

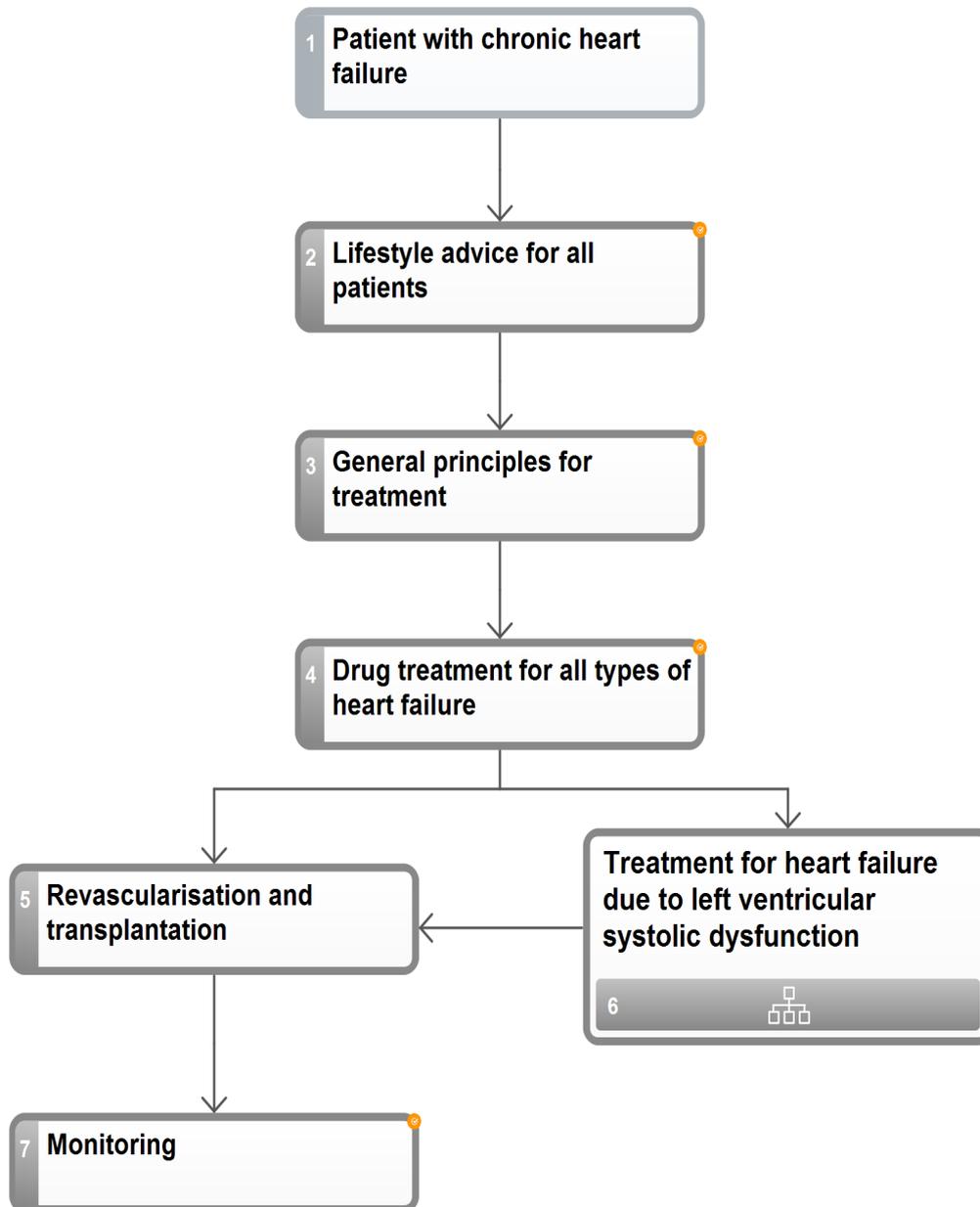
Chronic heart failure treatment and monitoring

A NICE pathway brings together all NICE guidance, quality standards and materials to support implementation on a specific topic area. The pathways are interactive and designed to be used online. This pdf version gives you a single pathway diagram and uses numbering to link the boxes in the diagram to the associated recommendations.

To view the online version of this pathway visit:

<http://pathways.nice.org.uk/pathways/chronic-heart-failure>

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1 Patient with chronic heart failure

No additional information

2 Lifestyle advice for all patients**Exercise**

For more information on exercise, see the [rehabilitation](#) section of this pathway.

Smoking

Strongly advise patients not to smoke.

Consider referral to smoking cessation services.

For more information on helping people stop smoking, see the [smoking pathway](#)

Alcohol

Advise patients with alcohol-related heart failure to abstain.

Discuss consumption with other patients and tailor advice to clinical circumstances.

For more information on helping people reduce their alcohol consumption, see the [alcohol pathway](#)

Sexual activity

Be prepared to broach sensitive issues such as sexual activity.

Vaccination

Offer:

- an annual vaccination against influenza
- a one-off vaccination against pneumococcal disease.

Air travel

Consider clinical circumstances when advising about air travel.

Driving regulations

Check the latest [Driver and Vehicle Licensing Agency guidelines](#) for drivers of large goods and passenger carrying vehicles.

