

National Heart Failure Audit: outcomes remain poor, but evidence-based approach and specialist care result in large improvements

Fourth annual National Heart Failure Audit includes finding that patients admitted to cardiology wards had in-hospital mortality rates less than half of those admitted to wards other than cardiology and general medicine.

Participation in the audit has improved substantially since 2009/10, with 85% of NHS Trusts and Welsh Health Boards now participating, and submitting data on 36504 patients: 54% of all patients discharged with heart failure as a primary diagnosis. Last year 79% of all Trusts and Health Boards submitted data on 42% of all heart failure patients (21294 patients). Case ascertainment (the proportion of relevant cases submitted for the audit) in Wales remains low, however, with only 7% of heart failure patients represented in the report, compared to 58% in England.

The audit – commissioned by the Healthcare Quality Improvement Partnership (HQIP) and managed by the National Institute for Cardiovascular Outcomes Research (NICOR) based at University College London – collects data on patients with a primary diagnosis of heart failure, and produces comparative analysis. This allows clinicians and commissioners to examine the impact of quality of care on patient outcomes and quality of life, and to implement change accordingly.

With 4-5% of all emergency admissions having heart failure coded as a diagnosis, and as one of the top 10 diagnoses for use of hospital bed days, heart failure not only remains an extremely common condition, but also places significant demand on NHS resources. Mortality rates are high both in hospital and following discharge, with 11.6% of patients dying during their admission and over 30% dying within a year of discharge; these figures do not represent an improvement on mortality rates reported in 2009/10.

Morbidity rates are also high, and heart failure patients experience a poor quality of life. This is to some extent unavoidable, as the mean age of heart failure patients is 76, and many suffer from co-morbidities, but despite this, appropriate diagnosis, treatment and follow-up care can significantly improve both morbidity and mortality, and can reduce readmission to hospital.

The 2010/11 audit report confirms that outcomes for patients are strongly associated with certain key factors, including the prescription of beta blockers, ACE inhibitors and other clinically recommended drugs, and the use of follow up services in community and primary care services. Patients admitted to cardiology wards were more likely to receive access to high quality, evidence-based care, which resulted in significantly better outcomes in terms of mortality both during admission and following discharge. Patients admitted to cardiology wards had in-hospital mortality rates of 8%, compared to 14% for patients admitted to general medicine and 17% for those admitted to other wards.

Quality of care is variable across the country, and the uptake of evidence-based guidance on diagnosis, treatment and therapy remains mixed. Under half of patients (45%) were admitted to cardiology wards, and only 65% were prescribed beta blockers on discharge, although this figure was significantly higher for those patients admitted to cardiology wards (78%) compared to those in in general medical wards (63%). Under half of patients (47%) with a confirmed diagnosis of heart failure were referred to heart failure liaison services on discharge, despite the use of such services having a significant impact on mortality rates.

Strong and mounting evidence shows that specialist cardiology management ensures better diagnosis, treatment, and onward specialist referral services, and that this leads to markedly improved clinical outcomes for patients with heart failure. As observed in *The Lancet* following last year's Annual Report: 'These data provide a powerful incentive to reorganise heart failure care in the UK...to deliver the same streamlined specialist care that we do for the treatment of heart attacks. Creating such specialised units could do for heart failure what coronary care units have done for myocardial infarction.' It is now up to hospitals and clinicians to rise to this challenge.

Professor Theresa A McDonagh (King's College Hospital, London), Clinical Lead for the National Heart Failure Audit, said:

"This is the fourth annual report from the National Heart Failure Audit. Altogether now, more than 70,000 patients have been included in the audit making it one of the biggest registries of its kind in the world. The number of submissions has increased from under 7,000 in the first year of the audit to more than 36,000 in this latest report, which is about 60% of all patients with a primary hospital discharge diagnosis of heart failure. This audit now provides robust and representative outcome data for patients admitted to hospital with heart failure. The consistency of the data across all four years is remarkable. Most patients are over 70 years old and almost half are women.

"Many patients are investigated appropriately. For instance, about 74% have left ventricular systolic dysfunction; consistent with a diagnosis of heart failure, the great majority of these patients (86%) are treated with loop diuretics. Use of disease-modifying therapies is, on average, fairly good although with substantial room for improvement, especially for beta-blockers and mineralocorticoid receptor antagonists. However, there are large variations in the use of these life-saving therapies between hospitals.

"Unfortunately, the prognosis of the patients remains poor. Just under 12% of patients die during the hospital admission and almost one third die within 12 months of discharge. This audit underscores the findings of previous years: that use of appropriate medication and access to specialist cardiology had striking benefits – both in-patient and one year mortality were significantly lower for those admitted to cardiology wards and those having cardiology follow-up. The ongoing challenge is to change our current models of care so that all patients admitted to hospital with heart failure have access to specialist cardiology care to improve these poor outcomes in the future."

About the audit: As part of the National Clinical Audit and Patient Outcomes Programme (NCAPOP), participation in the National Heart Failure Audit is now mandated by the NHS Standard Terms and Conditions for Acute Hospitals, which came into effect on 1 April 2011, and the heart failure audit is included in national Quality Accounts for 2011/12. Universal involvement in the audit is vital for the accumulation of evidence to support best-practice models of the treatment and management of heart failure, which in turn will drive improved performance and outcomes for patients.

About HQIP: HQIP is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing and National Voices. Its aim is to promote quality improvement, and in particular to increase the impact of clinical audit in England and Wales. HQIP hosts the contract to manage and develop the National Clinical Audit and Patient Outcomes

Programme (NCAPOP). The programme comprises 30 clinical audits that cover care provided to people with a wide range of medical, surgical and mental health conditions.

Notes for editors: The National Heart Failure Audit report for April 2010-March 2011 will be published on the National Heart Failure Audit website from 31 January 2012 (www.ucl.ac.uk/nicor/audits/heartfailure/additionalfiles).

Interviews: Theresa McDonagh will be available for interview. For further information please contact Polly Mitchell (polly.mitchell@ucl.ac.uk; 0203 108 3927).