



# *National Institute for Health and Clinical Excellence*

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## **PRESS RELEASE**

### **New NICE guidance will improve diagnosis and treatment of chronic heart failure**

The National Institute for Health and Clinical Excellence (NICE) has issued its updated clinical guideline on the management of chronic heart failure in adults in primary and secondary care. In taking into account the wealth of new, high quality evidence that has been published since NICE's original guideline in 2003, the new guideline provides the most comprehensive and up-to-date set of recommendations yet on the diagnosis, treatment, rehabilitation and monitoring of people with this condition.

The new guideline outlines best practice for healthcare professionals caring for individuals who have, or who are suspected of having, heart failure. Like its predecessor, it defines the combination of symptoms, signs and investigations which together are most effective in confirming a diagnosis of heart failure and influencing subsequent optimum treatments.

Heart failure, which is associated with significant morbidity and mortality, is a complex clinical syndrome of symptoms - such as breathlessness and fatigue - and signs - such as fluid retention - that suggest the efficiency of the heart is impaired. The most common cause of heart failure in the UK is coronary artery disease, with many patients having suffered a myocardial infarction (heart attack) in the past.

Heart failure affects about 900,000 people in the UK, with almost the same number again who have damaged hearts but as yet no symptoms - and that number is increasing as a result of improved prognosis of coronary artery disease, ageing of the population and better treatments for heart failure. Heart failure has a poor prognosis:

30–40% of patients diagnosed with heart failure die within a year – but thereafter the mortality is less than 10% per year. Heart failure accounts for a total of 1 million inpatient bed days – 2% of all NHS inpatient bed-days – and 5% of all emergency medical admissions to hospital. Hospital admissions because of heart failure are projected to rise by 50% over the next 25 years – largely as a result of the ageing population.

The new recommendations in the guideline include:

- Refer patients with suspected heart failure and previous heart attack urgently for echocardiography and specialist assessment within 2 weeks.
- Refer patients with suspected heart failure and very high levels of serum natriuretic peptides (a hormone secreted largely by the left ventricle in response to strain) for urgent echocardiography and specialist assessment within 2 weeks. Patients with suspected heart failure and raised levels of serum natriuretic peptides should be referred for echocardiography and specialist assessment within 6 weeks.
- Offer both angiotensin-converting enzyme (ACE) inhibitors and beta-blockers licensed for heart failure to all patients with heart failure due to left ventricular systolic dysfunction. Use clinical judgement when deciding which drug to start first.
- Consider adding one of the following if a patient remains symptomatic despite optimal therapy with an ACE inhibitor and a beta-blocker:
  - an aldosterone antagonist licensed for heart failure (especially if the patient has moderate to severe heart failure [NYHA<sup>1</sup> class III-IV] or has had heart attack within the past month) or
  - an angiotensin II receptor antagonist (ARB) licensed for heart failure (especially if the patient has mild to moderate heart failure [NYHA class II–III]) or
  - hydralazine in combination with nitrate (especially if the patient is of African or Caribbean origin<sup>2</sup> and has moderate to severe heart failure [NYHA class III–IV])
- Offer a supervised group exercise-based rehabilitation programme designed for patients with heart failure.

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<sup>1</sup> The New York Heart Association classification of heart failure.

<sup>2</sup> This does not include mixed race

- Ensure the patient is stable and does not have a condition or device that would preclude an exercise-based rehabilitation programme.
- Include a psychological and educational component in the programme.
- The programme may be incorporated within an existing cardiac rehabilitation programme.

**Dr Fergus Macbeth, Director, Centre for Clinical Practice at NICE said:** “Despite the fact that there are effective treatments and interventions for heart failure, many patients remain sub-optimally treated. For example, cardiac rehabilitation programmes have been shown to help reduce hospital readmissions and improve quality of life for people with heart failure. However, only a tiny proportion of eligible patients currently attend these programmes. This guideline, in recommending that cardiac rehabilitation programmes should be available that are specifically tailored to the needs of people with heart failure, aims to further improve the length and quality of life for people with this condition.”

**Professor Jonathan Mant, Professor of Primary Care Research at the University of Cambridge and Chair of the Guideline Development Group (GDG), said:** “The new recommendations in this guidance are important as they represent significant changes from the 2003 guidance. The use of natriuretic peptide testing will result in earlier diagnosis of heart failure and of left ventricular systolic dysfunction. This is important since the treatment for left ventricular systolic dysfunction will lead to longer life expectancy, lower risk of emergency admission to hospital, and a better quality of life.”

