A review of Specialist Heart Failure Services in Scotland

Complied by Chest, Heart & Stroke Scotland & British Heart Foundation on behalf of the Scottish Heart Failure Nurse Forum (SHFNF)

Autumn 2008

Scottish Heart Failure SHFNF Nurse Forum

Scottish Heart Failure Nurse Forum (SHFNF)

The SHFNF was launched as an independent formal organisation in 2003 for the benefit of registered nurses primarily involved in the specialist management of patients with heart failure in Scotland. The SHFNF currently has over 60 members across Scotland and hosts two educational meetings per annum, a Shared Space on the E-library, providing a discussion forum, news and educational updates and opportunities.

The SHFNF is supported by Chest, Heart & Stroke Scotland and the British Heart Foundation.

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Executive Summary

Heart Failure is a complex clinical syndrome that can result from any impairment of the heart to respond to demands for increased workload. Chronic heart failure is associated with breathlessness, fatigue and signs of fluid retention as well as the underlying heart problem. As mortality from heart conditions reduces, the number of those living with chronic heart failure in Scotland is predicted to rise.

This review is designed to provide a snapshot of the provision of specialist heart failure services in Scotland; highlighting areas in need of resources and investment to meet current demand in preparation for the rising numbers of patients requiring specialist support in the future. The current minimum service level recommendation is 1 Whole Time Equivalent [WTE] Specialist Heart Failure Nurse per 100,000 population[1] and that is the ratio which is used throughout this review to reflect current and recommended service levels.

The ratio should be considered with caution when assessing the demands of the many remote and rural areas in Scotland. It should also be noted that at the time of writing the standard Heart Failure Nurse Specialist Service manages only those patients who have heart failure secondary to Left Ventricular Systolic Dysfunction; on which the above ratio is based. LVSD is only one cause of heart failure and evidence suggests that many more people living in Scotland have Heart Failure with Preserved Systolic Function.[2]

Dedicated administrative support is also recommended to ensure that the focus of the role remains on patient care. As well as the obvious benefits to the patient experience which specialist support provides, NHS Quality Improvement Scotland (QIS) estimate that adequate provision of Specialist Heart Failure Nurses, with administrative support, would result in 6,150 fewer acute bed days per year.[3]

Following a brief overview of the conditions, key stages in the patient pathway and the role of the Specialist Heart Failure Nurse more detailed information is provided on the current situation in each of the 14 NHS Board areas. Rather than providing detailed statistical analysis the review is designed to reflect the patient experience in each local area; the services currently available to them and the equity of access across the country.

Contents

Introduction

What is heart failure and how does it affect the individual?

Heart Failure is a rather alarming term but it is commonly used to describe a syndrome where the heart muscle has become weakened and is unable to pump blood around the body as efficiently as before.

The symptoms of Heart Failure include breathlessness, swollen feet or ankles, tiredness and exhaustion. Commonly these symptoms are secondary to Left Ventricular Systolic Dysfunction [LVSD], a prominent cause of heart failure, where the pumping action of the left ventricle (chamber) within the heart is impaired, although heart failure can also occur without ventricular dysfunction and with right ventricle dysfunction.

Heart Failure – Home life and everyday routines:

'Heart failure may mean having to lead life at a slower pace than before. Most people noticed that they got fewer things done each day and that they sometimes became breathless and tired when they did too much. Everyday tasks like catching a bus, climbing the stairs, shopping, cooking, cleaning, decorating, having a shower, putting on a car seatbelt and driving could cause some difficulty.

Many people were frustrated by their lack of strength; a woman said she could no longer pick up her grandchildren or play football with them. Someone else said that because he couldn't do things he had given up trying, which annoyed his wife. One man described his car as a lifeline; another said that driving was the only way that he could get out of the house which was important to him and his wife.'

Extract from: www.dipex.org – Personal experiences of health & illness

As well as debilitating physical symptoms Heart Failure often leads to anxiety, depression and social isolation.[4] Quality of life in those living with Heart Failure is poor and often worse than all other chronic conditions and fulfilling their care needs includes maintaining and improving quality of their remaining life.[5]

Heart Failure - Bad Days, Anxiety & Depression:

'Many people said they had become more anxious since having heart failure and that the condition itself played on their minds. Others talked about feeling more anxious when things went wrong with friends and family. Several people who had experienced bouts of depression which were out of character thought that the depression may have been a side effect of their medication.

Some said their emotions were closer to the surface since having heart failure and one or two mentioned being more short-tempered with their partners. Though some took each day as it came and did not dwell on the future, many found this hard to do. They worried about how their families would manage if they died and about their own state of health and whether their condition was getting worse. Many found the uncertainty of life with heart failure particularly hard to cope with.'

