British Heart Foundation

An integrated approach to managing heart failure in the community

"The fact that someone really appreciates the difference I've made in their life is the most rewarding part of my job."

Josh's role requires him to work closely with patients and their families to empower them to self-manage their condition and reduce unnecessary hospital admissions.

He also supports other community healthcare providers, acting as a role model and providing education sessions and updates to improve their skills and knowledge in managing heart failure patients.

Josh Sunkur,
Community Heart Failure Nurse Specialist

An integrated approach to managing heart failure will:

- ✓ reduce hospital admissions
- ✓ provide a better experience for patients and carers
- ✓ enhance patient and carer education about heart failure and self-management
- ✓ empower the patient and carer to manage the condition more actively with appropriate clinical support
- ✓ support people when their condition becomes more advanced
- ✓ enable people to have choice to remain at home at end of life.

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Summary

Heart failure (HF) is a common progressive life limiting condition affecting around 550,000 people in the UK[1] with many more undiagnosed cases. The prevalence of HF may increase with the combined effect of medical advances in the treatment of heart disease and an ageing population[2,3]. One of the commonest causes of hospital admission, HF is a disabling and distressing condition which can often have a major effect on the quality of life of patients and their families.

With appropriate treatment, survival rates and improved quality of life for many people living with HF can dramatically improve, provided they are on the right pathway and have access to the most appropriate therapies, and support[4].

Managing HF is challenging as people with HF are often older and require social support. In addition most people with HF have a number of other long term conditions, requiring multiple medications and may receive treatment from multiple health professionals.

For a number of years the British Heart Foundation (BHF) has invested in and evaluated projects within healthcare communities that improve services for people living with HF and to support them as their condition becomes more advanced. The BHF harnesses and actively disseminates the robust evidence base developed from these projects to build the case for change and provide supporting resources to support the spread and adoption of these best practice examples at scale across the UK and further afield. This paper provides a summary of the findings from external evaluations of the BHF funded projects, programmes and HF delivery models and outlines the challenges facing healthcare professionals caring for people with HF in the community.

Key facts

13 days average length of stay for a heart failure admission

1 in 7 heart failure patients die in hospital or in the month following discharge

£3,796 typical cost per hospital admission episode for heart failure

Heart Failure accounts for:

2% of the total NHS budget due to heart failure with 70% of these costs due to hospitalisation

1 million patient bed days per annum

5% of all emergency admissions (commonest cause of admission in people > 65yrs)

Evidence summary

- ✓ The interventions have been successfully replicated and implemented.
- ✓ The interventions are linked to NICE guidance, SIGN guidelines, NICE quality standards and the National Heart Failure Audit in England and Wales.
- ✓ Independent evaluation of the effects of the interventions have been carried out.
- ✓ There are published articles in medical and clinical journals relating to the interventions.

People living with long term conditions such as heart failure require an integrated approach to their care with robust care pathways to meet their needs from diagnosis through to end of life. This should include long term follow up, social support and palliative care.