Quality standards

The following quality statement is relevant to this part of the pathway.

5. Education and self-management

3 General principles for treatment

Older patients may have lower drug tolerance and need more frequent monitoring for side effects.

Discuss contraception and pregnancy with women of childbearing age and consider the potential teratogenic effects of drugs.

Otherwise the principles of pharmacological management should be the same irrespective of age, gender or place of care.

Medicines adherence

Keep dosing regimens as simple as possible and ensure that patients and carers are kept fully informed.

Multidisciplinary approach to care

Heart failure care should be delivered by a multidisciplinary team with an integrated approach across the healthcare community.

Advice and care of women who are planning a pregnancy or are pregnant

Refer women who are planning a pregnancy or are pregnant to the specialist multidisciplinary heart failure team. Care of pregnant women should be shared between the cardiologist and obstetrician.

Comorbidities

Manage comorbidities according to the NICE pathways on [hypertension](#), [myocardial infarction: secondary prevention](#) and [diabetes](#).

This is particularly important in heart failure with preserved ejection fraction.

Quality standards

The following quality statements are relevant to this part of the pathway.

5. Education and self-management
6. Multidisciplinary heart failure team

4 Drug treatment for all types of heart failure

Diuretics

Titrate up and down as needed.

Offer a low to medium dose of loop diuretics to patients with heart failure with preserved ejection fraction.

Calcium channel blockers

Consider amlodipine for comorbid hypertension and/or angina but avoid verapamil, diltiazem and short-acting dihydropyridine agents.

Anticoagulants¹

Consider for patients in sinus rhythm with a history of thromboembolism, left ventricular aneurysm or intracardiac thrombus.

¹ See also the NICE pathway on [atrial fibrillation](#) for recommendations on the use of anticoagulants in patients with atrial fibrillation.

Aspirin

Offer 75–150 mg once daily to patients with atherosclerotic arterial disease (including coronary heart disease).

Inotropic agents

Only consider intravenous inotropic agents (such as dobutamine, milrinone or enoximone) for the short-term treatment of acute decompensation after specialist advice.

Amiodarone

Consult a specialist before offering amiodarone. Review need regularly and carry out a routine 6-monthly clinical review, including liver and thyroid function tests and a review of side effects.

Quality standards

6. Multidisciplinary heart failure team

5 Revascularisation and transplantation

Do not routinely consider coronary revascularisation in patients with heart failure due to left ventricular systolic dysfunction unless they have refractory angina.

Consider specialist referral for transplantation in patients with severe refractory symptoms or refractory cardiogenic shock.

NICE has published guidance on [short-term circulatory support with left ventricular assist devices as a bridge to cardiac transplantation or recovery](#) (NICE interventional procedure guidance 177) with **special arrangements** for clinical governance, consent and audit or research.

NICE has produced a pathway on [structural heart defects](#).

6 Treatment for heart failure due to left ventricular systolic dysfunction

[See Chronic heart failure / Treatment for heart failure due to left ventricular systolic dysfunction](#)

7 Monitoring

Clinical review

Monitor all patients. Include:

- clinical assessment of functional capacity, fluid status, cardiac rhythm (minimum of examining the pulse), cognitive status and nutritional status
- a review of drug treatment, including need for changes and possible side effects
- a minimum of serum urea, electrolytes, creatinine and eGFR.¹

Monitor at short intervals (days to 2 weeks) if the clinical condition or drug treatment has changed. Otherwise monitor at least 6-monthly.

Offer patients information and support if they wish to be involved in monitoring their condition. Ensure they know what to do if their condition deteriorates.

When a patient is admitted to hospital because of heart failure, seek advice on their management plan from a specialist in heart failure.

Serum natriuretic peptides

Consider specialist monitoring in some patients (for example, those in whom up-titration is problematic or those admitted to hospital).

Serum digoxin

Do not monitor routinely but consider a measurement within 8–12 hours of the last dose if toxicity or non-adherence is suspected.

Interpret in the clinical context because toxicity can occur in the 'therapeutic range'.

Pulmonary artery pressure monitors

NICE has produced guidance on [Insertion and use of implantable pulmonary artery pressure monitors in chronic heart failure](#) (NICE interventional procedure guidance 463) with **special arrangements** for clinical governance, consent and audit or research.

¹ This is a minimum. Patients with comorbidities or co-prescribed medications will require further monitoring. Monitoring serum potassium is particularly important if a patient is taking digoxin or an aldosterone antagonist.

Quality standards

The following quality statements are relevant to this part of the pathway.

5. Education and self-management
11. Contribution of multidisciplinary heart failure team to management plans
6. Multidisciplinary heart failure team
10. Management plans for people admitted to hospital
9. Monitoring stable chronic heart failure

Glossary

Sources

Chronic heart failure: management of chronic heart failure in adults in primary and secondary care. NICE clinical guideline 108 (2010)

Insertion and use of implantable pulmonary artery pressure monitors in chronic heart failure. NICE interventional procedure guidance 463 (2013)

Short-term circulatory support with left ventricular assist devices as a bridge to cardiac transplantation or recovery. NICE interventional procedure guidance 177 (2006)

Your responsibility

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