Extract from: www.dipex.org – Personal experiences of health & illness

Prevalence

Presently 3% of the UK population over 45 years old are thought to be affected by Heart Failure, with figures for the over 75's rising to 7% and then 15% for those over 85 years.[6] In 2007 it is estimated that as many as 100 000 people in Scotland are living with Heart Failure.[7] With an increasingly elderly population the prevalence of Heart Failure could increase by as much as 70% by 2010[8] and carries a worse prognosis than many cancers.[9]

Not all patients with heart failure have Left Ventricular Systolic Dysfunction [LVSD], patients with clinical heart failure but normal LV systolic function are described as having Heart Failure with Preserved Systolic Function[10] [HF-PSF], (this used to be called Heart Failure with diastolic dysfunction). The was name changed mainly because HF-PSF is a complicated and ill understood condition and not all cases can be attributed to diastolic dysfunction. Although the pathophysiology of HF-PSF is ill understood, it is known to comprise as high as 35-50% of the heart failure population.[11] In fact, often clinically, such patients resemble HF due to LVSD and it is only when the echocardiogram reveals preserved LV systolic function that the true diagnosis becomes apparent.[12]

Diagnosis

Patients commonly present with symptoms of fatigue, shortness of breath and/or ankle swelling. The diagnosis of heart failure can be complex as patients often have other health problems and the symptoms are not specific to the condition. Chronic heart failure is a complex patho-physiological condition which can demand highly technical interventions, but remains a progressive clinical syndrome despite therapeutic advances and requires high levels of clinical and social support. Echocardiography is a safe and inexpensive method of providing diagnosis and cause in suspected heart failure patients. It is therefore important that suitable equipment and trained personnel are available.

Brain Natriuretic Peptide (BNP) Testing[13]

The gold standard test to diagnose heart failure is an echocardiogram but supply of echo tends to be too low for all suspected heart failure patients to receive echo timeously. Therefore there are two screening tests which can be applied to ensure that those most likely to have heart failure are selected for echocardiography. Those two screening test are an Electrocardiogram (ECG) and/or BNP. Both tests are good 'rule out' tests but not good 'rule in' tests. For example if a patient has a totally normal ECG, then it is very unlikely that the patient will have heart failure due to LV systolic dysfunction but an abnormal ECG will be present in many without LVSD. Similarly for BNP, a normal level is very unlikely to be present in heart failure but a high BNP level can occur for reasons other than heart failure. Therefore either an abnormal ECG or a high BNP level in a patient with suspected heart failure means that that patient deserves an echocardiogram to refute or confirm the diagnosis of heart failure while a normal ECG or a normal BNP implies that other possible diagnosis are given more consideration.

Treatment

SIGN 95 outlines the optimal treatment for heart failure, which includes pharmacological therapies, interventional procedures and behavioural modification. The treatment of heart failure requires careful monitoring and medications often require frequent adjustments on an individual patient basis. The commonest cause of heart failure is left ventricular systolic dysfunction (LVSD) and LVSD has the strongest evidence base for treatment.[14] It is also only in such patients that the benefit of Heart Failure Nurse Specialists has a robust evidence base.

The second commonest cause of the heart failure syndrome is now called heart failure with preserved left ventricular systolic function (HF-PSF). Just as we are unclear about the pathophysiology of Heart Failure with Preserved Systolic Function [HF-PSF], we have little evidence to guide its treatment. Diuretics are usually essential since fluid retention is common. The only other treatment with an evidence base is the addition of Candesartan, although the main trial advocating it fell short of formal statistical significance. Atrial Fibrillation [AF] often complicates HF-PSF in which case control of the heart rate with either Digoxin or Beta Blockers is essential.

Rehabilitation

SIGN 95 presents guidance on advising lifestyle change in heart failure patients. The promotion of physical activity is also considered and 'regular low intensity physical activity' recommended. SIGN acknowledge the fear that many heart failure patients experience with regards to physical activity and supervised exercise programmes are one way of overcoming this barrier. The Scottish Campaign for Cardiac Rehabilitation was launched during 2008 by Chest, Heart & Stroke Scotland and BHF Scotland and has highlighted that less than 1% of heart failure patients in Scotland receive cardiac rehabilitation. Access to supervised exercise programmes is not consistent for heart failure patients, both within local NHS Boards and across the country as a whole.

Sources of Support

Chest, Heart & Stroke Scotland (CHSS) provides two key sources of support for heart failure patients and their carers in the community. CHSS supports a network of affiliated heart groups/clubs across Scotland which can offer peer support, signposting and social support. CHSS also currently provides the innovative Heart Failure Support Service (HFSS) in partnership with two NHS Board areas in Scotland, and has instituted elements of HFSS support in a further two areas; discussions are ongoing with Boards across Scotland. The HFSS is a comprehensive source of support, with three key areas of service provision; a matched volunteer befriending service, regular patient/carer forum meetings and an educational newsletter.

Both CHSS and BHF offer a wide range of literature, DVD/videos and resources to support patients and carers living with heart failure.

CHSS Advice Line: 0845 077 6000	BHF Heart Helpline: 08450 70 80 70
www.chss.org.uk	bhf.org.uk

National Advanced Heart Failure Service

The Scottish Advanced Heart Failure Service is based at the Golden Jubilee Hospital in Glasgow. The service manages adult patients who require multidisciplinary specialist expertise in the diagnosis and treatment of advanced heart failure. Device therapies, interventional procedures, non-invasive ventilation and heart transplantation are key components of this service.

http://www.nhsgoldenjubilee.co.uk/services/heart/heartandlung.php

Palliative Care

In Scotland, heart failure is associated with one of the poorest five year survival rates, approximately 25% for both sexes.[15] Access to specialist palliative care support is not consistent for heart failure patients across Scotland as reflected in this review. The Scottish Partnership for Palliative Care [SPPC] has produced a report and recommendations for improving access in heart failure: 'Living and dying with advanced heart failure: a palliative care approach.'

www.palliativecarescotland.org.uk

British Heart Foundation/Marie Curie Cancer Care Hospice Project

The British Heart Foundation is investing £3.6 million in developing specialist palliative care for patients in the advanced stages of heart failure and their carers. This project will be undertaken in partnership with Marie Curie Cancer Care. Part of this investment will go towards a centre of excellence, within the new Marie Curie Hospice in Glasgow, which will provide a comprehensive service for heart failure patients at end of life.

