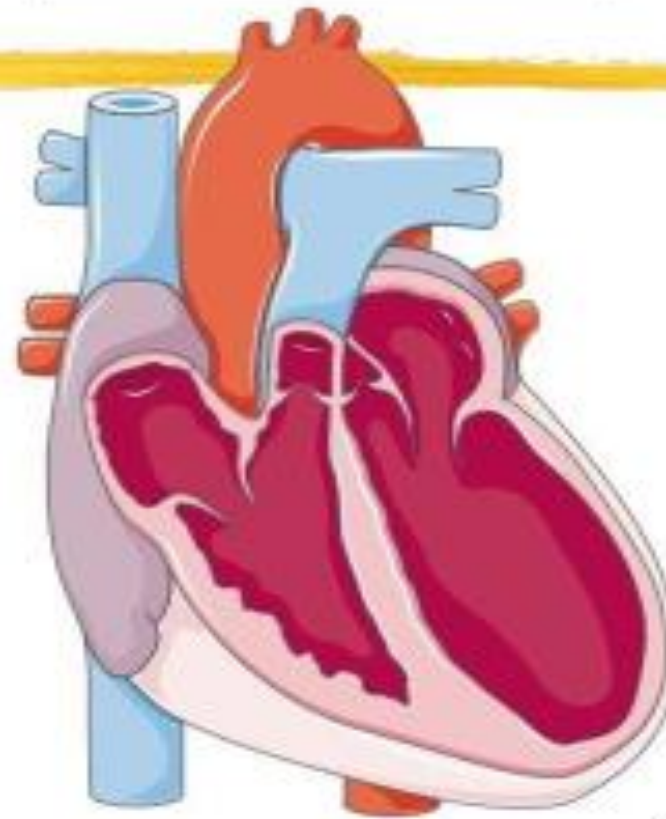
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NORMAL HEART



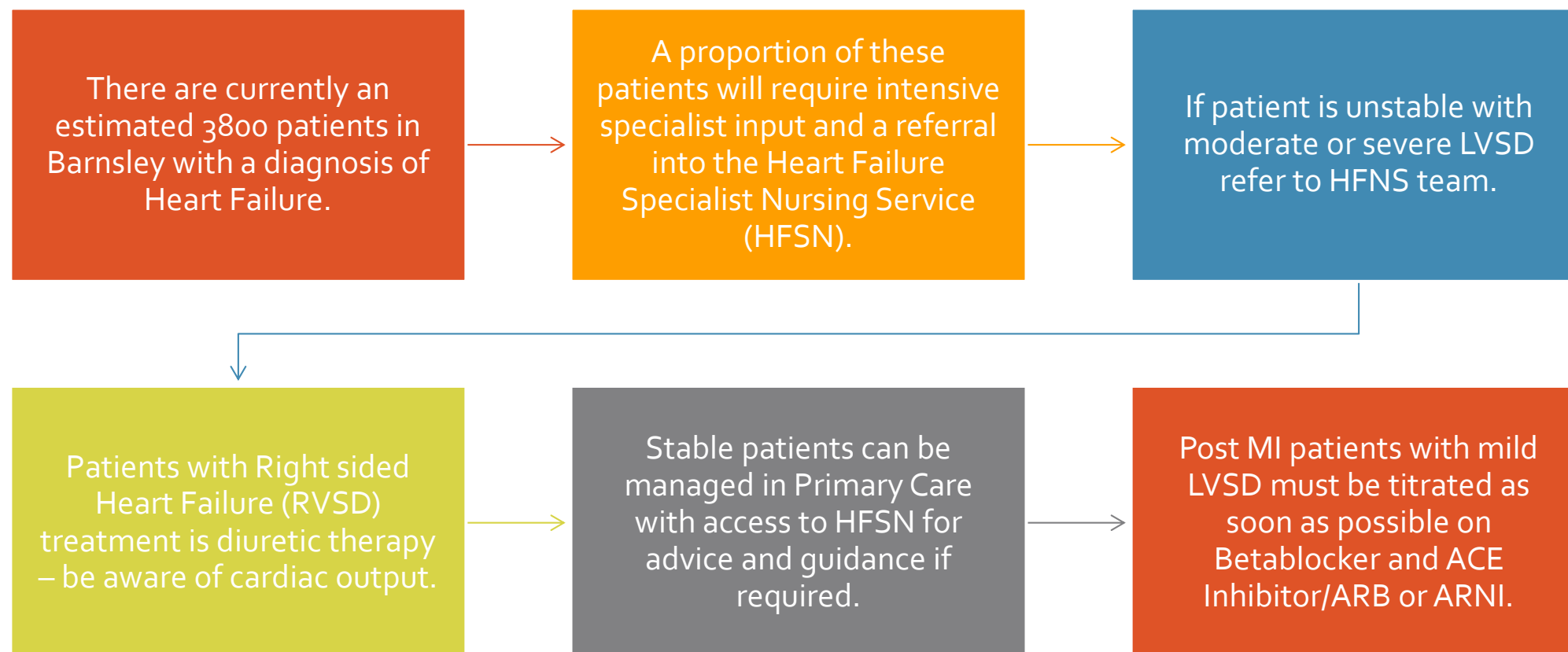
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HEART FAILURE

