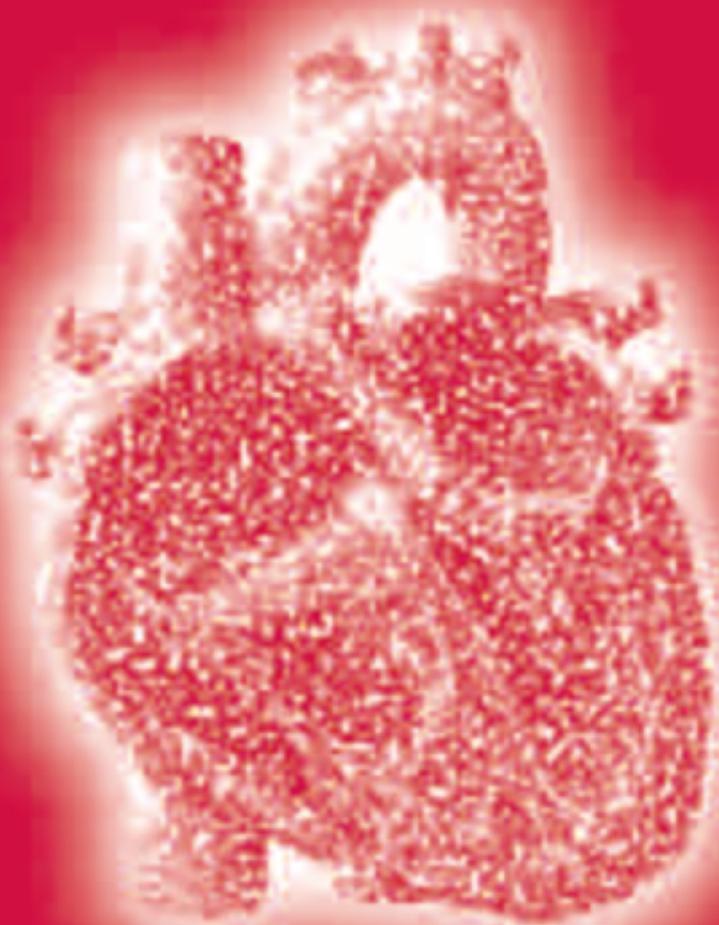


# British Society for Heart Failure 10th Annual Autumn Meeting

23–24 November 2007



**Friday 23 November 2007**

BSH Annual General Meeting

**Bridging the divide in heart failure**

**Saturday 24 November 2007**

**Advanced heart failure management challenges**

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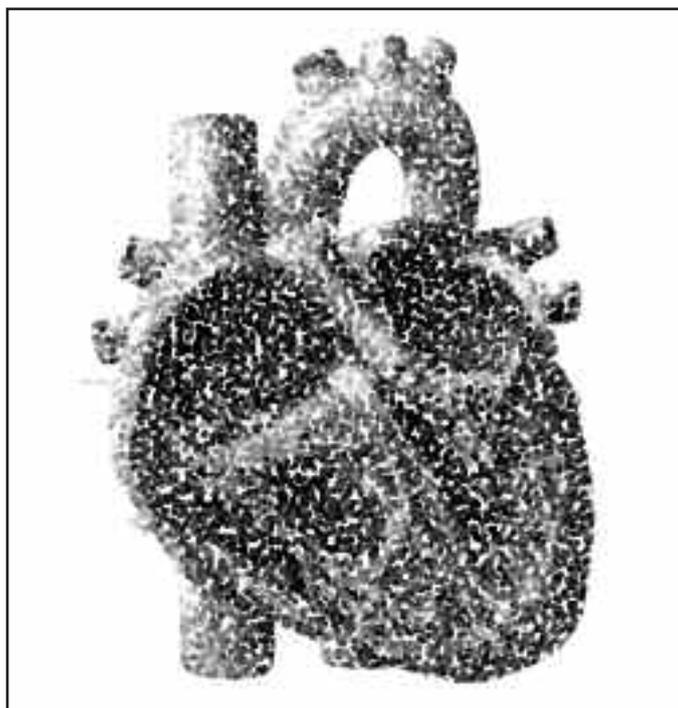
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*This conference is accredited by the Royal College of Nursing Accreditation Unit.  
It has been awarded 9 study hours and the event reference is 4052.*

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and the event reference is 38623.*

*Please note that photography, video and audio recording  
of the sessions and slides of this meeting is strictly prohibited*

# Programme – Day One FRIDAY 23 NOVEMBER 2007

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## **Bridging the divide in heart failure** *Programme Director: Nigel Rowell (Middlesbrough)*

- 09.00            *Registration – Tea/coffee*
- 09.00–09.25    *BSH Annual General Meeting (BSH members only)*
- 09.30–09.35    Opening of BSH 10th Annual Autumn Meeting and Introduction**  
***Martin Cowie (London)***
- 09.35–10.10    Session 1**  
**Breathless in Bridgend – the GP’s view**  
**Chairs:        *Martin Cowie (London)/Theresa McDonagh (London)***
- Where does heart failure present?
  - Who diagnoses it and could we pick it up earlier if we used practice nurses to screen?
  - Why BNP is a “must have” in primary care
  - The challenge of practice-based commissioning
- Nigel Rowell (Middlesbrough)*
- 10.10–11.20    Session 2**  
**The heart failure specialist nurse – a bridge over troubled water?**  
**Chairs:        *Annie MacCallum (Gloucester)/Suzanna Hardman (London)***
- 10.10–10.30    Is there an optimum model of care?  
*Jacky Austin (Abergavenny)*
- 10.30–10.50    The COACH study – outcome of the Dutch trial in heart failure care  
*Tiny Jaarsma (Netherlands)*
- 10.50–11.20    Discussion
- 11.20–11.45    *Coffee*
- 11.45–12.45    Session 3**  
**Mind the gap – what is the role of the GP(SI) and (heart failure) cardiologist?**  
**Chairs:        *Nigel Rowell (Middlesbrough)/Andrew Clark (Hull)***
- 11.45–12.05    Triaging, up-skilling and liaison  
*Peter Savill (Southampton)*
- 12.05–12.25    A guide to making the best use of your hospital  
*Adrian Davies (Middlesbrough)*
- 12.25–12.45    Discussion
- 12.45–13.45    *Lunch*

- 13.45–14.45    Session 4**  
**Quality Street – three years of the Quality and Outcome Framework**  
**Chairs:        *John Cleland (Hull)/Ahmet Fuat (Darlington)***
- 13.45–14.05    What has it meant for heart failure patients?  
*Ahmet Fuat (Darlington)*
- 14.05–14.25    The next steps – ambitions for the GP contract in heart failure:  
evidence or quality of life?  
*Richard Hobbs (Birmingham)*
- 14.25–14.45    Discussion
- 14.45–15.15    *Tea*
- 15.15–16.10    Session 5**  
**The future’s bright**  
**Chairs:        *Nigel Rowell (Middlesbrough)/Suzanna Hardman (London)***
- 15.15–15.35    Audit of long-term prescribing in general practice  
*Chris Arden (Southampton)*
- 15.35–15.55    The improving outcomes for patients with heart failure  
*Henry Dargie (Glasgow)*
- 15.55–16.10    Discussion
- 16.10–17.05    Session 6**  
**Post-MI heart failure – the forgotten many**  
**The following Symposium is brought to you by Pfizer Ltd**  
**Chairs:        *Martin Cowie (London)/Andrew Clark (Hull)***
- 16.10–16.25    How are we doing?  
*Martin Cowie (London)*
- 16.25–16.40    What should we be doing?  
*Theresa McDonagh (London)*
- 16.40–16.55    It can be done  
*Kiran Patel (Birmingham)*
- 16.55–17.05    Discussion
- 17.05–17.10    Summary of the day  
*Martin Cowie (London)*
- 17.10–18.15    *Reception with poster presenters and exhibitors*
- 20.00            *BSH 10th Anniversary Dinner (City Inn Westminster Hotel)*

# Programme – Day Two SATURDAY 24 NOVEMBER 2007

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## Advanced heart failure management challenges

*Programme Director (Session 7): Theresa McDonagh (London)*

*Programme Director (Session 8): John Cleland (Hull)*

### 09.30–11.00 Session 7

**Chairs:** *Theresa McDonagh (London)/Jayan Parameshwar (Cambridge)*

09.30–09.50 Advanced heart failure – what is it?