The joint initiative will serve Glasgow and the surrounding area- where there is a high incidence of heart disease. The centre will be funded by a £1.8 million investment from BHF with a further £1.8 million to be invested in research and development for patients in the advanced stages of heart failure in the west of Scotland. The initiative aims to jointly develop and test innovative models of palliative care for heart failure patients to; improve heart failure patients' access to end of life care and quality of supportive and palliative care and provide a pioneering model of care for others to replicate and learn from.

Role of the Heart Failure Nurse Specialist

Follow up (including by telephone) by trained heart failure nurses should be considered for patients post-discharge or with stable heart failure. Nurses should have the ability to alter diuretic dose and the interval between telephone calls, and recommend emergency medical contact.[16]

Heart failure specialist nurses provide care and advice to patients in their own homes and in clinics based in community and hospital settings which in turn decreases hospital re-admissions and improves quality of life.[17] The core aspects of the role include; monitoring the patient's condition, prescribing and adjusting medications when appropriate, advising on lifestyle changes, particularly related to diet and exercise and supporting patients and carers to manage and monitor their condition.

The nurses provide emotional support to cope with a terminal condition and declining quality of life and this may include working in partnership with palliative care teams in order to manage symptoms effectively and ensure the patient receives the best possible end-of-life care. The nurses also provide a valuable service in the education of other local healthcare professionals, such as practice nurses and district nurses, which helps to promote the improved care of heart failure patients and they are key in co-ordinating communication across the multidisciplinary health and social care team involved in the patient's care.

Heart Failure Nurse Specialist Training

The Scottish Heart Failure Nurse Forum [SHFNF] provides two Educational Meetings per annum, inviting expert speakers to provide updates and discuss innovative practice and treatments. As well as providing a vital source of professional support the SHFNF allows for the sharing of best practice and can lead to service developments across the country. During 2008, the Spring Educational Meeting was opened up to non-members to share the benefits of the meetings with colleagues across the nursing and allied health professions.

The Heart Failure Nurse Specialists attend an accredited heart failure training programme which was developed in 2002 by Glasgow Caledonian University in collaboration with the British Heart Foundation. Most of the nurses also undertake Clinic Assessment Skills training and are non-medical prescribers. To support their role in managing patients at end of life many are also attending Advanced Communication Skills training programmes. An accredited palliative care module specific to the needs of patients in the advanced stages of heart failure has been developed at Glasgow Caledonian University starts January 2009.

www.gcal.ac.uk

BHF Nurse Adoption Programme

The British Heart Foundation offer a 'nurse adoption' programme to many Specialist Nurses across the UK. Each 'adopted' nurse is provided with an annual training and development budget (£850 per annum) and opportunities to attend accredited training courses, conferences, courses and bi-annual BHF Heart Nurse Study Days. The nurses are also invited to access shared resources, best practice and facilitates to network on-line with Heart Nurses across the UK.

www.bhf.org.uk/research_health_professionals/health_professionals/bhf_heart_nurses.aspx

Specialist Heart Failure Services by NHS Board

- Ayrshire & Arran
- Borders
- Dumfries & Galloway
- Fife
- Forth Valley
- Grampian
- Greater Glasgow & Clyde
- Highland
- Lanarkshire
- Lothian
- Orkney
- Shetland
- Tayside
- Western Isles

Explanations of the terms

Explanations of the terms for comparison, used within the following reports.
Also includes explanations of technical terms and abbreviations.
HFNS = Heart Failure Nurse Specialist

NHS Board

Date service started: Start date of first HFNS post within the NHS Board.

Area Profile

CHP: Community Health Partnership; currently 41 in Scotland.

Population of area: Statistics taken from 2001 Census.

Population Density: Statistics taken from 2001 Census and reflect the travel burden for the HFNSs within each area.

Rurality: Statistics taken from Scottish Executive Urban Rural Classification 2003-2004 and reflect the travel burden for the HFNSs within each area.

Arbuthnott allocation: Statistics taken from the Arbuthnott formula (NRAC 2005), which reflects the variances in allocation of resources to each NHS Board; based on population, age, sex, deprivation and remoteness and distributes resources according to relative need. In this context a higher percentage can reflect a more challenging caseload.

Specialist provision

SN/Population ratio: SIGN 95 recommended a minimum ratio of 1 Heart Failure Nurse Specialist to 100,000 of population in Scotland and this figure reflects the true picture in each area. The ratio should be read in the context of the area profile.

WTE posts: Whole Time Equivalent; NHS posts based on full-time hours of 37.5 per week. The actual number of nurses appears in brackets.

MCN: Managed Clinical Network; 1 CHD MCN in each NHS Board.