The proposal

THE PROPOSAL	To provide evidence for an integrated care approach to support people living with HF in the community from diagnosis to end of life.
PURPOSE	To improve; the management of people living with HF, early diagnosis, access to specialist services, social support and a palliative approach where appropriate: to improve survival, quality of life and reduce avoidable hospital admissions and the associated costs.
THE HEART FAILURE CHALLENGE	✓ HF is a clinical syndrome, with symptoms such as fatigue, breathlessness and fluid retention, arising from the heart's inability to pump sufficient blood around the body[2,3]. ✓ The most common cause of HF is coronary artery disease (70% of patients have had a previous heart attack)[3]. ✓ Outcomes are consistently poor for patients who receive sub-optimal care, however input from HF specialists and prescription of evidence based HF therapies have a significant impact on prognosis and life expectancy[2]. ✓ The national heart failure audit showed that 6.1% of the patients who were discharged from hospital following an admission with acute heart failure died within 30 days of discharge from all-cause mortality. When combined with in-hospital mortality rates, a total of 15% of patients died in hospital or in the month following discharge (around one in seven patients)[2].
IMPROVING QUALITY OF CARE	**Heart Failure Specialist Nurses** Heart failure specialist nurse (HFSN) services are now well established in many areas of the UK, however some gaps still remain in service provision and staffing levels in certain localities. For instance, few select CCGs are decommissioning HF community services due to financial pressures which has health implications for the local population. The role has evolved mainly as a result of evidence from a large number of international studies, including one UK study which demonstrated that nurse-led interventions aimed at optimising medication and improving self-management not only reduced readmission rates[5] but resulted in savings that offset the cost of the heart failure nurse service (estimated £169,000 saved per 1,000 patients)[6]. **BHF Primary care initiatives** The BHF tested an innovative community and home-based HF programme led by HFSNs. The Big Lottery Fund funded the 76 HFSN posts in 26 NHS primary care organisations in England. The BHF administered the funds, managed and supported nurses and helped shape the roles and services by providing professional development. • Between 2004 and 2007 the 76 HFSNs saw approximately 15,000 patients, the majority of whom had at least one home visit. The programme delivered a 35% reduction in all cause admissions and significant cost savings. • The evaluation demonstrated that HFSNs based in primary care play a major role in managing and supporting HF patients at the critical period post-diagnosis, as well as ongoing integration in primary and secondary care[7].
IMPROVING QUALITY OF CARE *(continued)*	• A key recommendation was that services should be part of an integrated pathway of care, from diagnosis, through exacerbations to stabilisation and deterioration, including supportive and palliative care for the dying patient. **Establishing community nurse-led heart failure services and adopting a multi-disciplinary team approach can:** ✓ Reduce hospital admissions and associated costs. ✓ Improve quality of care, quality of life and patient experience. ✓ Support people with HF to self-manage their condition. ✓ Bridge the interface between primary, secondary and tertiary care, facilitating and improving communication channels between GPs and cardiologists to support the integration of patient management. ✓ Provide a key link professional to identify when other services should be engaged and help their patients access them, for example, cardiac rehabilitation, social care or palliative care. ✓ Provide education and up-skill generalist primary care teams, enabling them to take over the management of 'stable' heart failure patients, and encourage a more holistic approach including consideration for psychological and social care needs[7]. **Integrated Care** Building on the evidence outlined above and in line with government mandate for the NHS to promote integration of care, the BHF invested £1 million across nine NHS organisations in the UK. Six of the projects were community based heart failure models of care, whilst the others were focused on cardiac rehabilitation and arrhythmia care. An external evaluation is being undertaken, focusing on four overarching outcomes: improving service quality, patient quality of life, identifying the care needs of patients and implementing preventative measures. The final report is expected in June 2015. **Programme principles and preliminary findings:** • No universal model has been identified to achieve integration, hence a variety of approaches are being tested. • The projects focused on shifting elements of care from secondary to primary care; up-skilling primary care teams. • Improving systems within primary care to respond to the challenge of implementing integrated care. • Collaborating across organisational boundaries to facilitate multi-disciplinary working by hosting joint clinics and study days. • Improving patient experience and ability to manage their conditions. • Healthcare Professionals HCPs report improved pathways, patient identification and diagnosis, and care coordination. • Cost savings due to system efficiencies such as reduction in hospital admissions and hospital referrals and better provision of care within the community[8]. *Continued overleaf*

IMPROVING QUALITY OF CARE *(continued)*

Added skills and expertise to enhance and support an integrated care approach:

- Nurse prescriber
- Cognitive behavioural therapy (CBT) Training
- Palliative care training
- Heart failure specialist modules
- Motivational Interviewing
- Difficult conversations training

Over a 2 year period, cost savings of over £1.2 million have been reported at one of the heart failure sites as a result of hospital admission avoidance.

AUGMENTING SERVICES

Delivering IV Diuretics in the Community

BHF funded and evaluated a two year project at 10 NHS organisations across the UK to explore the potential for specialist nurses working within existing heart failure teams to deliver IV diuretics in the home or as a day case admission close to their homes. The evaluation demonstrated that the intervention is safe, clinically and cost-effective and well received by patients and their informal carers'[9]. Further information available at **bhf.org.uk/communityivd**

ORGANISATION OF SERVICES

There is strong evidence that disease management programmes can be effective in improving the quality of care for people with HF following hospital discharge[10]. However, there is no clear evidence that any one programme is more effective than another.

A systematic review looking at methods of delivery concluded that there was evidence that both clinics and home visits offer benefits in managing patients with HF, depending on the patient's clinical status[11].

Home visits

- The first randomised controlled trial to assess the impact of a home-based intervention model by specialist nurses included optimising pharmacotherapy[5]. Many services developed in the UK were replicated on this home-based model.
- Home visits are often part of an initial assessment or when a patient is frail or their condition has deteriorated and they have difficulty travelling. A systematic review of multidisciplinary interventions identified that the most effective programmes delivered care, to some extent, in the home setting[12].
- A randomised multi-centre study comparing clinic versus home-based interventions to assess the best method of delivering disease management programmes for HF found no difference in the primary end points of all cause hospitalisation or death, but found that patients in the home-based intervention group spent significantly fewer days in hospital[13]. The researchers believed that this may be due to a more generic approach to interventions to address comorbidities, as well as better involvement of carers and increased patient engagement.