*Henry Dargie (Glasgow)*

09.50–10.10 Drug therapy – overcoming diuretic resistance and issues with standard therapies

*Theresa McDonagh (London)*

10.10–10.30 CRT in AHF – who to refer, when and what to expect in terms of outcome

*Peter Cowburn (Southampton)*

10.30–10.50 Palliative care – when, how and for whom?

*Miriam Johnson (Scarborough)*

10.50–11.00 Discussion

11.00–11.30 *Coffee*

### 11.30–12.50 Session 8 Hot topics

**Chairs:** *Theresa McDonagh (London)/Martin Cowie (London)*

Corona

*Andrew Clark (Hull)*

EVEREST

*Roy Gardner (Glasgow)*

STARS BNP

*Theresa McDonagh (London)*

SHIFT

*Martin Cowie (London)*

Echo CRT

*Martin Cowie (London)*

Remodelled

*Robin Weir (Glasgow)*

BHF Heart Failure Nursing Programme: health economic data for first year

*Jill Pattenden (York)*

HOME-HF

*Martin Cowie (London)*

12.50–13.00 **Summary of the day and end of meeting**

*Martin Cowie (London)*

# Biographies

## **Dr Chris Arden**

On graduating from medical school in London I spent several years working on the south coast, originally during a medical rotation in Portsmouth and, since 1998, as a GP Principal near Southampton. I am currently also employed, for three sessions a week, by Southampton City PCT, as a GPSI in Cardiology in an echocardiography based open-access heart failure and atrial fibrillation clinic. The clinic also provides facilities for ambulatory ECG and event recorder monitoring. The service receives valuable support from secondary-care colleagues via a mentorship programme and works in close partnership with our BHF nurse specialist and cardiac nursing team.

## **Dr Jacky Austin**

Dr Jacky Austin was appointed Consultant Nurse for Heart Failure Services Gwent Healthcare NHS Trust and Honorary Lecturer (University of Glamorgan) in 2004. Jacky has many years of experience in general intensive care, acute cardiology and cardiac rehabilitation. For services to Cardiac Rehabilitation and, in particular, patient and public involvement, Jacky received an MBE in 2003.

Her doctorate compared the effect of 'a programme of cardiac rehabilitation versus standard care in elderly patients with heart failure'. The heart failure cardiac rehabilitation programme (based in North Gwent), which also includes a discharge strategy for patients admitted to hospital, was granted a BHF Excellence Award (Spring 2006). Her current research interest is in exploring the needs of patients with end-stage heart failure.

To improve access to accredited heart failure education for nurses working in Wales, she instigated a nursing module 'Caring for Patients with Heart Failure' in partnership with the University of Glamorgan. Jacky is currently Chair of the 'All Wales Nurse Specialist Heart Failure Group' and nurse representative on the newly formed 'All Wales Heart Failure Forum'.

Spanning the healthcare trajectory from prevention of heart failure to diagnosis and comprehensive individualised management, Jacky is committed to improving the holistic care of patients with heart failure.

## **Dr Andrew Clark**

Dr Andrew Clark is a Reader at The University of Hull and an Honorary Consultant Cardiologist. His interest in heart failure started during a period spent in research at the Brompton Hospital, London, and continued whilst he was at the Western Infirmary, Glasgow. He now works in Hull where he has helped create a successful and growing heart failure unit. He is a founder member of the BSH.

## **Professor John Cleland**

Professor John Cleland qualified in medicine at the University of Glasgow, Scotland, in 1977. He was appointed Senior Registrar and subsequently Senior Lecturer in Cardiology and Honorary Consultant Cardiologist at St Mary's Hospital and the Hammersmith Hospital, London, from 1986 to 1994. Professor Cleland was appointed to the Foundation Chair of Cardiology at the University of Hull in 1999.

His main field of interest is in heart failure and its epidemiology and prevention. Particular interests include the role of myocardial hibernation contributing to heart failure and its treatment (including beta-blockers and revascularisation), diastolic heart failure in the elderly, the potential deleterious effect of aspirin in heart failure, ventricular resynchronisation, telemonitoring, implantable haemodynamic monitoring devices, atrial fibrillation in heart failure and new interventions for acute decompensated heart failure. Active programmes for the assessment of heart failure and its optimal management using cardiac impedance, magnetic resonance, computer tomography and advanced electrophysiology are also carried out by his department in Kingston upon Hull.

## **Dr Peter Cowburn**

Dr Peter Cowburn is a Consultant Cardiologist with a specialist interest in heart failure at Southampton General Hospital. Prior to his consultant appointment, he completed an 18-month heart failure/device fellowship in Toronto, Canada, where he trained in cardiac resynchronisation therapy (CRT). He has a particular interest in patient selection and the haemodynamic effects of CRT. His MD thesis explored the role of endothelin in chronic heart failure. He served as a Councillor for the BSH in 2005–7 and is currently Deputy Chairman of the Society.

## **Professor Martin Cowie**

Professor Martin Cowie is Professor of Cardiology at the National Heart & Lung Institute, Imperial College and Honorary Consultant Cardiologist at the Royal Brompton Hospital, London. After studying medicine at Aberdeen University, he trained in cardiology at University College and Imperial College, and undertook a Wellcome Research Training Fellowship and Masters in Clinical Epidemiology.

A founding member and currently Chairman of the BSH, Professor Cowie is also a Board member (and Chair of the Education Committee) of the Heart Failure Association of the European Society of Cardiology (ESC). He was the clinical advisor for the National Institute for Clinical Excellence (NICE) guidelines on the management of chronic heart failure, and advises the Health Care Commission on its heart failure audit work.

Professor Cowie's studies and reviews have been featured in a variety of peer-reviewed journals, including *The Lancet*, *European Heart Journal*, *British Medical Journal*, *Heart* and the *European Journal of Heart Failure*. He is a member of the editorial board of *Heart*, *The British Journal of Diabetes and Vascular Diseases* and *Cardiovascular Diabetology*. He has contributed chapters to many books, and has written a book for patients entitled *Living with Heart Failure – A Guide for Patients*.

## **Professor Henry Dargie**

Professor Henry Dargie is Director of the Scottish Advanced Heart Failure Service based at Glasgow Royal Infirmary. This service incorporates the former Scottish Cardiopulmonary Transplant Unit, and was developed in recognition of the many new innovations that have improved the management of advanced heart failure.

He has been principal Investigator on a number of landmark clinical trials, including CIBIS II, the first single randomised controlled trial to demonstrate the beneficial effects of beta-blockade with bisoprolol in heart failure; and CAPRICORN, which confirmed the benefits of beta-blockade with carvedilol in post-MI patients with left ventricular dysfunction with or without heart failure.

His main ongoing research is into the natural history of ventricular dysfunction and heart failure in the community, with programme grant funding from the Medical Research Council and British Heart Foundation. Other interests include the contribution of cardiac magnetic resonance imaging to the investigation of patients with heart failure and the role of B-type natriuretic peptide in the diagnosis, prognosis and management of heart failure.