BHF funded posts: Direct funding from BHF with line management provided by NHS Board. Funding based on a fixed term period of normally 3 years.

GPwSI: General Practitioner with Special Interest in Heart Failure.

BNP testing: Brain Naturetic Peptide; blood test which is negative indicator of the presence of heart failure, used to identify suitable referrals for ECHO and recommended by SIGN 95.

ECHO: Echocardiogram; ultrasound of the heart, used in definitive diagnosis of heart failure. The number of weeks that the average patient waits for this diagnostic test is listed: less than 2 weeks is the target.

Specialist Heart Failure Nurse Service

Average caseload: Indicator of routine workload, although greatly influenced by the area profile of the NHS Board.

Waiting list: Patients waiting to be seen by HFNS service.

Service base: Physical location of HFNS service office base.

Service delivery: Model of service delivery; home visits and/or clinics.

Referral criteria: HFNSs were established to primarily manage patients with LVSD (Left Ventricular Systolic Dysfunction), although due to patient need there is an increasingly pressure to manage the care of other types of heart failure within existing resources.

Referral source: Most HFNS were established to manage patients on discharge from hospital with LVSD, although increasingly referrals from other sources are being accepted to meet patient need.

Administration: HFNS generate a significant amount of administration, keeping patient records up to date, coordinating referrals and communicating GPs and Consultants. Many services are inadequately supported with administration, which results in less time allocated to direct patient care.

Local Education: Aware of the limitations of the provision of their direct service, many HFNSs are involved in local education initiatives to share their specialist knowledge with GPs, Hospital Staff, District Nurses, Practice Nurses etc…

Base of education: Indicates the target group for local education initiatives led by the HFNSs.

Additional services available

Palliative Care: Indicates local availability of referral routes into specialist palliative care services.

Exercise Classes: Indicates local availability of referral routes in exercise classes for heart failure patients.

Cardiac Rehabilitation: Indicates local availability of referral routes into mainstream Cardiac Rehabilitation Services within the NHS Board.

Ayrshire and Arran

Date service started:	May 2004
Area profile	
Number of CHPs:	3
Population of area:	366,450
Population Density:	108 per km^2
Urban / Rural population profile:	77.8% / 22.2%
Arbuthnott allocation:	7.8%
Specialist provision	
Specialist Nurse/Population ratio:	1:73,290
Number of WTE posts (actual number of staff):	5 WTE (6)
NHS Board/CHP/MCN funded posts:	4
BHF funded posts:	1
Number of BHF Adopted nurses:	0
Specialist Heart Failure Consultant posts:	0
GPwSI posts:	0
BNP testing funded locally:	No
Diagnostic ECHO average waiting time:	3 weeks

Notes on current service provision

Ayrshire & Arran is a well established service, with the Specialist Heart Failure Nurses working mainly from within the three CHPs, with a strong presence in primary care and a Service Lead based in Secondary Care. Provision of Heart Failure services are well integrated within the general cardiac service provision. During 2008, a Specialist Palliative Care Nurse was appointed. This post is funded by BHF for a three year period.

Specialist Heart Failure Nurse Service	
Average caseload per nurse:	90
Waiting list:	No
Hours of operation:	Mon – Fri (9-5)
Service base:	Hospital/Community
Service delivery:	Home visits/Clinics
Referral criteria:	LVSD
Referral source:	Hospital Discharge/Community
Administration Support hours per service:	18.75 hours per week
Participation in local education initiatives:	Yes
Base of education delivery:	Secondary/Primary Care
Additional services routinely available:	
Palliative Care:	Yes
Exercise Classes:	Yes
Cardiac Rehabilitation:	Limited *(Research Study)*

Borders

Date service started:	April 2007
Area profile	
Number of CHPs:	1
Population of area:	110,247
Population Density:	23 per km^2
Urban / Rural population profile:	47% / 53%
Arbuthnott allocation:	2.27%
Specialist provision	
Specialist Nurse/Population ratio:	1:44,499
Number of WTE posts (actual number of staff):	WTE 2.5 (3)
NHS Board/CHP/MCN funded posts:	0
BHF funding:	3
Number of BHF Adopted nurses:	0
Specialist Heart Failure Consultant posts:	1 *(P/T)*
GPwSI posts:	1
BNP testing funded locally:	No
Diagnostic ECHO average waiting time:	8 weeks

Notes on current service provision

The service started in April 2007, with BHF funding for an initial period of 3 years, although some heart failure service provision continues to be provided by the existing cardiac specialist nurses. The population is widespread in the Borders, with the Borders General Hospital situated at Melrose.The service is still in the process of establishing a profile across primary care and plans to provide local educational opportunities in the future.

