Alliance for

Heart Failure

Heart Failure: A call to action for community pharmacists

Part 3: treating and managing heart failure as part of a multidisciplinary team

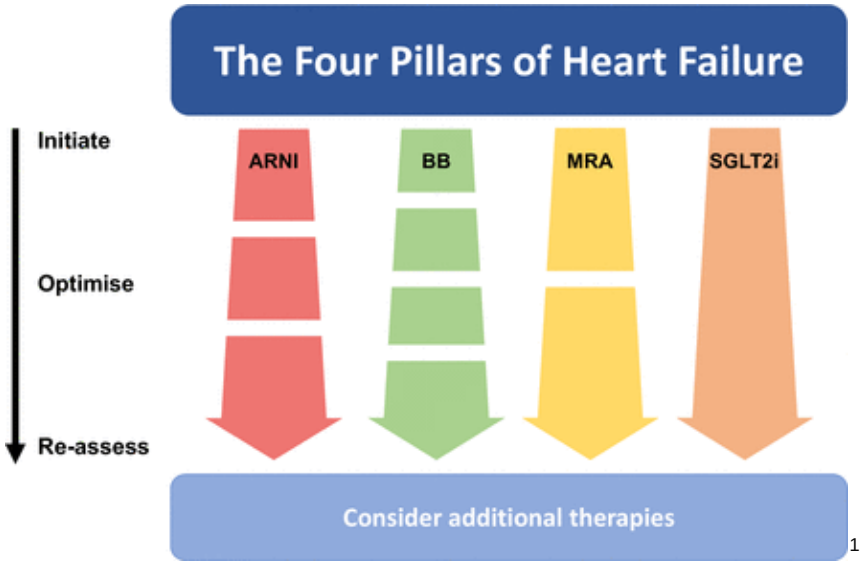
In the last article we looked at how heart failure is diagnosed in primary care. In order to deliver future services aimed at easing the burden of heart failure in the UK, it is vitally important that community pharmacists are aware of the pharmacological interventions involved in heart failure as well as the associated evidence-based guidelines to ensure duty of care to the patient.

This will enable you to deliver quality outcomes for patients as well as work effectively as a multidisciplinary team (MDT) member with your GP practice and local heart failure service.

Starting treatment in primary care

Once heart failure with reduced ejection fraction [HFrEF] has been diagnosed via a NT-proBNP blood test and confirmed through imaging via echocardiography, eligible patients will be initiated and titrated on the following medicines if tolerated: ARNi, BB, MRA, SGLT2i.

These can be summarised by the 'four pillars' approach broadly recognised to improve patient morbidity and reduce mortality as per ESC guidelines. The aim should be starting all four medications at the lowest dose (the order in which they are started will depend on the patient presentation) and then up-titrate to the maximal tolerated dose where appropriate.



[1]

[1] Four pillars of heart failure: contemporary pharmacological therapy for heart failure with reduced ejection fraction, Straw et al, http://dx.doi.org/10.1136/openhrt-2021-001585

“Four pillars” medication

- Angiotensin Receptor Neprilysin Inhibitor (ARNi) i.e. sacubitril valsartan
- Beta-blockers e.g. bisoprolol or carvedilol
- Mineralocorticoid Receptor Antagonists (MRA) e.g. spironolactone or eplerenone
- SGLT2 inhibitors (following specialist advice) e.g. dapagliflozin or empapliflozin

Other drugs used for heart failure:

- Angiotensin Converting Enzyme (ACE) inhibitors e.g. ramipril or enalapril, or Angiotensin Receptor Blocker (ARB) e.g. valsartan or candesartan where ACE not tolerated
- Ivabradine [HCN Channel Blocker]
- Hydralazine in combination with nitrates