Professor Dargie was a member of the BSH Board for several years, being Chairman between 2003 and 2005, during which he instigated the development by the BSH of a national database for heart failure. Together with Theresa McDonagh and John Cleland, he is currently a member of the Implementation Board of the Healthcare Commission-funded heart failure audit project being performed in partnership with the BSH.

## **Dr Adrian Davies**

I have had a great interest in heart failure throughout my 27 years as a consultant, 12 years as a single-handed physician/cardiologist in a busy district, followed by setting up the Regional Cardiothoracic Centre in James Cook University Hospital, Middlesbrough. As Lead Cardiologist for heart failure services to South Tees, over the past 4 years I have developed and run a 'one-stop' heart failure clinic for patients with elevated NTproBNP referred from primary care, and we have a large experience of this. We now have a team of two GPSIs (Drs Nigel Rowell and Raj Saha) and a team of five heart failure specialist nurses (four based in PCTs). We are about to 'go live' with community-based heart failure screening and assessment clinics for patients with positive BNP levels run by GPs and specialist nurses, supported by our Trust echocardiographers with a Vivid i machine.

## **Dr Ahmet Fuat**

Dr Ahmet Fuat is a GP in Darlington and a GPSI in Cardiology at Darlington Memorial Hospital/Darlington PCT. He coordinates a local integrated heart failure service, and the service team have just been short-listed and interviewed for the Hospital Doctor Cardiac Team of the Year awards.

Dr Fuat completed a PhD in the diagnosis and management of heart failure across primary and secondary care at the University of Durham, where he was appointed as a senior clinical lecturer and research fellow. Co-founder of the GPSI Cardiology National Forum, he is also Deputy Chairman of the Primary Care Cardiovascular Society.

He enjoys peer reviewing articles for several journals, including the *BMJ*, *British Journal of General Practice*, *Heart*, *European Heart Journal* and the *European Journal of Heart Failure*, and is on the editorial board of the *British Journal of Cardiology*.

## **Dr Roy Gardner**

Roy Gardner graduated from Dundee University in 1996. He is a final-year specialist registrar in cardiology at Glasgow Royal Infirmary, and has a specialist interest in heart failure and devices. He was awarded an MD in 2006 for research into markers of prognosis in advanced heart failure, reflecting his particular interest in the assessment of patients for cardiac transplantation and device therapy. He was elected as Observer to the board of the BSH in July 2007 to represent trainees.

## **Dr Suzanna Hardman**

As a Consultant Cardiologist with an interest in heart failure and community cardiology, I work in a busy DGH in an inner-city setting. Over the past 7 years I have led the development of local heart failure services, working across primary and secondary care to implement best practice and explore new models of care for people with heart failure. I head a research programme in heart failure alongside delivering much of the local secondary inpatient and outpatient care, where mortality rates have been markedly reduced through the implementation of a multidisciplinary inpatient heart failure team. I first served on the BSH Board as a Councillor, then as Deputy Chairman, and currently as Treasurer.

## **Professor Richard Hobbs**

Richard Hobbs has been Professor and Head of Primary Care and General Practice at the School of Medicine, University of Birmingham, since 1991. During this period, he has served as Associate Dean for Finance and Strategic Planning (1994–98) and for External Affairs (2000–2005).

At a national level, he is Director of the Quality and Outcomes Review Panel and Deputy Director of the NIHR School for Primary Care Research. Professor Hobbs sits on many international scientific boards, including: the Education Committees of the Heart Failure Association and the European Society of Cardiology; the Advisory Councils to the Medical Research Council and the NIHR HTA Programme; and chairs the Prevention and Care Board of the British Heart Foundation (BHF). He has also consulted on NHS policy, including having an advisory role with the National Service Frameworks for Coronary Heart Disease and for Heart Failure, and for several NICE assessments. He has worked with the Council of the British Cardiac Society, and was a founding board member of the BSH and the British Primary Care Cardiovascular Society. He is currently chairman of the European Primary Care Cardiovascular Society and Council Member to the BHF.

His research interests focus on cardiovascular epidemiology, vascular risk and heart failure, and his publications include 25 chapters, 9 edited books and over 250 original papers in peer-reviewed journals. Professor Hobbs has also provided clinical care in inner-city general practice for over 25 years.

## **Professor Tiny Jaarsma**

Biography not received at time of going to press.

## **Dr Miriam Johnson**

Miriam Johnson qualified from Manchester University in 1984. She did her higher specialist training in palliative medicine in the West of Scotland, which included a heart failure clinic attachment that triggered her interest in supportive and palliative care for patients with heart failure. She is now Senior Lecturer in Palliative Medicine at Hull-York Medical School where her research interests include symptom management in advanced heart failure and venous thromboembolism in advanced cancer patients. She is currently Lead Clinician for the Hull and Yorkshire Cancer Network and Honorary Consultant at St. Catherine's Hospice in Scarborough. In conjunction with local cardiologists, she has developed a joint cardiology-palliative care service – one of the first in the country.

## **Mrs Annie MacCallum**

Annie initially gained her cardiology experience at the Royal Infirmary of Edinburgh and the Cardiac Unit in Bristol Royal Infirmary before moving to the Cardiology Department of Gloucestershire Royal Hospital. Annie has a wealth of experience in all aspects of cardiac care.

1989–98 – Annie became a CHD practice nurse in primary care, further developing the skills to help CHD patients understand their health issues and empower them through education to become involved in maintaining their health and well being.

1999 – Annie returned to cardiology in the hospital setting. Her primary-care experiences helped to inform her understanding of the unmet needs of heart failure patients. As a Heart Failure Specialist Nurse in Gloucester, Annie developed the proposal for a county-wide Heart Failure Service for Gloucestershire. Launched in January 2004 and with the help of a successful bid to the British Heart Foundation, the Service offers echo and GPSI clinics, six Heart Failure Specialist Nurses based in primary care, but with close liaison with the hospitals and cardiologists. The service is the regionally recommended model for the south west. Annie is increasingly asked to lecture on aspects of heart failure patient care and the successful Gloucestershire Service model. With completion of audit data from 2007, publication of the service activity is planned for 2008.

Annie became an Observer to the BSH Board in September 2007.

## **Dr Theresa McDonagh**

Dr Theresa McDonagh is a Consultant Cardiologist with an interest in heart failure at the Royal Brompton Hospital London.

Clinically, she has a long track record in heart failure. In addition to having a hands-on input in clinical heart failure, she has an active research profile in the epidemiology of left ventricular dysfunction and in the clinical utility of the natriuretic peptides in both the diagnosis and prognosis of heart failure.

Dr McDonagh has been on the board of the BSH for the past 6 years in various capacities. She has taken a particular interest in developing clinical standards for heart failure and, through the SAC in Cardiology, has been involved with developing the heart failure curriculum for subspecialty cardiology registrar training. In addition, she has been part of the group moving the BSH Heart Failure Audit forward.

## **Dr Jayan Parameshwar**

Dr Jayan Parameshwar completed his medical school and general medical training in India, and cardiology training at Hillingdon Hospital and the National Heart and Royal Brompton Hospitals. His research involved the epidemiology of heart failure, exercise testing and the prognosis of severe heart failure. He is now Consultant Cardiologist at Papworth Hospital, Cambridge, and for the past 16 years has been cardiologist to the Heart Transplant Unit. He has been involved in setting up an advanced heart failure service and, for the past 10 years, with an active ventricular assist device programme.