Specialist Heart Failure Nurse Service	
Average caseload per nurse:	36
Waiting list:	No
Hours of operation:	Mon-Fri (9-5)
Service base:	Hospital
Service delivery:	Home visits/Clinics
Referral criteria:	LVSD
Referral source:	Hospital Discharge/Community
Administration Support hours per service:	0 hours per week
Participation in local education initiatives:	No
Base of education delivery:	N/A
Additional services routinely available:	
Palliative Care:	Yes
Exercise Classes:	No
Cardiac Rehabilitation:	No

Dumfries and Galloway

Date service started:	April 2002
Area profile	
Number of CHPs:	1
Population of area:	148,030
Population Density:	24 per km^2
Urban / Rural population profile:	46.3% / 53.7%
Arbuthnott allocation:	3.27%
Specialist provision	
Specialist Nurse/Population ratio:	1:74,015
Number of WTE posts (actual number of staff):	2 WTE (4)
NHS Board/CHP/MCN funded posts:	2
BHF funding:	0
Number of BHF Adopted nurses:	2
Specialist Heart Failure Consultant posts:	0
GPwSI posts:	0
BNP testing funded locally:	Yes
Diagnostic ECHO average waiting time:	2 weeks

Notes on current service provision

Well established service, started with BHF funding, now sustainably funded by NHS Dumfries & Galloway. The service covers a very large, mainly rural area. The service meets the recommended level of service provision but rurality poses future problems of sustainability with the inevitable rise in case load numbers. Expansion of the service to meet increasing demands in challenging area may be required.

Specialist Heart Failure Nurse Service	
Average caseload per nurse:	50
Waiting list:	Yes *(2 weeks)*
Hours of operation:	Mon-Fri (9-5)
Service base:	Primary Care
Service delivery:	Home visits/Clinics
Referral criteria:	LVSD
Referral source:	Hospital Discharge/Community
Administration Support hours per service:	8 hours per week
Participation in local education initiatives:	Yes
Base of education delivery:	Secondary/Primary Care
Additional services routinely available:	
Palliative Care:	Yes
Exercise Classes:	Yes
Cardiac Rehabilitation:	No

Fife

Date service started:	August 2004
Area profile	
Number of CHPs:	3
Population of area:	358,858
Population Density:	271 per km^2
Urban / Rural population profile:	79.4% / 20.6%
Arbuthnott allocation:	6.74%
Specialist provision	
Specialist Nurse/Population ratio:	1:179,429
Number of WTE posts (actual number of staff):	2 WTE (2)
NHS Board/CHP/MCN funded posts:	2
BHF funding:	0
Number of BHF Adopted nurses:	2
Specialist Heart Failure Consultant posts:	0
GPwSI posts:	2 posts
BNP testing funded locally:	Yes *(Research Trial)*
Diagnostic ECHO average waiting time:	3 weeks

Notes on current service provision

The service was initially launched with Big Lottery funding and is now funded by Fife CHD MCN. Fife is a widespread area with two main District General Hospitals and pockets of deprivation. The 2 nurses are currently working at capacity, with no administration support and may require additional resource as the heart failure patient population increases.

Specialist Heart Failure Nurse Service	
Average caseload per nurse:	70
Waiting list:	No
Hours of operation:	Mon-Fri (9-5)
Service base:	Hospital
Service delivery:	Home visits
Referral criteria:	LVSD
Referral source:	Hospital Discharge/Community
Administration Support hours per service:	5 hours per week
Participation in local education initiatives:	Yes
Base of education delivery:	Secondary/Primary Care
Additional services routinely available:	
Palliative Care:	Yes
Exercise Classes:	No
Cardiac Rehabilitation:	No

Forth Valley

Date service started:	December 1999
Area profile	
Number of CHPs:	3
Population of area:	286,053
Population Density:	108 per km^2
Urban / Rural population profile:	80.5% / 19.5%
Arbuthnott allocation:	5.27%
Specialist provision	
Specialist Nurse/Population ratio:	1:89,392
Number of WTE posts (actual number of staff):	3.2 WTE (4)
NHS Board/CHP/MCN funded posts:	2.2
BHF funding:	1
Number of BHF Adopted nurses:	1
Specialist Heart Failure Consultant posts:	1
GPwSI posts:	0
BNP testing funded locally:	No
Diagnostic ECHO average waiting time:	< 2 weeks

Notes on current service provision

The service meets minimum level of service provision, although 1 post is only funded until December 2009. The Service also provides a review of in-patients on a Saturday. The service is well established and well integrated into the general provision of cardiac services in the area.

Specialist Heart Failure Nurse Service	
Average caseload per nurse:	220 *(clinics)* 65 *(visits)*
Waiting list:	No
Hours of operation:	Mon-Sat (9-5)
Service base:	Hospital
Service delivery:	Home visits/Clinics
Referral criteria:	LVSD
Referral source:	Hospital Discharge/Community
Administration Support hours per service:	30 hours per week
Participation in local education initiatives:	Yes
Base of education delivery:	Secondary/Primary Care
Additional services routinely available:	
Palliative Care:	Yes
Exercise Classes:	Yes
Cardiac Rehabilitation:	Yes

Grampian

Date service started:	March 2004 *(break in service 03/07-09/09)*
Area profile	
Number of CHPs:	3
Population of area:	529,889
Population Density:	61 per km^2
Urban / Rural population profile:	64% / 36%
Arbuthnott allocation:	9.06%
Specialist provision	
Specialist Nurse/Population ratio:	1:264,944
Number of WTE posts (actual number of staff):	2 WTE (4)
NHS Board/CHP/MCN funded posts:	0
BHF funding:	2
Number of BHF Adopted nurses:	0
Specialist Heart Failure Consultant posts:	1
GPwSI posts:	Training in progress
BNP testing funded locally:	No
Diagnostic ECHO average waiting time:	2-3 weeks

Notes on current service provision

There had been no home visiting service operating from March 2007-September 2008 as initially funded by the Big Lottery Fund and continuation funding was not secured due to competing funding demands within cardiac services. In the interim period, HFNSs had delivered educational sessions to Primary Care staff to disseminate knowledge and skills and were able to allocate some time to two regular clinics (Elgin & Aberdeen). During 2008 funding was secured from the BHF for an initial 3 year period, providing 2 WTE posts based in Aberdeen City, Aberdeenshire and Moray; there will be 4 nurses working across the 3 CHP's with a 50% clinical and 50% educational component. Grampian requires an additional of 3.5 WTE posts for the adequate provision of specialist heart failure care.

