

Defining the Specifics for the Provision of Heart Failure Services in Secondary and Tertiary Care

Introduction

As heart failure is a common medical problem (indeed, the only cardiovascular diagnosis which is rising in both prevalence and incidence) which is associated with substantial morbidity and mortality and for which there is evidence based therapy capable of altering its natural history, the establishment of heart failure management programmes is becoming a priority. Outlined below is a summary of the key elements which should be involved as well as some more desirable features which can improve the delivery of such service provision. Obviously the specifics of how a heart failure service will run may vary from site to site.

Personnel

All tertiary referral centres should have among their consultant cardiology staff an individual with a specific interest and expertise in heart failure. In secondary referral centres/district general hospitals it would also be ideal to have a cardiologist with an interest in heart failure. Alternatively, there should at least be a physician (who could either be a geriatrician, or general medicine consultant) with a specific remit for provision of heart failure care. This person would be responsible for the setting up and coordination of both in patient and out patient management strategies for heart failure.

The involvement of specialist nurse practitioners in the continuing care of patients admitted to hospital with decompensated heart failure is now well proven to reduce subsequent hospitalisations. It would be desirable for each acute hospital site to have at least 1.5WTE nurses dedicated to this area. The service will vary according to the site and may involve the nurses providing home visits, telephone contact and nurse lead clinics or a combination of these. The designated heart failure consultant (above) should serve as a link person for advice to any heart failure nursing input.

The Role of Clinics

All patients with suspected of having heart failure should have the diagnosis established and then the aetiology defined prior to implementing a management strategy. All acute hospitals have the necessary tools to provide this for patients admitted acutely with new heart failure or decompensated heart failure.

For patients being referred as out-patients, ideally, the diagnostic and management strategies for heart failure patients should be centred around a heart failure clinic or cardiology/care of the elderly clinic with access to a consultant with expertise in heart failure. Indeed heart failure clinics are seen as a key element in the multidisciplinary models of heart failure care in the US which have led to improvements in health care delivery in CHF as well as a significant reduction in hospitalisations. Such clinics would act as a focus for referral of patients admitted acutely, from primary care and from the hospitals' nursing service. They should be multidisciplinary involving cardiologists, specialist nurses and pharmacists. They also provide a supportive milieu for those involved in the care of the heart failure patients

and act as a forum for discussion, advice, and appropriate supervision and training of the health care professionals involved. They also facilitate better time management by the nursing service allowing the nurses to follow up patients who are able to attend a clinic rather than having more time-consuming home visits. As such they allow rapid access to heart failure expertise for primary and secondary care physicians, other specialist health care professionals and patients.

Diagnostic Services

To diagnose and manage heart failure optimally certain minimum diagnostic services should be available.

- Routine haematology, biochemistry and ECG services will be widely available.
- As echocardiography is the most common means by which the presence of cardiac dysfunction is defined and as it would be desirable for heart failure clinics to function in a “one stop manner” diagnostically, an echocardiographic service (preferably with an echo machine dedicated to the heart failure service)should be available on site.
- To further establish the aetiology of heart failure, there should be access to exercise testing and coronary angiography.
- For centres dealing with the management of advanced heart failure and transplantation there must be provision for nuclear cardiology, exercise testing with oxygen uptake measurement, right heart catheter haemodynamics and cardiac biopsy.
- Diagnostic services which will be required in the near future will include access to BNP measurements (see ESC guidelines) and cardiac MR.

Therapeutic Services

- All heart failure services should offer evidence based drug therapy according to National Guidelines (NICE and SIGN).
- Physicians should have access to cardiac surgical services for revascularisation surgery in patients with LV dysfunction, as appropriate.
- There should be provision for/a referral strategy for patients with heart failure, due to LV dysfunction who have VT for implantation of ICDs.
- Specialist centres should be able to offer resynchronisation therapy for relief of symptoms in suitable patients.
- A heart failure service should have a referral strategy for patients who require transplantation and/or LVAD therapy and good links with the appropriate transplant centre.
- The heart failure service should be able to decide when and in whom palliative care is necessary and a referral strategy should be in place.
- Patients with heart failure may benefit from cardiac rehabilitation. They should be referred as appropriate.

It is evident that the management of the patient with suspected or confirmed heart failure is complex and that the numbers of patients involved is large and increasing. It is a condition that involves many different types of expertise

across a range of medical, nursing and other professions allied to medicine together with support services in the community. This service provision document envisages a situation whereby all patients have access to the best possible care, including improved access to palliative care services, informed by and responsive to advances in diagnosis management and treatment. The goal should be to provide a “seamless” system of care across the primary/secondary care divide in order that the care of every patient is optimal.