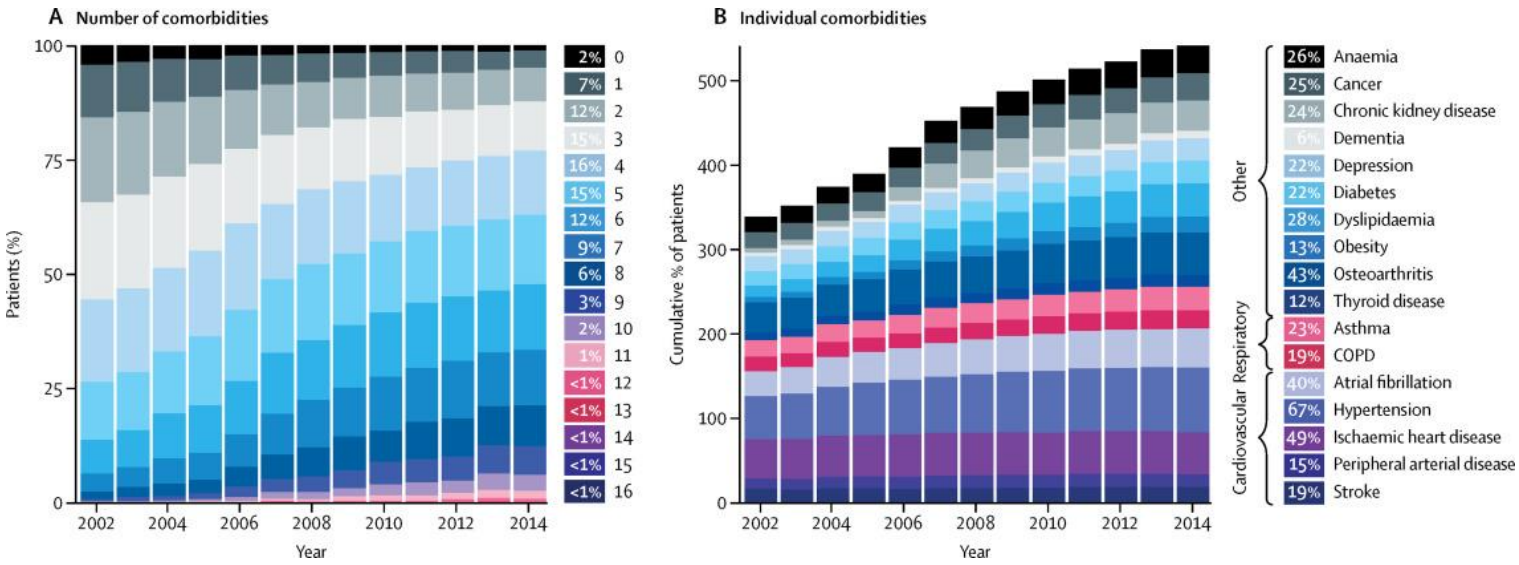
These drugs are usually initiated by, or on the advice of, a heart failure specialist but can also be prescribed, up titrated and monitored in primary care.

It’s common for patients on these drugs **not** to receive optimal doses. You can use your knowledge of heart failure symptoms (refer to the New York Heart Association Functional Classification)[2] to determine how a patient is responding to their medicine and whether they’re on the right dosage. Weight gain or fluid retention can be a useful indication that heart failure is deteriorating. Your observations can be useful to a GP when considering different titrations.

Be on the lookout for worsening or persistent symptoms in heart failure patients during their check-ups, particularly in those with the relevant comorbidities (see chart below).

[2] New York Heart Association Functional Classification - Wikipedia

Temporal trends in comorbidities among patients diagnosed with incident heart failure, from 2002 to 2014



(A) Number of comorbidities, out of 17 major conditions, affecting patients with incident heart failure, over time. (B) Cumulative percentage of patients affected by individual comorbidities, over time. COPD=chronic obstructive pulmonary disease.

Source: The Lancet: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)32520-5/fulltext

Being able to identify a patient who is not on the optimal four pillar medications, or on a suboptimal dose, could save a life. Liaise with a GP if you have a concern.

Recommending changes to drug titration

NICE guidelines state you should start the four pillar drugs at maximal tolerated dose and titrate upwards every two weeks, until the maximum tolerated dose is reached.[3]

Community pharmacists can work with GPs to ensure that a patient has reached their maximally tolerated dose for heart failure medication inside 12 months of their diagnosis.

Primary care clinicians will measure serum sodium and potassium and assess renal function and blood pressure before starting treatment and after each upwards titration.

Guidelines for maximum dosage should be available locally. If not, discuss with your GP or local specialist.

Dizziness or light-headedness are symptoms of low blood pressure and may require dose adjustment.

[3] NICE Chronic heart failure in adults, Quality standard [QS9] https://www.nice.org.uk/guidance/qs9

Cardiac rehabilitation, CRT and long-term care in the community

Every heart failure patient should participate in collaborative care planning. If the opportunity arises, you should check in with them to see whether their care plan is working well and to ensure they are aware of locally available services.

Cardiac rehabilitation services may also be available in your local area, although this varies by location. Make the patient aware of these and advise them of the importance of attending regularly to help them manage their condition over the long term. If any access barriers are identified, advise the patient on how these may be overcome.

Alongside this, therapies such as Cardiac Resynchronization Therapy (CRT) can play a vital role in helping patients, particularly those with moderate to severe heart failure, manage their symptoms. A CRT device is essentially a pacemaker that emits tiny pulses of electricity to help resynchronise the heart and ensure sinus rhythm. Up to a third of heart failure patients can benefit from this treatment.

We hope this series of articles on treating heart failure will help you make a difference to the lives of patients. If you have any questions, or would like to know more about the work we do at the Alliance for Heart Failure, you can visit www.allianceforheartfailure.org

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The Alliance for Heart Failure is a coalition of charities, patient groups, professional bodies and corporate members for the purpose of raising the profile of heart failure in Government, the NHS and the media.

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