Specialist Heart Failure Nurse Service	
Average caseload per nurse:	*Posts to commence*
Waiting list:	6 weeks
Hours of operation:	One day clinic (9-5)
Service base:	Secondary Care
Service delivery:	Limited clinics
Referral criteria:	LVSD
Referral source:	Hospital Discharge/Community
Administration Support hours per service:	0 hours per week
Participation in local education initiatives:	Yes
Base of education delivery:	Primary Care
Additional services routinely available:	
Palliative Care:	No
Exercise Classes:	No
Cardiac Rehabilitation:	No

Greater Glasgow and Clyde

Date service started:	August 1999
Area profile	
Number of CHPs:	8
Population of area:	1,191,584
Population Density:	910 per km^2
Urban / Rural population profile:	98.3% / 1.7%
Arbuthnott allocation:	18.39%
Specialist provision	
Specialist Nurse/Population ratio:	1:73,103
Number of WTE posts (actual number of staff):	16.3 WTE (20)
NHS Board/CHP/MCN funded posts:	11.8
BHF funding:	1 WTE 2
Number of BHF Adopted nurses:	8
Specialist Heart Failure Consultant posts:	2
GPwSI posts:	0
BNP testing funded locally:	No
Diagnostic ECHO average waiting time:	4-6 weeks

Notes on current service provision

A mainly urban area with high deprivation and rates of CHD, the service is delivered from sites across the Board area. This was the pioneering service in Scotland and the NHS have met funding requirements since the onset and expanded during the recent merger with Clyde. Despite having a robust discharge criteria the nurses have very large caseloads this is partly due to the volumes being referred to the service and the poor general state of health of many of the patients. The service only has capacity to take patients who have had a hospital admission and this remains a gap in service provision, with little integration into primary care. Three nurses have recently been appointed to support a Local Enhanced Service in primary care. One working in the North of the city, 1 working in the South of the city and 1 in Clyde.

Specialist Heart Failure Nurse Service	
Average caseload per nurse:	100-110
Waiting list:	No
Hours of operation:	Mon-Fri (9-5)
Service base:	Secondary care
Service delivery:	Home visits/Clinics
Referral criteria:	LVSD
Referral source:	Hospital Discharge
Administration Support hours per service:	20 hours per week (per site)
Participation in local education initiatives:	Yes
Base of education delivery:	Secondary/Primary Care
Additional services routinely available:	
Palliative Care:	Yes
Exercise Classes:	No
Cardiac Rehabilitation:	No

Highland

Date service started:	November 2006
Area profile	
Number of CHPs:	4
Population of area:	306,701
Population Density:	9 per km^2
Urban / Rural population profile:	31.2% / 68.8%
Arbuthnott allocation:	4.69%
Specialist provision	
Specialist Nurse/Population ratio:	1:78,385
Number of WTE posts (actual number of staff):	3.4 WTE (7)
NHS Board/CHP/MCN funding:	0.4
BHF funding:	3
Number of BHF Adopted nurses:	0
Specialist Heart Failure Consultant posts:	1
GPwSI posts:	0
BNP testing funded locally:	No
Diagnostic ECHO average waiting time:	2-4 weeks *(longer in remote)*

Notes on current service provision

This is a new service in a very rural and large geographical area. The BHF funded nurses, initial 3 years fully funded followed by 50% funding for a further 2 years do not cover Argyll which has recently merged with NHS Highland and has 26 inhabited islands. Argyll has one funded general heart post, but only 15 hours dedicated to heart failure in a rural area. The nurses working in the more remote areas have few funded hours and travel many miles to see patients as NHS Highland region takes up 41% of the Scottish land mass! A major part of the HFNS role in this area will be to up-skill the existing community staff however this may be difficult to plan due to time constraints within part-time posts.

Specialist Heart Failure Nurse Service	
Average caseload per nurse:	60
Waiting list:	No
Hours of operation:	Mon-Fri (9-5)
Service base:	Primary Care
Service delivery:	Home visits/Clinics
Referral criteria:	LVSD
Referral source:	Hospital Discharge/Community
Administration Support hours per service:	20 hours per week
Participation in local education initiatives:	Yes
Base of education delivery:	Secondary/Primary Care
Additional services routinely available:	
Palliative Care:	No
Exercise Classes:	No
Cardiac Rehabilitation:	No

Lanarkshire

Date service started:	October 2004
Area profile	
Number of CHPs:	2
Population of area:	558,139
Population Density:	118 per km^2
Urban / Rural population profile:	88.7% / 11.3%
Arbuthnott allocation:	10.73%
Specialist provision	
Specialist Nurse/Population ratio:	1:186,046
Number of WTE posts (actual number of staff):	3 WTE (4)
NHS Board/CHP/MCN funding:	3
BHF funding:	0
Number of BHF Adopted nurses;	0
Specialist Heart Failure Consultant posts:	0
GPwSI posts:	0
BNP testing funded locally:	No
Diagnostic ECHO average waiting time:	2 wks *(1 site)*/3 mths *(2 sites)*

Notes on current service provision

The service was started with Big Lottery Funding and is now funded by the CHD MCN. The area has 3 District General Hospitals and contains many areas of significant deprivation. NHS Lanarkshire also covers a widespread mix of towns and rural countryside areas. The service is currently at capacity and it is therefore a challenge for the current HFNSs to develop the service to meet the increasing demands in this area.

