# Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in your care.

Making decisions using NICE guidelines explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

## *1.1 Team working in the management of heart failure*

1.1.1 The core specialist heart failure multidisciplinary team (MDT) should work in collaboration with the primary care team, and should include:

- a lead physician with subspecialty training in heart failure (usually a consultant cardiologist) who is responsible for making the clinical diagnosis
- a specialist heart failure nurse
- a healthcare professional with expertise in specialist prescribing for heart failure. **[2018]**

1.1.2 The specialist heart failure MDT should:

- diagnose heart failure
- give information to people newly diagnosed with heart failure (see giving information to people with heart failure)
- manage newly diagnosed, recently decompensated or advanced heart failure (NYHA [New York Heart Association] class III to IV)
- optimise treatment
- start new medicines that need specialist supervision
- continue to manage heart failure after an interventional procedure such as implantation of a cardioverter defibrillator or cardiac resynchronisation device
- manage heart failure that is not responding to treatment. **[2018]**

1.1.3 The specialist heart failure MDT should directly involve, or refer people to, other services, including rehabilitation, services for older people and palliative care services, as needed. [2018]

1.1.4 The primary care team should carry out the following for people with heart failure at all times, including periods when the person is also receiving specialist heart failure care from the MDT:

- ensure effective communication links between different care settings and clinical services involved in the person's care
- lead a full review of the person's heart failure care, which may form part of a long-term conditions review
- recall the person at least every 6 months and update the clinical record
- ensure that changes to the clinical record are understood and agreed by the person with heart failure and shared with the specialist heart failure MDT
- arrange access to specialist heart failure services if needed. [2018]

## Care after an acute event

For recommendations on the diagnosis and management of acute heart failure see NICE's guideline on acute heart failure.

1.1.5 People with heart failure should generally be discharged from hospital only when their clinical condition is stable and the management plan is optimised. Timing of discharge should take into account the wishes of the person and their family or carer, and the level of care and support that can be provided in the community. [2003]

1.1.6 The primary care team should take over routine management of heart failure as soon as it has been stabilised and its management optimised. [2018]

## Writing a care plan

1.1.7 The specialist heart failure MDT should write a summary for each person with heart failure that includes:

- diagnosis and aetiology
- medicines prescribed, monitoring of medicines, when medicines should be reviewed and any support the person needs to take the medicines
- functional abilities and any social care needs
- social circumstances, including carers' needs. [2018]

1.1.8 The summary should form the basis of a care plan for each person, which should include:

- plans for managing the person's heart failure, including follow-up care, rehabilitation and access to social care
- symptoms to look out for in case of deterioration
- a process for any subsequent access to the specialist heart failure MDT if needed
- contact details for
  - a named healthcare coordinator (usually a specialist heart failure nurse)
  - alternative local heart failure specialist care providers, for urgent care or review.
- additional sources of information for people with heart failure. [2018]

1.1.9 Give a copy of the care plan to the person with heart failure, their family or carer if appropriate, and all health and social care professionals involved in their care. [2018]

## *1.2 Diagnosing heart failure*

### Symptoms, signs and investigations

1.2.1 Take a careful and detailed history, and perform a clinical examination and tests to confirm the presence of heart failure. [2010]

1.2.2 Measure N-terminal pro-B-type natriuretic peptide (NT-proBNP) in people with suspected heart failure. [2018]

1.2.3 Because very high levels of NT-proBNP carry a poor prognosis, refer people with suspected heart failure and an NT-proBNP level above 2,000 ng/litre (236 pmol/litre) urgently, to have specialist assessment and transthoracic echocardiography within 2 weeks. **[2018]**

1.2.4 Refer people with suspected heart failure and an NT-proBNP level between 400 and 2,000 ng/litre (47 to 236 pmol/litre) to have specialist assessment and transthoracic echocardiography within 6 weeks. **[2018]**

1.2.5 Be aware that:

- an NT-proBNP level less than 400 ng/litre (47 pmol/litre) in an untreated person makes a diagnosis of heart failure less likely
- the level of serum natriuretic peptide does not differentiate between heart failure with reduced ejection fraction and heart failure with preserved ejection fraction. **[2018]**

1.2.6 Review alternative causes for symptoms of heart failure in people with NT-proBNP levels below 400 ng/litre. If there is still concern that the symptoms might be related to heart failure, discuss with a physician with subspeciality training in heart failure. **[2018]**

1.2.7 Be aware that:

- obesity, African or African–Caribbean family origin, or treatment with diuretics, angiotensin-converting enzyme (ACE) inhibitors, beta-blockers, angiotensin II receptor blockers (ARBs) or mineralocorticoid receptor antagonists (MRAs) can reduce levels of serum natriuretic peptides
- high levels of serum natriuretic peptides can have causes other than heart failure (for example, age over 70 years, left ventricular hypertrophy, ischaemia, tachycardia, right ventricular overload, hypoxaemia [including pulmonary embolism], renal dysfunction [eGFR less than 60 ml/minute/1.73 $m^2$], sepsis, chronic obstructive pulmonary disease, diabetes, or cirrhosis of the liver). **[2010, amended 2018]**

1.2.8 Perform transthoracic echocardiography to exclude important valve disease, assess the systolic (and diastolic) function of the (left) ventricle, and detect intracardiac shunts. **[2003, amended 2018]**

1.2.9 Transthoracic echocardiography should be performed on high-resolution

equipment by experienced operators trained to the relevant professional standards. Need and demand for these studies should not compromise quality. **[2003, amended 2018]**

1.2.10 Ensure that those reporting echocardiography are experienced in doing so. **[2003]**

1.2.11 Consider alternative methods of imaging the heart (for example, radionuclide angiography [multigated acquisition scanning], cardiac MRI or transoesophageal echocardiography) if a poor image is produced by transthoracic echocardiography. **[2003, amended 2018]**

1.2.12 Perform an ECG and consider the following tests to evaluate possible aggravating factors and/or alternative diagnoses:

- chest X-ray
- blood tests:
  - renal function profile
  - thyroid function profile
  - liver function profile
  - lipid profile
  - glycosylated haemoglobin ($HbA_{1c}$)
  - full blood count
- urinalysis
- peak flow or spirometry. **[2010, amended 2018]**

1.2.13 Try to exclude other disorders that may present in a similar manner. **[2003]**

1.2.14 When a diagnosis of heart failure has been made, assess severity, aetiology, precipitating factors, type of cardiac dysfunction and correctable causes. **[2010]**