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ORGANISATION OF SERVICES *(continued)*

Nurse-led clinics

- Nurse led clinics for managing patients with HF are also well established in the UK. They are often delivered in combination with home visits and have been shown to reduce morbidity and mortality[14]. The clinic model is more time-efficient; more people can be seen in a clinic setting than at home, with more immediate access to cardiologist advice if delivered in an acute setting and easier access to tests and investigations. However, clinic based services can present challenges for patients who are frail or unstable, resulting in non-attendance.

Telehealth

- Increasing numbers of people living with HF and other long term conditions has prompted innovative ways to manage ever expanding caseloads. However, despite more than 20 years research in this area the most recent systematic review found inconclusive evidence that telehealth is more effective than usual care in managing patients with HF[15].
- The Department of Health funded a large prospective study on the use of telehealth to manage diabetes, HF and chronic obstructive pulmonary disease and, while the results showed a reduction in admission and mortality in the intervention group, researchers were unable to conclude this was specifically linked to the use of telehealth[16].

Cardiac Rehabilitation

- Evidence of benefits of cardiac rehabilitation programmes for patients with HF has led to the inclusion of this intervention in national guidelines[3]. A consensus document from the European Society of Cardiology looked at the evidence for cardiac rehabilitation and describes the physiological changes it can promote, as well as improvements in quality of life[17]. The recommendation from this document is to incorporate cardiac rehabilitation training programmes for HF in to routine practice
- Few HF related rehabilitation services have been commissioned and a recent cardiac rehabilitation audit found that **less than 4% of referrals to cardiac rehabilitation were due to HF**[18].

Palliative Care and Heart Failure

- In recognition of national strategies and guidelines on palliative care provision for all chronic life limiting illnesses and reports from HFSNs on the palliative care needs of patients living with HF, the BHF has funded palliative care initiatives including the BHF Palliative Care HF nurse project[19, 20] and, in collaboration with Marie Curie Cancer Care, the Better Together programme in Poole and Bradford[21] and Caring Together Programme in Greater Glasgow and Clyde[22].

Caring Together

- The Caring Together Programme is a partnership between the BHF, Marie Curie Cancer Care and NHS Greater Glasgow and Clyde, aimed at improving the quality of and access to palliative care for patients in the advanced stages of HF across Greater Glasgow and Clyde[22,23].
- A formal evaluation, in particular to demonstrate patient outcomes and health economics has been commissioned. The report is due to be published in November 2015.

PRIMARY CARE CHALLENGES

- GP practice HF registers commonly reflect a discrepancy in terms of prevalence of HF and there is a wide variation of knowledge among primary care staff to identify and diagnose people with HF.
- Practice nurses are well placed to identify people with HF and play an essential role in managing stable HF patients. However, they need to be allocated sufficient clinic appointment time as many of these people have a number of other co-morbidities which can further complicate their management.
- Community teams are not always qualified or have time to manage HF medication regimes, for example, a community nurse may be a non-medical prescriber and can prescribe antibiotics but not qualified to prescribe or change HF medication.
- Many people with HF are frail and housebound and therefore the community nurse is best placed to detect early signs of clinical deterioration when they visit patients at home. It is therefore important that they are also up-skilled to manage people with HF.

EDUCATION

A key aspect of successful disease management programmes for HF is specialist skills and knowledge of the professionals implementing them. It is therefore essential that HCPs are adequately trained and have appropriate skills and knowledge with regular updates.

- In the UK, the first formal and academically accredited educational module to prepare HCPs involved in the management of HF was developed in 2002. This was in conjunction with Glasgow Caledonian University and the BHF and endorsed by the British Society for Heart Failure. Approximately 1,200 HCPs have completed or are in the process of completing the chronic heart failure specialist modules.
- Masters level heart failure modules are now available at universities across the UK however only one university currently offers a combined Heart Failure & Palliative Care MSc module.
- The School of Health and Life Sciences within Glasgow Caledonian University continues to offer a blend of Masters Level Professional Development Modules to support Health and Social Care professionals working across a variety of care settings to effectively care for and manage people living with and dying from heart failure.
  - Optimising Health and Wellbeing (30 credits) and the Supportive Palliative Care for Patients with Advancing Heart Failure (15 credits) Masters Level modules are delivered by clinical experts and continue to be supported by multidisciplinary professionals to encourage the integration of theoretical heart failure and supportive palliative care concepts into everyday clinical practice. The modules offer a blend of innovative learning methods to facilitate independent, flexible and lifelong learning.
- The majority of UK universities also now offer nurse prescribing modules, enabling more effective delivery of local community based care which can also reduce frequency of GP appointments.