## **Dr Kiran Patel**

Dr Kiran Patel is a Consultant Cardiologist at Sandwell and West Birmingham NHS Trust and Honorary Senior Lecturer at the University of Birmingham. He graduated from Cambridge in 1993 and then trained in Bristol and Birmingham. He has a special interest in advanced heart failure and device therapy, services which he has set up over the past 2 years. Basic science interests have evaluated excitation contraction coupling in the myocardium at a cellular level and his current clinical research interests are metabolic manipulation in heart failure and the role of cardiac resynchronisation therapy in non-conventional patient groups.

## **Ms Jill Pattenden**

Jill Pattenden is a Senior Research Fellow in the Department of Health Sciences at the University of York. Jill has managed a range of research and evaluation projects exploring health service innovation and interventions to promote behaviour change for the prevention of coronary heart disease. Jill has experience of teaching on a number of formal academic courses at both undergraduate and postgraduate level.

Jill has carried out a study of the decision-making processes in people with symptoms of heart attack, and carried out a systematic review of the effectiveness of interventions based on a 'stages of change' approach to promote individual behaviour change. Her current research involves: evaluating the British Heart Foundation heart failure specialist nurse service; a randomized controlled trial of a menu-based, nurse-facilitated, self-management programme for patients with heart failure; and evaluating an end-of-life initiative for patients with heart failure and their families.

## **Dr Nigel Rowell**

I work eight sessions a week as a GP in inner-city Middlesbrough. My interest in heart failure comes from a background in echocardiography. After a hospital job in cardiology, I furthered my interest in echocardiography by becoming a clinical assistant in 1987. In 2003, I became a hospital practitioner specialising in heart failure. I currently run the heart failure one-stop clinic with consultant cardiologist Dr Adrian Davies at James Cook University Hospital in Middlesbrough. I'm particularly interested in the early diagnosis of heart failure in at-risk groups in the community – even my children have heard of B-type natriuretic peptide! I carry out screening of our known coronary heart disease patients through a structured programme. In 2005, I was invited to join the board of the BSH as an Observer and was delighted to then be elected as a Councillor earlier this year.

In addition to this, I also teach third-year medical students and used to work for a PCT until their financial targets bore little relevance to clinical need. I'm also an active member of the National GPSI Forum in Cardiology and the Primary Care Cardiovascular Society. My outside interests include cross-country skiing in Norway and trying to keep up with my two labradors in my local forest.

## **Dr Peter Savill**

I am predominately employed as a GPwSI in Cardiology working for both the PCT and acute trust in Southampton. I am also the Southampton City PCT CHD Lead and work three sessions a week in general practice.

I qualified from the Royal Free Hospital School of Medicine in 1994 having completed an intercalated BSc in Biochemistry in 1991. After completing house jobs, I have worked in emergency medicine, anaesthesia, obstetrics and psychiatry. My interest in cardiology developed during my 2 years of anaesthesia and intensive care medicine. In this time I was involved in research into the role of transoesophageal Doppler ultrasound in the perioperative management of laparoscopic cholecystectomy.

I completed a Postgraduate Diploma in Cardiology in 2004 and was involved in the planning and development of the Southampton Intermediate Cardiology Service. My main clinical interests are heart failure, valvular heart disease and echocardiography. I am a co-opted board member of the Primary Care Cardiovascular Society and a member of the British Society of Echocardiography.

## **Dr Robin Weir**

Biography not received at time of going to press.

# Breathless in Bridgend – the GP’s view

*Nigel Rowell*

James Cook University Hospital, Middlesbrough

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Getting the “right patient to the right doctor at the right time” has never been more important, with targets on referral-to-treat and constraints on referral budgets and “payment by results”. B-type natriuretic peptide (BNP) is a biomarker with high negative predictive value that enables primary-care physicians to do just this.

Since Professor Richard Hobbs’ seminal work in 2002 on the prevalence of left ventricular systolic dysfunction (LVSD) in the community in patients with coronary heart disease little seems to have happened in terms of screening for heart failure. Over the past 3 years, I have been working with our Nurse Practitioner to actively seek out LVSD and symptomatic heart failure. I shall present these data along with a practical “how to” approach to screening in the community.

Many patients with heart failure are still admitted and discharged without having seen an expert in heart failure, so perpetuating the revolving door syndrome. Local Enhanced Schemes to supplement the GP contract could improve care by increasing beta-blocker and spironolactone use, and I shall discuss this.

# Is there an optimum model of care?

*Jacky Austin*

Department of Cardiology, Nevill Hall Hospital, Abergavenny

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Abstract not available at time of going to press.

# The COACH study – outcome of the Dutch trial in heart failure care

*Tiny Jaarsma*

Department of Cardiology, University of Groningen, Groningen, The Netherlands

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Abstract not available at time of going to press.

# Triaging, up-skilling and liaison

*Peter J Savill*

Southampton Primary Care Trust, Southampton

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The general practitioner (GP) with a special interest in cardiology is an ever-expanding role that fulfils all of the elements of the above title. The role has developed from the GP who would occasionally perform in a capacity beyond that of their generalist role into its current form in which a host of GPs with Special Interest (GPwSIs) ply their trade in a wider arena. The increasing cardiological challenges facing both primary and secondary care have led to opportunities to extend the scope of primary care and, in particular, to offer such services as one-stop clinics, community echocardiography and educational programmes. Training programmes with nationally recognised accreditation aim to set standards and ensure that high-quality care is provided.

The Southampton model involved developing a GP training programme leading to a GPwSI Cardiology role. A Royal College of General Practitioners-approved Post-Graduate Diploma in Cardiology was undertaken over 10 months, with distance learning modules, case reports, outpatient sessions and an exit exam. In addition, training in echocardiography was undertaken over 16 months supervised by senior cardiac technicians and with the support of a consultant cardiologist mentor. More recently, the British Society for Echocardiography community accreditation standard has been adopted as an additional measure of competency.

The consultant mentor provides ongoing support during service delivery to maintain knowledge and provide a mechanism to review problem cases and audit echocardiography studies. A Primary Care Trust appraisal is also undertaken.

The service accepts referrals from primary care with a core workload of suspected heart failure, murmurs and palpitations. Patients are assessed, and investigations such as transthoracic echocardiogram and ambulatory electrocardiography performed as indicated. A provisional diagnosis is made and a report sent back to the referring practice. In most cases the patient is discharged back to the GP with advice. A proportion is referred on to secondary care after discussion with the consultant mentor and a small number are retained by the service for follow up.

At present, the team comprises two GPwSIs and a cardiac nursing service, which includes a Heart Failure Nurse Specialist and a cardiac rehabilitation team. The GPwSI service also has a key role in the education and training of local primary-care clinicians and in developing and promoting primary-care cardiology research projects.

# A guide to making the best use of your hospital

*Adrian Davies*

Cardiology Department, James Cook University Hospital, Middlesbrough

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- The expert role of the cardiologist in teaching and training
- The expert opinion in heart failure to confirm or reject the diagnosis of heart failure
- Assessment of diastolic heart failure
- Assessment of need for and up-titration of drugs, especially in difficult cases, either:
  - in clinic
  - through out-reach nurses
- Further advice and management of difficult cases:
  - in patient if necessary
- Palliative care organisation
- Assess the true cause of some of the symptoms if not heart failure (the nature of the problem)
- To rule ischaemia in or out
- Assessment of right heart failure (? pulmonary embolic disease)
- Continuity of care with “Choose and Book” and “Payment by Results”
- Outpatient assessment or emergency admission – debate

# What has it meant for heart failure patients?

*Ahmet Fuat*

Carmel Medical Practice, Darlington

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The quality and outcome framework (QOF) is a system to remunerate general practice for providing good-quality care to their patients, and to help fund work to further improve the quality of healthcare delivered. It is a fundamental part of the new General Medical Services (nGMS) contract, introduced on 1 April 2004. The thinking underpinning the QOF is that incentives are the best method of resourcing work, driving up standards and recognising practitioners' achievements.