**Dr Abdallah Al-Mohammad, Consultant Cardiologist at the Sheffield Teaching Hospitals NHS Trust and lead clinician on the GDG said:** “There have been many significant advances in the diagnosis and treatment of heart failure since the original NICE guideline was published in 2003. This update has put together a streamlined treatment pathway for the many heart failure patients with left ventricular systolic dysfunction which will improve their outcomes in terms of length and quality of life. And although the improved diagnostic pathway recommended in the guideline may initially be more demanding on the health service, earlier accurate diagnosis will lead to more timely treatments known to be effective at reducing hospitalisation and mortality of many heart failure patients.”

**Dr Mark Davis, a GP with a special interest in heart failure and a member of the GDG, said:** “This guideline will help primary care clinicians to reach the correct

diagnosis in patients presenting with the signs and symptoms of heart failure and allow them to start life saving treatment. It recognises the fact that having suffered a heart attack previously will markedly increase the risk of an individual developing heart failure and the use of BNP testing will help clinicians to identify other patients who are likely to have heart failure. The guideline will encourage the ongoing development of services that will allow patients identified as probably having heart failure to obtain a rapid and expert opinion in order to confirm the diagnosis and establish a treatment plan.”

**Jane Gilmour, Specialist Nurse in Chronic Heart Failure at Luton & Dunstable NHS Trust and member of the GDG, said:** “As a nurse I am very aware of the impact heart failure can have on patients and their families. The updated guidance aims to improve and speed up diagnosis by referring for specialist assessment right at the beginning. This will mean appropriate treatment is started quickly and ensure that all patients have access to specialist heart failure teams and cardiac rehabilitation. With the right treatment and support, length and quality of life improves and unnecessary hospital admissions can often be avoided, which is good for patients and the health service.”

**Richard Mindham, a patient representative on the GDG, said:** “The first NICE chronic heart failure guideline set a solid benchmark for the diagnosis and treatment of this condition. The new guideline pushes that benchmark still further by making recommendations based on the most up-to-date evidence that will significantly advance the care of patients with heart failure. Being diagnosed with heart failure can be a tremendous shock. The increased emphasis in the guideline on rehabilitation, including recognising the significance of educational and emotional support, is an important element to helping people to help themselves, in understanding and managing their condition, and taking back a measure of control of their lives.

“It has been a privilege to sit on the Guideline Development Group and I have been impressed by the rigour and inclusiveness of NICE’s process, and by the collegiate approach of everyone on the Group with the sole objective of improving diagnosis, treatment and care for heart failure patients.”

## **Ends**

For more information call the NICE press office on 0845 003 7782 or 07775 583 813.

## Notes to Editors

### About the guideline

1. The NICE guideline, 'Chronic heart failure: the management of adults with chronic heart failure in primary and secondary care, is available at [www.nice.org.uk/CG108](http://www.nice.org.uk/CG108)
2. A version of the NICE guideline for patients and the public is available at [www.nice.org.uk/CG108publicinfo](http://www.nice.org.uk/CG108publicinfo) and a free hard copy can be requested by calling 0845 003 7783.

### About heart failure

1. Heart failure is a complex clinical syndrome of symptoms and signs that suggest the efficiency of the heart as a pump is impaired. It is caused by structural or functional abnormalities of the heart. Some patients have heart failure due to left ventricular systolic dysfunction (LVSD) which is associated with a reduced left ventricular ejection fraction. Others have heart failure with a preserved ejection fraction (HFPEF). Most of the evidence on treatment is for heart failure due to LVSD. The most common cause of heart failure in the UK is coronary artery disease, and many patients have had a myocardial infarction in the past.
2. Around 900,000 people in the UK have heart failure. Almost as many have damaged hearts but, as yet, no symptoms of heart failure.
3. The annual incidence of heart failure in England has been estimated at 93,000.
4. Both the incidence and prevalence of heart failure increase steeply with age, with the average age of first diagnosis being 76 years.
5. Heart failure accounts for a total of 1 million inpatient bed days (2% of all NHS inpatient bed days) and 5% of all emergency medical admissions to hospital. Hospital admissions because because of heart failure are projected to rise by over 50% over the next 25 years – largely as a result of the ageing population.
6. It is estimated that the total annual cost of heart failure to the NHS is around 2% of the total NHS budget: approximately 70% of this is due to the costs of hospitalization. Re-admissions are common: about 1 in 4 patients are re-admitted within 3 months.

### About NICE

1. The National Institute for Health and Clinical Excellence (NICE) is the independent organisation responsible for providing national guidance on the promotion of good health and the prevention and treatment of ill health.
2. NICE produces guidance in three areas of health:
  - **public health** – guidance on the promotion of good health and the prevention of ill health for those working in the NHS, local authorities and the wider public and voluntary sector
  - **health technologies** – guidance on the use of new and existing medicines, treatments and procedures within the NHS
  - **clinical practice** – guidance on the appropriate treatment and care of people with specific diseases and conditions within the NHS.