



## Heart Failure

A quick guide to quality commissioning across the whole pathway of care



## Introduction

This practical guide sets out to help commissioners develop integrated heart failure services by highlighting evidence based practice and measurable outcomes. It draws on the NICE Commissioning Guidelines (Feb 2008), Our NHS Our Future (specifically long term conditions, urgent care and end of life) and is timely as it pre-empts the first ever End of Life Strategy, due out summer 2008. Finally it is informed by the findings of local projects supported under the NHS Improvement Heart programme of work.

Heart failure is a clinical syndrome in which the heart's ability to pump blood is reduced and is characterised by symptoms such as breathlessness and fatigue, and signs such as fluid retention. The focus here is upon chronic heart failure in the over 45's, the most common disorder of which is left ventricular systolic dysfunction, in line with the NICE Commissioning Guide.

The bad news is patients with chronic heart failure often experience a poor quality of life and survival rates worse than breast and prostate cancer. People with heart failure account for about 5% of all medical admissions to hospital, with readmission rates among the highest for any common condition in the UK (as high as 50% over 3 months) (Healthcare Commission 2007). Financially this adds up to some 2% of health care costs, about two-thirds of which are hospital costs.

The cost of general practitioner consultations has been estimated at £45 million per year, with an additional £35 million for GP referrals to outpatient clinics. In addition, community-based drug therapy costs the NHS around £129 million per year (NICE 2003 CG5).

The good news is that the majority of heart failure care is relatively low tech and inexpensive but needs to be better organised to achieve a good quality of life and a reduction in costly hospital admission and re-admission.

Heart failure prevalence is predicted to rise over the next 20 years. Some likely causes are the increase in the ageing population and ironically increased survival from heart attacks which leaves a residual left ventricular dysfunction.

Effective commissioning can only benefit the quality of care across the whole pathway and reduce the financial burden. Key to this effectiveness is an integrated multi disciplinary team approach across the healthcare community and the role of the specialist heart failure nurse in improving the uptake of pharmacological therapy and reducing recurrent hospital stay.

## Stage of Pathway: **Prevention**

### **Elements of Best Practice:**

Primary prevention is recommended for all and vascular checks are anticipated to be offered for everyone between 40 and 74. Apart from age and sex, modifiable risk factors such as – smoking, raised blood pressure and raised cholesterol make a major contribution to cardiovascular disease (CVD) risk, particularly when they are combined. The risk of CVD can be calculated from these risk factors and people at highest risk can be identified, recorded and treated according to guidelines.

Secondary prevention measures form part of the treatment pathway and deal with the above, plus aspects such as optimising medication, promoting rehabilitation and self management.

Information technology tools can be used within general practice to interrogate systems to help identify high risk patients enabling treatment and monitoring.

### **Evidence:**

Recent NICE lipid recommendations (2008) look at primary and secondary prevention and the current recommended tools for CVD risk measurement, Framingham 1991 10-year risk equations. 'QRISK' is currently the subject of consultation and this may give a better estimation of risk in the general population (National Collaborative Centre for Primary Care 2008).

Putting Prevention First (2008) outlines vascular checks proposing 'a systematic, integrated approach to assessing risk of vascular diseases for everyone aged between 40 and 74, followed by the offer of personalised advice and treatment and individually tailored management to help individuals manage their risk more effectively, is both clinically and cost effective'.

### **Outcomes:**

- Increased identification of high risk adults is expected to reduce CVD events. NICE (2008) suggest that this will promote savings estimated at £51 million in the first year of the event avoidance and further savings in subsequent years.

## Stage of Pathway: **Diagnosis**

### **Elements of Best Practice:**

The Healthcare Commission (2007) reported variability and under recording of prevalence to the level of 140,000 across England. Under diagnosing and early diagnosing of heart failure remains problematic. NICE Commissioning Guide (2008) highlights that approximately 60% of people referred for specialist assessment are not subsequently diagnosed with heart failure.

The tests required for diagnosis of heart failure are an electrocardiogram (ECG) and/or brain natriuretic peptide (BNP), dependant on local circumstances. If either test is abnormal there is sufficient likelihood of heart failure to warrant an echocardiography to confirm the diagnosis and provide information on the underlying functional abnormalities of the heart.

### **Evidence:**

The diagnostic pathway has been highlighted in a number of publications such as NSF 2000, NICE 2003; Sign 2007

In some areas BNP has been used to 'rule out' heart failure diagnosis. People with normal BNP results are unlikely to have heart failure and echocardiographic testing and the associated cost is not required (Heart Improvement Programme 2008, Making Best use of In-patient beds and Brain-type Natriuretic Peptide (BNP) An information resource for Cardiac Networks).

### **Outcomes:**

- Quicker access to echo
- Better informed prescribing through having accurate diagnosis
- Reduce the level of undiagnosed heart failure in the population.
- Reduce inequalities by improving access.
- Earlier rule out enables treatment sooner for non-cardiac patients.

## Stage of Pathway: **Treatment**

### **Elements of Best Practice:**

**There are three key aspects to treatment:**

**behavioural modification** - dietary changes, encourage exercise, smoking cessation, reduced alcohol consumption and promoting self management.

**Pharmacological therapy** - the right drugs at the right dose sustained over time. Medications considered for use are ace inhibitors, beta blockers, angiotensin receptor blockers, aldosterone antagonists, diuretics and digoxin to control symptoms, improve quality of life and slow disease progression.