The QOF measures achievement against a range of evidence-based indicators, with points and payments awarded according to the level of achievement. QOF cannot remain static and has evolved, with 655 points instead of the original 550 available for clinical indicators. Practices have risen to the challenge and score very highly.

Heart failure is included in QOF, with 20 points available for producing and maintaining a register of patients with heart failure, confirming the diagnosis by echocardiography and treating patients with left ventricular dysfunction with an angiotensin-converting enzyme inhibitor or an angiotensin receptor blocker (if they can tolerate therapy and for whom there is no contraindication). The prevalence of heart failure was found to be 0.8% in 2006/2007 and practices achieved 96% of the available points for this area. This talk will address whether nGMS QOF has had a positive impact on the management of heart failure across the UK.

## The next steps – ambitions for the GP contract in heart failure: evidence or quality of life?

*Richard Hobbs*

Dept of Primary Care and General Practice, Medical School, The University of Birmingham, Birmingham

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The Quality and Outcomes Framework (QOF) contributed to remarkable changes in some aspects of clinical care in general practice, and especially in the management of cardiovascular disease. The indicators relating to heart failure are currently limited in scope, at least partly due to the limitations of the criteria and processes by which QOF indicators are developed. These constraints to indicators in general, and possible changes to indicators relevant to heart failure management, will be discussed. Whether relevant to QOF or not, this session will also review the evidence and importance of quality-of-life to patients suffering heart failure.

# Audit of long-term prescribing in general practice

*Chris Arden*

Southampton City PCT, Southampton

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The Intermediate Cardiology Service in Southampton has been reviewing patients, referred by their general practitioners for suspected heart failure, for echocardiography and appropriate investigation since August 2004. We were interested in following up the cohort of patients identified with either moderate or severe left ventricular systolic dysfunction (LVSD), to assess their progress and therapy optimisation following their clinic review.

All patients seen between August 2004 and December 2006 who had been diagnosed with either moderate (ejection fraction [EF] 20–40%) or severe (EF < 20%) LVSD were posted a questionnaire. This was designed to obtain information on the prescribing of four key therapeutic agents: angiotensin-converting enzyme (ACE) inhibitors, angiotensin receptor blockers (ARBs), beta blockers and spironolactone, as well any subsequent hospital admissions or interventional procedures.

A total of 72 patients were identified, 52 with moderate and 20 with severe LVSD. Within the moderate LVSD group, 67% were receiving an ACE inhibitor, 13% an ARB, 71% a beta blocker and 19% spironolactone. Of those with severe LVSD, 77% were receiving an ACE inhibitor, 12% an ARB, 59% a beta blocker and 35% spironolactone.

Patients receiving an ACE inhibitor were predominately taking ramipril (80%), although there appeared to be the potential to optimise dosing in both groups of patients.

With respect to beta blocker therapy, the majority (90%) of patients were receiving bisoprolol, with relatively good dose optimisation in those patients with severe LVSD but, interestingly, less dose titration in the moderate LVSD group.

Approximately one-third of patients with severe LVSD were receiving spironolactone, indicating an opportunity to improve the prescribing of aldosterone antagonists for patients in this group who, evidence shows, would benefit.

During the study period, 35% of patients with severe LVSD were either admitted as an emergency, or had a diagnostic catheter or an implantable cardioverter defibrillator fitted. This compared with only 15%, in the moderate LVSD group.

In summary, the results demonstrate encouraging levels of prescribing of prognostically important therapies in patients with significant LVSD. However, the study has identified areas, especially with regard to dose optimisation, where there appears to be scope for improvement. In this regard there is an important role for our Heart Failure Nurse Specialist in supporting both patients and prescribers within the community to ensure the uptake of optimal therapy and the management of relevant lifestyle risk factors.

# **The improving outcomes for patients with heart failure**

*Henry Dargie*

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Abstract not available at time of going to press.

# How are we doing?

*Martin R Cowie*

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The risk of developing heart failure after admission to a UK hospital with an acute coronary syndrome is around 8%, based on the most recent data from the Myocardial Infarction National Audit Project (MINAP).<sup>1</sup> At least one-quarter of all new cases of heart failure in the UK are due to acute myocardial infarction (AMI), which can also trigger acute decompensation of chronic heart failure.

Women, the elderly, those with diabetes and those with an anterior myocardial infarction are most at risk of heart failure. An equal number of cases arise from non-ST and ST segment elevation MI. The overall in-hospital mortality rate is fourfold higher than in those who do not develop heart failure, and this risk persists for many months.

The management of AMI has advanced greatly in recent years. More sensitive diagnosis using cardiac troponin assays, increased pre-hospital thrombolysis and primary angioplasty, and a firmer evidence base for drug therapy are all likely to have played a part in improving the prognosis of this condition.

The National Service Framework for Coronary Heart Disease<sup>2</sup> has identified AMI management as a key part of coronary heart disease care, with standards and targets for service delivery. The National Institute for Clinical Excellence has produced guidelines on management, including how heart failure should be treated.<sup>3</sup>

Recent data from both MINAP<sup>1</sup> and the Health Care Commission<sup>4</sup> point towards improvements in the care of patients in hospital with AMI and heart failure, but there is still considerable room for improvement. A gender inequality persists in the use of echocardiography and in the prescription of life-saving drug therapies.

The challenge is to ensure a rapid and thorough approach to diagnosis and care, particularly after the chest pain and acute revascularisation issues have been tackled. Detection of ongoing ischaemia, arrhythmia and significant ventricular dysfunction are key. Most patients will require polypharmacy with aspirin, a statin, an angiotensin-converting enzyme inhibitor, a beta-blocker and eplerenone if heart failure is present.

The appropriate introduction, monitoring and up-titration of drug therapies is a challenge, particularly with the current emphasis on reducing length of stay and transferring care back to the community as quickly as possible. Important steps in treatment are delayed or forgotten, or thought to be someone else's responsibility.

Patients are doing better after myocardial infarction than previously, but many of the highest risk patients are being missed or under-treated. Each healthcare economy needs to examine its current approach, monitor process and outcome, and drive standards higher. The responsibility for this is shared between emergency services, the hospital, rehabilitation services and the community.

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# What should we be doing?

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This talk will focus on how we should be treating patients with post-myocardial infarction (MI) left ventricular dysfunction and heart failure. It will review the evidence-based guidelines for pharmacotherapy in this area from the European Society of Cardiology, Scottish Intercollegiate Guidelines Network and National Institute for Health and Clinical Excellence (NICE), and will also cover the most recent specific guidance on post-MI treatment from NICE. In addition, it will focus on ways of optimising the systems by which we implement post-MI care to try and bridge the gap that exists between the patient on the cardiac care unit with heart failure and our current heart failure multidisciplinary management protocols.

# It can be done

*Kiran Patel*

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Upon what principles should a heart failure service be developed? Strategies should commence with the effective prevention of heart failure. Early reperfusion for myocardial infarction (MI) and prompt institution of therapeutic interventions to ameliorate adverse left ventricular remodelling post-infarction and reduce the risk of sudden arrhythmic death are key early measures in ischaemic cardiomyopathy, and I shall focus on these.