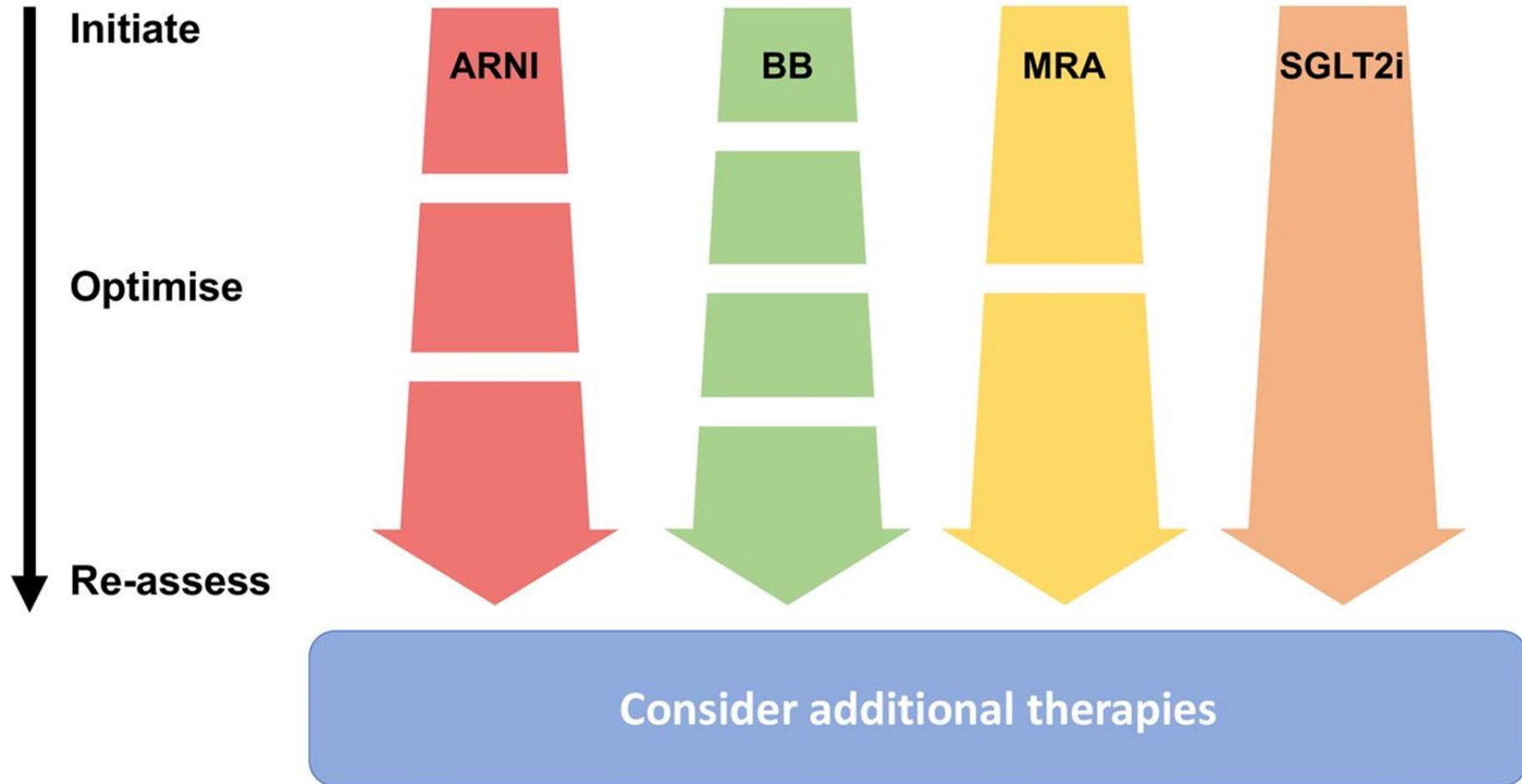


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Heart Failure in Barnsley



The Four Pillars of Heart Failure



New Diagnosis and mild Left Ventricular Systolic Dysfunction (LVSD).



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- Newly mildly diagnosed patients and post MI patients require their Betablocker and Ace Inhibitor/ARB or ARNI titrating as quickly as possible to prevent worsening of LV but can also resolve ventricular impairment from becoming permanent.
- The pathway will guide recommended titrations and remember your patient's condition will determine how far to go with titrations.
- The order of therapy is dependent on patient presentation and treat accordingly.