Specialist Heart Failure Nurse Service	
Average caseload per nurse:	100
Waiting list:	No
Hours of operation:	Mon-Fri (9-5)
Service base:	Secondary Care
Service delivery:	Home visits/Clinics
Referral criteria:	LVSD
Referral source:	Hospital Discharge
Administration Support hours per service:	18.75 hrs wk
Participation in local education initiatives:	Yes
Base of education delivery:	Secondary/Primary Care
Additional services available:	
Palliative Care:	No
Exercise Classes:	Yes *(one site only)*
Cardiac Rehabilitation:	No

Lothian

Date service started:	March 2002
Area profile	
Number of CHPs:	4
Population of area:	801,310
Population Density:	169 per km^2
Urban / Rural population profile:	89.3% / 10.7%
Arbuthnott allocation:	13.47%
Specialist provision	
Specialist Nurse/Population ratio:	1:200,328
Number of WTE posts (actual number of staff):	5 WTE (5) *1 post education only*
NHS Board/CHP/MCN funding:	4
BHF funding:	1
Number of BHF Adopted nurses:	0
Specialist Heart Failure Consultant posts:	0
GPwSI posts:	0
BNP testing funded locally:	No
Diagnostic ECHO average waiting time:	4 weeks

Notes on current service provision

Well established service which has recently received sustainable funding from NHS Lothian following Big Lottery funding. The service also received a Scottish Health Services Award at the end of 2006 and has introduced a BHF funded education post into Primary Care (funded until Feb 2010). Current service provision is at an insufficient level and requires additional posts to meet minimum requirements.

Specialist Heart Failure Nurse Service	
Average caseload per nurse:	100
Waiting list:	N0
Hours of operation:	Mon-Fri (9-5)
Service base:	Secondary Care
Service delivery:	Home visits/Clinics
Referral criteria:	LVSD
Referral source:	Hospital Discharge
Administration Support hours per service:	10 hours per week
Participation in local education initiatives:	Yes
Base of education delivery:	Secondary/Primary Care
Additional services routinely available:	
Palliative Care;	Yes
Exercise Classes:	Limited
Cardiac Rehabilitation:	Limited

Orkney

Date service started:	March 2007
Area profile	
Number of CHPs:	1
Population of area:	19,770
Population Density:	20 per km^2
Urban / Rural population profile:	0% / 100%
Arbuthnott allocation:	0.43%
Specialist Heart Failure provision	
Specialist Nurse/Population ratio:	1:19,770
Number of WTE posts (actual number of staff):	1 WTE (1)
NHS Board/CHP/MCN funding:	0
BHF funding:	1
Number of BHF Adopted nurses:	0
Specialist Heart Failure Consultant posts:	0
GPwSI posts:	0
BNP testing funded locally:	Yes
Diagnostic ECHO average waiting time:	6 weeks

Notes on current service provision

The population is spread across 18 inhabited islands, 85% live on 'Mainland' (the main island) where the administrative centre of Kirkwall and the Balfour District General Hospital are located. The single Heart Failure Specialist Nurse (BHF funded for 3 years), works closely with the Cardiac Specialist Nurse/MCN Lead. Although time constraints prevent the heart failure nurse from visiting patients out with mainland Orkney, patients are supported by district nurses under the guidance and coordination of the heart failure nurse. It is anticipated that the BHF funded nurse will then incorporate elements of the general cardiac nurse role into her daily workload. There are no physicians on Orkney with community management led by GPs. The heart failure nurse communicates with a Cardiologist in Aberdeen in relation to complex patients and is endeavouring to attend his clinics every few months to support her clinical supervision. There is currently no secure pathway heart failure diagnosis or specialist care for non-LVSD patients.

Specialist Heart Failure Nurse Service	
Average caseload per nurse:	35
Waiting list:	No
Hours of operation:	Mon-Fri (9-5)
Service base:	Secondary Care
Service delivery:	Home visits/Clinics
Referral criteria:	LVSD
Referral source:	Hospital Discharge
Administration Support hours per week per service:	0 hours per week
Participation in local staff education initiatives:	Yes
Base of education delivery:	Secondary/Primary Care
Additional services routinely available:	
Palliative Care:	No
Exercise Classes:	No
Cardiac Rehabilitation:	Yes