Active screening for left ventricular systolic dysfunction (LVSD) in fertile grounds such as coronary care units would identify patients with asymptomatic LVSD.<sup>1</sup> The National Service Framework for Coronary Heart Disease<sup>2</sup> states that all patients post-MI have a right to know their left ventricular function. Once an MI has been diagnosed, a challenge exists to determine who should receive an echocardiogram post-MI and when it should be performed. Those with symptomatic heart failure should clearly undergo echocardiography as an inpatient, which will identify those amenable to eplerenone therapy and also diagnose conditions requiring prompt cardiac surgery. Patients with no evidence of heart failure might undergo echocardiography at a later stage (e.g. 4 weeks post-MI) to identify those who might be candidates for defibrillator therapy.

As a general rule, revascularisation and drugs, but not defibrillators, reduce the risk of sudden cardiac death in the first month post-MI. The optimal management of patients with LVSD post-MI requires organised and targeted strategies, which can be accomplished in the real world if services and personnel are used appropriately.

In the post-MI setting, most patients nowadays will have been revascularised. In patients with chronic heart failure (CHF), however, many argue that there is no evidence supporting revascularisation. However, in the presence of objective evidence of reversible ischaemia in CHF, should CHF patients be denied potential benefit? How does “angina manifesting with dyspnoea” differ from “heart failure due to reversible ischaemia”? An aetiology should therefore be established for all heart failure patients.

CHF patients remaining symptomatic with heart failure despite optimal medical therapy justify clinical review to consider advanced therapies. Device therapy (cardiac resynchronisation therapy with or without defibrillator capacity) is established in the management of heart failure. Implantation of a device should not be perceived as the endpoint of device therapy. Like any pacemaker, reprogramming and adjustment of drug therapy ensures that patients derive optimal benefit from these expensive devices, and services should be tailored to meet these needs.

There is much food for thought in heart failure management, and patients now have more therapeutic options available, particularly post-MI.

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# Advanced heart failure – what is it?

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Abstract not available at time of going to press.

# Drug therapy – overcoming diuretic resistance and issues with standard therapies

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Diuretic resistance is not well defined or studied. It is usually assumed to be present when peripheral oedema is still present despite adequate dosing of loop diuretic. It occurs in over 30% of patients with advanced chronic heart failure. Causes include chronic kidney disease, activation of the renin–angiotensin aldosterone system, renovascular disease, use of non-steroidal anti-inflammatory drugs and cyclo-oxygenase inhibitors. The mechanisms whereby resistance is established include decreased absorption of the diuretic, reduced secretion into the tubular lumen and post-diuretic salt retention (tubuloglomerular feedback). The latter occurs with chronic use of loop diuretics, which stimulates hypertrophy and hyperplasia of the epithelial cells in the distal tubule.

Managing diuretic resistance is difficult. Strategies include sodium and fluid restriction, increased and/or more frequent dosing of the loop diuretic or changing to intravenous administration. Angiotensin-converting enzyme inhibitors/angiotensin receptor blockers/aldosterone antagonists may have to be reduced/stopped temporarily if renal dysfunction is a significant problem. Continuous infusions of intravenous diuretic are more effective than bolus dosing. Addition of other diuretics (e.g. thiazides and metolozone) may help. More novel approaches have been shown to be useful and include adenosine and arginine vasopressin receptor antagonists.

# CRT in AHF – who to refer, when and what to expect in terms of outcome

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Cardiac resynchronisation therapy (CRT) improves symptoms and exercise tolerance, reduces hospitalisation and decreases mortality in patients with moderate/severe chronic heart failure and a prolonged QRS.<sup>1,2</sup> Patients entering randomised clinical trials have generally been in stable class III/IV heart failure, on oral medication. Recent reports suggest that patients in class IV heart failure benefit from CRT.<sup>3</sup> Case series have also suggested that CRT may have a role in patients with very advanced heart failure requiring inotropic support.<sup>4,5</sup> Patient selection, implant techniques using arterial blood pressure response to guide lead positioning and outcome will be discussed.

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# Palliative care – when, how and for whom?

*Miriam Johnson*

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Patients with heart failure are living longer due to advances in patient management. Better understanding of the underlying pathophysiology has led to the use of targeted effective therapies: medication, devices and surgery. Optimisation of these options is the cornerstone of symptom management as well as the improvement of survival, but it is only relatively recently that any significant attention has been given to this area of patient experience.

A flurry of publications within the past 10 years has drawn attention to the symptom burden that affects patients with heart failure and their carers in all domains of life. These publications have highlighted the inequity of access to supportive and palliative care services compared with patients with cancer, and have led to a call that this is addressed.

Despite this, many services across the UK have been slow to systematically incorporate these broader aspects of care due to a variety of barriers, including: lack of time, skills and resources; and lack of local palliative care services willing or able to be involved. There is also a relative dearth of research to help provide an evidence base in symptom control or service provision for supportive and palliative care, although an empirical approach by interested clinicians working together has resulted in some apparently well-functioning joint services.

This presentation will explore some of the barriers to, and solutions for, providing supportive and palliative care for patients with heart failure.

# Corona

*Andrew Clark*

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Abstract not available at time of going to press.

# EVEREST

*Roy Gardner*

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Arginine vasopressin (AVP) is a mediator of fluid retention in heart failure. Although it is nearly 20 years since the first vasopressin V<sub>2</sub>-receptor antagonists became available, they had little clinical utility due to their low oral bioavailability and variable *in vivo* effects. The development of small-molecule V<sub>2</sub>-receptor antagonists has rekindled interest in this hormone, and the results of short-term studies suggest that these newer agents improve fluid management as well as haemodynamics. Tolvaptan is a selective oral arginine vasopressin V<sub>2</sub>-receptor antagonist that inhibits vasopressin-induced water reabsorption in the kidney, without an associated increase in electrolyte excretion (i.e. an aquaretic).

EVEREST (The Efficacy of Vasopressin Antagonism in Heart Failure Outcome Study with Tolvaptan) was a programme of three trials designed to examine the short- and long-term effects of vasopressin V<sub>2</sub>-receptor antagonism in patients hospitalised with acute decompensated heart failure and symptoms and signs of volume overload. A total of 4133 patients were randomised within 48 hours of hospitalisation to either 30 mg/day of oral tolvaptan (n=2072) or placebo (n=2061), in addition to standard medical therapy.

## Short-term results

Patients were well managed with 97% receiving diuretic therapy. By day 7 or discharge, compared with placebo, tolvaptan reduced body weight, exerted a modest improvement in symptoms but did not improve global clinical status.

## Medium-term results

Over a median of 9.9 months follow-up, tolvaptan did not reduce all-cause mortality (hazard ratio [HR] 0.98 [0.87–1.11], p=0.68) or the composite of cardiovascular death or heart failure hospitalisation (HR 1.04 [0.95–1.14], p=0.55).

## Conclusion

Although the short-term results of EVEREST provide some support for the in-hospital use of tolvaptan in patients with acute decompensated heart failure, the medium–long term results were disappointing. Therefore, maintenance therapy with tolvaptan cannot be advocated until further investigation helps identify which patients may benefit from this novel aquaretic.

# STARS BNP

*Theresa McDonagh*

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This is the second randomised trial of therapy monitoring by B-type natriuretic peptide (BNP) to be published.<sup>1</sup>

The trial randomised 220 patients with chronic heart failure (CHF) in New York Heart Association classes II and III receiving optimal treatment by CHF specialists. Patients were randomised to medical treatment according to either current guidelines or a goal of decreasing BNP plasma levels to <100 pg/ml. Follow-up included outpatient visits every 1 month for 3 months, then every 3 months. The primary combined endpoint was CHF-related death or hospitalisation. Mean doses of angiotensin-converting enzyme inhibitors and beta-blockers were significantly higher in the BNP group ( $p<0.05$ ) than in the group receiving medical treatment according to current guidelines; mean increase in furosemide dose was similar in both groups. At a median follow-up of 15 months, significantly fewer patients in the BNP group had reached the combined endpoint (24% vs. 52%,  $p<0.001$ ).