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NYHA Classifications

- Mild, Moderate and Severe Heart Failure which can be diagnosed by an echocardiogram or CMRI. Not all ECHOs will have Ejection Fraction calculated as per BHNFT practice but will state which category.

I to IV Levels of how the symptoms affect your daily life.

- **I** no limitation with physical activity. Ordinary physical activity does not cause undue tiredness, palpitations or Shortness Of Breath.
- **II** slight limitation of physical activity. Comfortable at rest, but ordinary physical activity results in tiredness, palpitations, or SOB.
- **III** Marked limitation of physical activity, Comfortable at rest, but less than ordinary activity causes tiredness, palpitations or SOB.
- **IV** Unable to carry out any physical activity without discomfort and tired and SOB at rest. In any physical activity is undertaken, discomfort increases.

Case Study One

78yo male with mild LVSD and AF.

Meds: Bisoprolol 1.25mg od, Ramipril 1.25mg od, Apixaban 2.5mg bd, Frusemide 20mg od.

Vital Signs: HR 75 irregular, BP 145/78 no deficit on standing, eGFR 72.

Oedema has improved but remains in ankles

Chest clear

PLAN: ?

PLAN:

Patient is in Atrial Fibrillation, so HR is stable and ok at this level.

BP remains elevated consider increasing Ramipril

Consider increasing Loop for ankle oedema after next review if oedema remains.

Monitor bloods and BP 2 weeks post to assess renal function and effect of change.

If responds well to therapy continue to increase ACE until optimised as per maximum dose or patient tolerance.

Case Study Two

64 yo female POST STEMI – mild LVSD, waiting 3-month post MI ECHO to assess LV for stunning.

Meds: Bisoprolol 1.25mg od, Ramipril 1.25mg od, Eplerenone 12.5mg od, Atorvastatin 80mg on, Aspirin 75mg od, Ticagrelor 90mg bd.

Vital signs: HR 64 regular, BP 128/78 no deficit on standing.

Mild oedema to sock line continues.

Bloods Na 138, K 3.3, Creatinine 78, Urea 6.0, eGFR >90.

PLAN?

PLAN

- In view of oedema and low potassium increase Eplerenone to 25mg od if able or ask GP to prescribe.
- Review bloods, BP and oedema level 2 weeks post increase.
- If oedema remains and potassium in normal range, consider then adding in low dose loop diuretic.

Case Study Three

- 88 yo male
- Mild LVSD, COPD, T2DM, HTN
- Meds: Bisoprolol 7.5mg od, Ramipril 5mg BD, Fostair, Salbutamol, Carbocysteine, Metformin 500mg bd, Atorvastatin 40mg on.
- Vital Signs: 132/74, HR 49 Reg,
- Patient reports lethargy and sleepy. Increased cough, Nil oedema noted.
- PLAN: ?

PLAN

- Check manual pulse for rate and rhythm
- 12 Lead ECG as soon as possible
- Reduce Betablocker by 2.5mg
- Reassess in 1 week and if remains low reduce further unless patient has pacemaker insitu.
- If HR improved but cough remains, consider changing to Metoprolol or consider reducing ACE or change to ARB if dry cough.

Case Study 4

- 68 yr old female
- LVSD EF 45%
- NYHA III
- On all 4 pillars of HF medication
- The Dapagliflozin was added 8 weeks ago
- PMH – O.A. AF, prev Ca breast
- Vitals- BP 110/80, 112/74 standing, HR 78bpm AF, chest clear, o2 sats 97% ORA, JVP normal.
- Medications- Apixiban 5mg BD, Bisoprolol 10mg OD, Ramipril 7.5mg OD, Spironolactone 25mg OD, Dapagliflozin 10mg OD, Digoxin 62.5mcg OD, Furosemide 20mg OD.

Clinical Assessment

No PND, no oedema, no chest pain, no palpitations or dizziness. No Breathlessness, bowels and urine output satisfactory.

Pre Dapagliflozin Bloods:

Na 136

K 4.5

Creatine 94

Urea 8

eGFR 48

Bloods repeated at 6 weeks

Na 140

K 4.8

Creatine 101

Urea 10

e GFR 20

Bloods at 8 weeks

Na 138

K 4.9

Creatine 112

Urea 11

e GFR 20

PLAN

What would you do?

Carry on and recheck in another 4 week? Or STOP? OR Reduce??

Consider other changes of medications??

When Specialist Input is required

- Following the initiation and titration of medication, some patient may still be experiencing symptoms of their heart failure. At this point a referral to the Heart Failure Specialist Nurse should be completed.
- A referral form and copy of echocardiogram result should be send to: rightcarebarnsleyintegratedspa@swyt.nhs.uk
- A copy of the referral form can be found by clicking the link below and scrolling to key documents. You will also be able to access further information about the service.
- [Heart Failure Specialist Nurse Service \(barnsleyccg.nhs.uk\)](http://barnsleyccg.nhs.uk)

ANY QUESTIONS ?



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THANK
YOU