Shetland

Date service started:	June 2005
Area profile	
Number of CHPs:	1
Population of area:	21,880
Population Density:	15 per km^2
Urban / Rural population profile:	0% / 100%
Arbuthnott allocation:	0.45%
Specialist provision	
Specialist Nurse/Population ratio:	1:72,390
Number of WTE posts (actual number of staff):	0.3 WTE (1)
NHS Board/CHP/MCN funding:	0.3
BHF funding:	0
Number of BHF Adopted nurses:	0
Specialist Heart Failure Consultant posts:	0
GPwSI posts:	0
BNP testing funded locally:	Yes
Diagnostic ECHO average waiting time:	4 weeks

Notes on current service provision

Shetland is an island archipelago that stretches for over 100 miles from Muckle Flugga in the north to Fair Isle in the south, with 13 inhabited islands. In Shetland there are 10 Health Centres, with practice populations ranging in size from 676 to 9656 patients, acting as bases for primary health care teams, with a wide range of services delivered. A wide range of medical, surgical and therapeutic services are provided at the two District General Hospitals serving the Shetland community. There is a Consultant led hospital service that provides emergency care via an in-patient and outpatient medical service, a chest pain clinic, diagnostic services including ECG and echocardiography and referral to Grampian cardiologists and cardio-thoracic surgeons for tertiary care. Potential problems with sustainability due to a single post holder providing all service cover and may require increased resource due to difficulties posed by remote and rural area.

Specialist Heart Failure Nurse Service	
Average caseload per nurse:	15
Waiting list:	No
Hours of operation:	Mon-Fri (9-5)
Service base:	Secondary Care
Service delivery:	Home visits/Clinics
Referral criteria:	LVSD
Referral source:	Hospital Discharge/Community
Administration Support hours per service:	0
Participation in local education initiatives:	Yes
Base of education delivery:	Secondary/Primary Care
Additional services available:	
Palliative Care:	No
Exercise Classes:	No
Cardiac Rehabilitation:	No

Tayside

Date service started:	May 2004
Area profile	
Number of CHPs:	3
Population of area:	391,639
Population Density:	52 per km^2
Urban / Rural population profile:	76.5% / 23.5%
Arbuthnott allocation:	8.02%
Specialist provision	
Specialist Nurse/Population ratio:	1:130,546
Number of WTE posts (actual number of staff):	3 WTE (3)
NHS Board/CHP/MCN funding:	3
BHF funding:	0
Number of BHF Adopted nurses:	0
Specialist Heart Failure Consultant posts:	1
GPwSI posts:	0
BNP testing funded locally:	No
Diagnostic ECHO average waiting time:	6 weeks

Notes on current service provision

Well established service with sustainable funding provided by NHS Tayside, Lead Nurse role shared by existing members of staff. Tayside is a widespread area with a high population mainly in the cities of Perth and Dundee. The service is currently operating at capacity and unable to expand further to meet increasing demand.

Specialist Heart Failure Nurse Service	
Average caseload per nurse:	80
Waiting list:	NO
Hours of operation:	Mon-Fri (9-5)
Service base:	Secondary care
Service delivery:	Home visits
Referral criteria:	LVSD
Referral source:	Hospital Discharge/Clinics
Administration Support hours per service:	30 hours per week
Participation in local education initiatives:	Yes
Base of education delivery:	Secondary/Primary Care
Additional services available:	
Palliative Care:	No
Exercise Classes:	Yes
Cardiac Rehabilitation:	No

Western Isles

Date Service started:	April 2007
Area profile	
Number of CHPs:	1
Population of area:	26,350
Population Density:	9 per km^2
Urban / Rural population profile:	0% / 100%
Arbuthnott allocation:	0.78%
Specialist provision	
Specialist Nurse/Population ratio:	1:13,175
Number of WTE posts (actual number of staff):	2 WTE (3)
NHS Board/CHP/MCN funding:	0
BHF funding:	2
BHF Adoption:	0
Specialist Heart Failure Consultant posts:	0
GPwSI posts:	1
BNP testing funded locally:	Yes
Diagnostic ECHO average waiting time:	2 weeks

Notes on current service provision

The population is spread over 10 inhabited islands with 50-60% of the population living in Stornoway on the Isle of Lewis. A wide range of medical, surgical and therapeutic services are provided by the District General Hospital in Lewis and GP Led Community Hospitals based in Benbecula and Barra; including a chest pain clinic and ECG and echocardiography diagnostic services. Patient referral can be made to Highland and West of Scotland cardiologists and cardio-thoracic surgeons for tertiary care if required. The Heart Failure Nurse Service was introduced by the BHF with an initial funding period of 3 years. The Lead Heart Failure Nurse covers the whole of the Western Isles, in conjunction with 2 part-time nurses; one covers Lewis and Harris and one covers the islands of North & South Uist, Berneray, Benbecula, Eriskay and Barra. The service has also been given invaluable support from the National Advanced Heart Failure Service.

Specialist Heart Failure Nurse Service	
Average caseload per nurse:	35 *(55 lead/17 P-T Nurses)*
Waiting list:	No
Hours of operation:	Mon – Fri (9-5)
Service base:	Primary Care
Service delivery:	Home visits/Clinics
Referral criteria:	LVSD
Referral source:	Hospital Discharge/Community
Administration Support hours per service:	7.5 hrs per week
Participation in local education initiatives:	Yes
Base of education delivery:	Secondary/Primary Care
Additional services available:	
Palliative Care:	No
Exercise Classes:	No
Cardiac Rehabilitation:	No

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