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# SHIFT

*Martin R Cowie*

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The SHIFT study is a double-blind, randomised, parallel comparison of ivabradine and matching placebo in addition to optimal congestive heart failure therapy, including beta-blocking drugs, on the composite endpoint of cardiovascular death or hospitalisation for worsening heart failure in patients with moderate to severe heart failure and left ventricular dysfunction (ejection fraction  $\geq 35\%$ ). Ivabradine, an  $I_f$  inhibitor, is a novel heart rate-lowering agent that modulates the activity of pacemaker cells in the sinoatrial node, thereby decreasing heart rate without any negative inotropic or conduction disturbances. A total of 5500 patients will be recruited and followed-up for a mean of 2 years.

# Echo-CRT

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Echocardiography-guided Cardiac Resynchronization Therapy (EchoCRT) is the first prospective randomised clinical trial to evaluate the impact of cardiac resynchronisation therapy (CRT) in patients with advanced heart failure (New York Heart Association class III) and a narrow QRS complex ( $< 120$  msec) who show mechanical dyssynchrony as assessed by echocardiography. More than 1000 patients will be enrolled and randomised to CRT or no CRT, with patients in both arms receiving a back-up implantable defibrillator. The primary objective of the study is to determine whether CRT will reduce the combined endpoint of all-cause mortality or hospitalisation for cardiovascular events.

# Remodelled

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Abstract not available at time of going to press.

# BHF Heart Failure Nursing Programme: health economic data for first year

*Jill Pattenden*

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Heart failure affects about 2% of the population, with an annual incidence of 0.5–1%. Treatment takes up about 1.8% of the NHS budget, 5% of acute admissions and 10% of bed occupancy.<sup>1</sup> Nurses caring for patients with heart failure initially tended to have characteristics more indicative of a hospital-based setting, with little experience of outpatient, community and home settings. This was not ideal since cardiovascular disease, and specifically heart failure, is chronic and well suited to management in the community.

Nurses have increasingly taken on a larger role in managing patients with chronic disease in both hospital and community settings.<sup>2</sup> Policy in recent years has led to the expansion of nursing roles, one of which has been the development of specialist nurses,<sup>3,4</sup> and, more recently, an improvement in the balance of generalists and specialists to provide integrated networks of specialist and continuing care in the management and support of patients with long-term conditions.<sup>5</sup>

The management of heart failure by specialist nurses has reported positive outcomes: regular monitoring of people living with heart failure by specialist nurses has been shown to improve quality of life, reduce readmissions and mortality, and be cost effective.<sup>6–8</sup>

In recognition of this, there has been considerable investment in the provision of community heart failure specialist nursing services within England. In 2004, the British Heart Foundation with the Big Lottery Fund provided funding for the employment of 76 community heart failure specialist nurses in 76 Primary Care Trusts. A mixed methods evaluation has taken place to assess access to specialist heart failure services in the community, health-related quality of life and satisfaction with care in patients and carers, and hospital admissions. Clinical and demographic data on 9354 patients in the nurses' caseloads have been collected over an 18-month period. Data on hospital readmissions in this caseload over a 1-year period have been compared with hospital episode statistics. This is a pragmatic study to assess the impact of these nurses in England.

The evidence to date suggests that patients seen by Heart Failure Specialist Nurses are readmitted to hospital on fewer occasions and for fewer nights than patients receiving routine heart failure services. But these nurses incur a cost over and above the cost of routine provision of heart failure services, so we are currently carrying out a cost–benefit analysis of the service. Results will be presented at the conference.

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# HOME-HF

*Martin R Cowie*

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HOME-HF is a randomised controlled trial testing whether home telemonitoring can reduce the risk of re-hospitalisation compared with usual care in the UK setting of three district general hospitals in West London serving a multi-ethnic population with high indices of deprivation. Following hospital discharge, patients monitor their weight, blood pressure, oxygen saturation and symptoms of dyspnoea daily using the HomMed telemonitoring system. Data is then transmitted to a base station and reviewed by a nurse who decides whether there has been a clinically important change and uses standard protocols to guide subsequent action. The study aim is to examine the effect of telemonitoring on the risk of rehospitalisation, and the cost-effectiveness of this approach. The study will also examine the effect of telemonitoring upon anxiety, depression and quality of life, and how patients incorporate this approach into their daily self-care routines. Recruitment is complete, with results of a 6-month follow-up expected early in 2008.

# Poster presentation summaries

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*These posters were submitted to the BSH and poster presentation details have been reproduced as submitted; they have not undergone a peer-review process.*

1.

## **Breaking service boundaries to help failing hearts – a nurse-led heart failure service delivered as part of a chronic disease management strategy**

*Wendy Churchouse, Helen Llewellyn-Griffiths, Rhoswen Davies*  
British Heart Foundation

**Presenting author: Wendy Churchouse**

### **Key points:**

#### ***Aims/objectives***

- Provide an equitable heart failure service throughout Carmarthenshire.
- Facilitate a continuum of care from diagnosis to a dignified death, including a one-stop nurse-led diagnostic clinic.
- Establish collaborative working with traditional, existing services (district nurses, etc.) and new chronic disease services (acute response teams, etc.).
- Reduce emergency medical admissions and inpatient stay by 10%.
- Improve application of evidence-based treatments and interventions.
- Facilitate self-care strategies for patients and their carers.
- Provide validated training and education for primary, secondary and social care services.

#### ***Results***

- Excellent collaborative working and multi agency shared care.
- Exceeded admission avoidance targets.
- High satisfaction from both patient, relatives and carers.
- Significant improvements in application of evidence-based treatments and interventions.
- Delivered validated heart failure training programmes for primary- and secondary-care staff.

**2.**

## **Low pulse pressure is a marker of poor outcome in patients with advanced heart failure**

*RS Gardner,<sup>1</sup> C Petrie,<sup>1</sup> KS Chong,<sup>1</sup> HJ Dargie,<sup>1</sup> MC Petrie,<sup>1</sup> TA McDonagh<sup>2</sup>*

<sup>1</sup>Scottish National Advanced Heart Failure Service, <sup>2</sup>Royal Brompton Hospital, London

**Presenting author: RS Gardner**

**Key points:**

- 182 patients with advanced heart failure.
- Low pulse pressure was predictive of an adverse outcome on univariate analysis.
- NT-proBNP was the only marker predictive of mortality, independent of other variables.

**3.**

## **Does troponin I (TnI) provide additional prognostic information in addition to B-type natriuretic peptide (BNP) in patients hospitalised with decompensated heart failure?**

*CE Jackson,<sup>1</sup> IK Tsoralis,<sup>1</sup> RS Gardner,<sup>2</sup> D Austin,<sup>1</sup> RC Myles,<sup>1</sup> J Rodgers,<sup>2</sup>  
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**Presenting author: RS Gardner**

**Key points:**

- An elevated BNP or TnI concentration is a predictor of higher early mortality in patients hospitalised with decompensated heart failure.
- Elevation of both cardiac biomarkers identifies patients at particularly high risk of early death.
- This combination of tests may be useful in identifying patients requiring the most intensive treatment and monitoring after discharge.