**Interventional procedures will be appropriate in selective patients** - these may include cardiac resynchronisation, internal defibrillator (CRT/CRTD), revascularisation, restorative surgery, transplantation and involve heart failure rehabilitation.

### **Evidence:**

NICE (2008) and NHS Improvement (2008) found that patients not receiving optimum medication doses in primary care are more likely to need unplanned care in hospital.

The health benefit and cost benefit of heart failure specialist nurses to deliver and co-ordinate care has been suggested in both the Disease Management Information Tool and the British Heart Foundation research.

### **Outcomes:**

- Reduce recurrent hospital stay through optimising patient management plan
- Improving clinical outcomes by slowing down the rate of disease progression
- Reduce unnecessary acute admissions
- Reduce unnecessary referrals
- Increase in the proportion of heart failure patients being invited to undergo rehabilitation
- Improve the uptake of heart failure patients undergoing formal rehabilitation
- More people undertaking self care, joining patient support groups, expert patient groups.

## Stage of Pathway: **End of Life**

### **Elements of Best Practice:**

- Increase public awareness of death and dying - make it easier for individuals to discuss and record their preferences towards the end of life e.g., Preferred priorities of care
- Develop the workforce (generalist and specialist) - to assess physical, psychological, social and spiritual care needs
- Minimise avoidable suffering in the last year of life
- Coordinate care proactively by commissioning across health, social care, voluntary, charitable and independent sectors
- Minimise distress and misunderstanding in the dying phase, e.g. Liverpool Care Pathway (LCP)
- Minimise the distress in bereavement.

### **Evidence:**

- Effectiveness of interventions such as improved communication, coordination, symptom management, psychological support, frameworks of care and support to carers has been highlighted through the NICE Guidelines for Supportive and Palliative Care in Adults with Cancer (2004). This was further endorsed for the heart failure audience through the Heart Improvement Programme publication of Supportive and Palliative Care in Heart Failure: A Resource Kit for Cardiac Networks (2004).

### **Outcomes:**

- Reducing avoidable deaths in hospital
- Reduced length of stay in hospital
- Greater proportion of heart failure patients supported through LCP and Gold Standards Framework
- Greater uptake of Preferred Priorities of Care
- Increase in number of patients with written advance care plans
- Reduction in complaints relating to end of life care.

## Useful Contacts/References

### **Health Care Commission**

- Pushing the boundaries (2007)
- [www.healthcarecommission.org.uk](http://www.healthcarecommission.org.uk)

### **NICE Chronic Heart Failure**

- Management of chronic heart failure in adults in primary and secondary care (July 2003)
- Supportive and Palliative Care for Adults with Cancer (2004)
- Commissioning guide for chronic heart failure (Feb 2008)
- Cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease (May 2008)

[www.nice.org.uk](http://www.nice.org.uk)

### **Department of Health**

- National Service Framework chapter 6 (2000)
- Our Health our care our say (Jan 2006)
- Our NHS our future (October 2007)
- Putting Prevention First. Vascular checks:risk assessment and management (April 2008)
- The NHS in England: The operating framework (2008/9)
- World class commissioning (December 2007)
- Commissioning framework for health and well being (Feb 2007)
- Delivering the 18 week patient treatment pathway
- Our NHS, Our future: NHS Next Steps Review (2008)
- End of Life Care Strategy (Due in summer 2008)
- DH equity audit hospitals
- Disease Management Information Tool

[www.dh.gov.uk](http://www.dh.gov.uk)

### **Scottish Intercollegiate Guidelines Network**

- Management of chronic heart failure: A national clinical guideline (Feb 2007)

[www.sign.ac.uk](http://www.sign.ac.uk)

- Scottish Partnership Palliative Guidelines (March 2008)

[www.office@palliativecarescotland.org.uk](http://www.office@palliativecarescotland.org.uk)

### **NHS Improvement**

- Making Best Use of Inpatient Beds – Heart Improvement Programme (2008)
- Brain-type Natriuretic Peptide (BNP) - An information Resource for Cardiac Networks (2008)
- Supportive and Palliative Care in Heart Failure: A Resource Kit for Cardiac Networks (2004)

[www.improvement.nhs.uk](http://www.improvement.nhs.uk)

### **NHS National Prescribing Centre**

[www.npci.org.uk](http://www.npci.org.uk)

### **Heart Failure Competencies – Skills for Health**

[www.skillsforhealth.org.uk](http://www.skillsforhealth.org.uk)

### **Liverpool Care Pathway**

[www.mcpcil.org.uk/liverpool\\_care\\_pathway](http://www.mcpcil.org.uk/liverpool_care_pathway)

### **Gold Standards Framework**

[www.thegoldstandardsframework.nhs.uk](http://www.thegoldstandardsframework.nhs.uk)

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#### **NHS Improvement**

Formed in April 2008, NHS Improvement brings together the Cancer Services Collaborative 'Improvement Partnership', Diagnostics Service Improvement, NHS Heart Improvement Programme and Stroke Improvement into one improvement programme.

With over eight years practical service improvement experience in cancer, diagnostics and heart, NHS Improvement aims to achieve sustainable effective pathways and systems, share improvement resources and learning, increase impact and ensure value for money to improve the efficiency and quality of NHS services.

Working with clinical networks and NHS organisations across England, NHS Improvement helps to transform, deliver and build sustainable improvements across the entire pathway of care in cancer, diagnostics, heart and stroke services.