Continued opposite

EDUCATION *(continued)*

- Many HCPs who have undertaken the modules accessed professional development funding from the BHF. Others received funding from their NHS Trust/Health Board. **HCPs who are BHF Alliance members can access learning and development funding for these modules.**
- Since the development of specialist nurse-led HF services in the UK, a range of service models have been adopted, with nurses' levels of autonomy and clinical expertise varying greatly[24]. HFSNs managing patients with HF require decision making skills e.g. to act on blood chemistry results, when to titrate medication, admit patients to hospital or to refer for palliative care and are essential to multi-disciplinary working.
- Community and practice nurses must also have a basic level of skills and competencies in HF management of stable patients because many people do not have access to specialist services.

Practice Development Coordinator/ Cardiovascular Disease Clinical Development Coordinator role

- In 2012 the BHF introduced and developed the Practice Development Coordinator (PDC) role now called the Cardiovascular Disease Clinical Development Coordinator role (CVD CDC).
- The role delivered by specialist CVD nurses provides local education and development advice to community based Healthcare Professionals, to support the delivery of high quality care and services for people at risk of or with a diagnosis of cardiovascular disease (CVD), particularly in areas of health inequalities where CVD is most prevalent, and where gaps in care and management exist. Education on heart failure management is a common request from practice nurses and GPs.
- An external evaluation of the role undertaken in 2014 to assess the performance and impact of the PDC programme of work demonstrated a number of high value impacts in improvement of care[25].

FIT WITH NHS POLICY AND CONTEXT

✓ An ageing population and associated increase in people living with one or more long term conditions has driven UK wide health policy focus towards integrating secondary and primary health services to enable access to safe and cost effective care as close to home as possible, providing support to patients and their carers to self-manage their conditions and make informed decisions about their care.

✓ The NHS Cardiovascular Disease Outcomes Strategy for England, the Heart Disease Improvement Plan for Scotland, Together for Health – Heart Disease Delivery Plan and the Prudent Healthcare plans for Wales and the Service Framework for Cardiovascular Health and Wellbeing in Northern Ireland all state an overarching ambition to improve outcomes in terms of clinical effectiveness, safety, a high quality patient experience and cost effectiveness.

Continued overleaf

FIT WITH NHS POLICY AND CONTEXT *(continued)*

In particular:

- ✓ Patients having access to what is recognised as the right treatment, and specialist teams.
- ✓ Improving care for patients living with cardiovascular disease (CVD), and empowering and supporting them to live as full a life as possible after diagnosis or an acute event.
- ✓ Improving end of life care for patients with CVD and enabling them to be cared for in their usual place of residence when they are approaching the end of their life.

RELATED GUIDANCE AND STANDARDS

NICE Clinical Guideline 108: Management of chronic heart failure in adults in primary and secondary care. August 2010

NICE Clinical Guideline 187: Diagnosing and managing acute heart failure in adults. October 2014

SIGN Guideline 95: Management of chronic heart failure. February 2007 (being updated 2015)

National Heart Failure Audit 2013

Quality Standard 9, NICE Quality Standard for Chronic Heart Failure 2011

NICE Quality Standard: The NHS operating Framework 2012/2013 states:

'2.17 There is strong evidence that early treatment supports better clinical outcomes. There are a number of key areas where commissioners and providers can work together to ensure earlier diagnosis and treatment.

Cardiovascular Outcomes Strategy 2013 (England)

NHS England Outcomes Framework Domains 2,3,4 and 5 2013/14

NHS Quality Premium for Clinical Commissioning Groups in England 2014/15

Department of Health: End of Life Care Strategy 2010

Quality, Improvement, Productivity and Prevention (QIPP) 2013

5 Year Forward View, NHS England 2014

Together for Health – A Heart Disease Delivery Plan, Wales, 2011-2016

Prudent Healthcare Plan, Wales 2015

Heart Disease Improvement Plan 2014, Scotland

Service Framework for Cardiovascular Health and Wellbeing, 2014-2017 , Northern Ireland

TOOLS TO SUPPORT IMPLEMENTATION

The BHF Best Practice Toolkit which includes; a business toolkit **bhf.org.uk/businesscasetoolkit** protocols, reports, evaluations and service case studies to support setting up a community IV diuretic service and offering a menu based approach within existing HF services.

The BHF supports HCPs with funding and resources for training and development through the BHF Alliance membership programme **bhf.org.uk/alliance**

CONTACTS

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British Heart Foundation

For over 50 years we've pioneered research that's transformed the lives of millions of people living with cardiovascular disease. Our work has been central to the discoveries of vital treatments that are changing the fight against heart disease.

But cardiovascular disease still kills around one in four people in the UK, stealing them away from their families and loved ones.

From babies born with life threatening heart problems, to the many mums, dads and grandparents who survive a heart attack and endure the daily battles of heart failure.

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