## 4.

# Experience of a one-stop advanced heart failure clinic

*Kiran CR Patel,<sup>1</sup> Russell C Davis,<sup>1</sup> Derek Connolly,<sup>1</sup> Patrick Cadigan,<sup>1</sup> Rajai Ahmad,<sup>1</sup> Jane P Stubbley,<sup>2</sup> Lynda Parkes,<sup>2</sup> Lynn Cooper,<sup>2</sup> Jacqueline Elson Whittaker,<sup>2</sup> Huw Wiseman,<sup>2</sup> Margaret Hems,<sup>2</sup> Hilda O'Keefe Henry,<sup>2</sup> Laura Brown,<sup>2</sup> Joanne Toller,<sup>2</sup> Janet Kennerly,<sup>3</sup> Jenny Wiedeman,<sup>3</sup> Ruth Naylor,<sup>4</sup> Lesley Parry<sup>4</sup>*

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**Presenting author: Jane Stubbley**

### Key points:

- We have identified that a one-stop clinic for advanced heart failure is able to formulate a management plan which can be implemented without the need for further routine clinic follow-up for most patients.
- Patients with class 3/4 heart failure can be referred to the advanced heart failure clinic by both community- and hospital-based heart failure nurses, cardiologists and general practitioners.
- In a cohort of 71 patients, we found that 52% went on to device therapy, 37% underwent further drug optimisation, 20% underwent coronary angiography to be considered for revascularisation, 13% were discharged to a community-based palliative care service, 6% to another speciality and almost one-third were discharged to the GP and community heart failure nurses, leaving only 5% requiring a further hospital routine consultant review appointment.
- This service reveals that even patients with more advanced heart failure can be managed by heart failure nurses and do not require routine consultant review, but an adequate management plan. It further emphasises the need for an excellent working relationship within the whole multidisciplinary team, across primary and secondary care, with a patient-centric approach to management.



# Meeting exhibitors

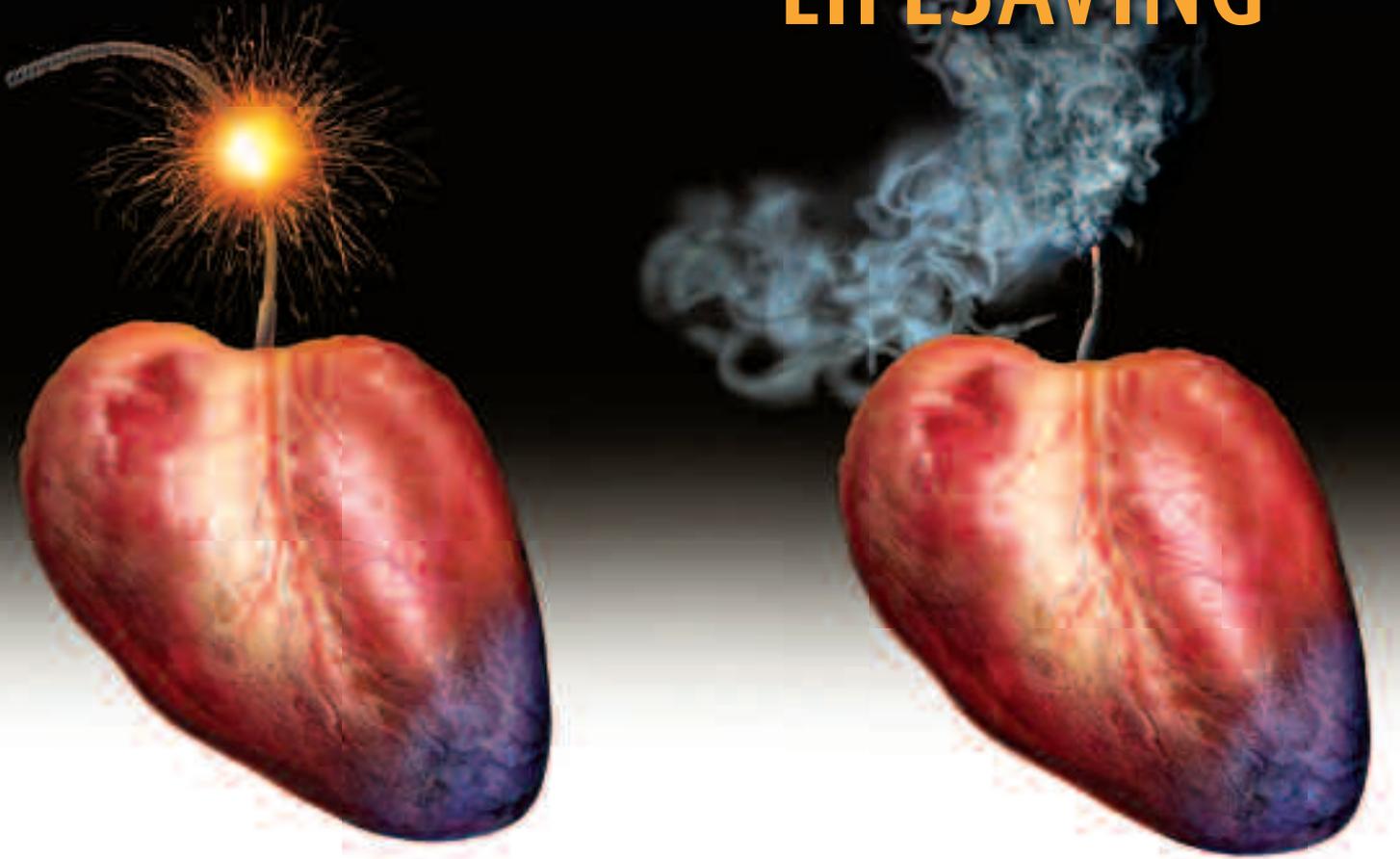
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3<sup>rd</sup> floor, St John's House  
East Street, Leicester, LE1 6NB  
Contact: Carolyn Heyes  
Tel: 0116 2225184  
Email: carolyn.heyes@heart.nhs.uk
- 10. OXFORD UNIVERSITY PRESS**  
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Email: bookorders.uk@oup.com
- 11. PFIZER LTD**  
Walton Oaks, Dorking Road  
Walton on the Hill, Surrey, KT20 7NS  
Contact: Matt Coleman  
Tel: 01737 330251  
Email: matt.coleman@pfizer.com
- 12. RESMED (UK) LTD**  
96 Milton Park  
Abingdon, Oxfordshire, OX14 4RY  
Contact: Phil Hufton  
Tel: 01235 437528  
Email: reception@resmed.co.uk
- 13. SERVIER LABORATORIES LTD**  
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Framewood Road, Slough, SL3 6RJ  
Contact: Hannah O'Connell  
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Email: hannah.oconnell@uk.netgrs.com
- 14. SIEMENS MEDICAL SOLUTIONS DIAGNOSTICS**  
Sir William Siemens Square, Frimley  
Camberly, GU16 8QD  
Contact: Abigail Wynne-Jones  
Email: abigail.wynne-jones@siemens.com
- 15. TAKEDA UK**  
Takeda House, Mercury Park  
Wycombe Lane, Wooburn Green  
High Wycombe, Buckinghamshire, HP10 0HH  
Tel: 01628 537900

Post-MI patients with LVD and evidence  
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**PRESCRIBING INFORMATION FOR INSPRA (eplerenone).** Please refer to the SmPC before prescribing Inspra 25 mg film-coated tablets or Inspra 50 mg film-coated tablets. **Presentation:** Yellow film-coated tablets containing either 25 mg or 50 mg eplerenone. **Indications:** Eplerenone is indicated, in addition to standard therapy including beta-blockers, to reduce the risk of cardiovascular mortality and morbidity in stable patients with left ventricular dysfunction (LVEF  $\leq$  40 %) and clinical evidence of heart failure after recent myocardial infarction. **Dosage:** Treatment should be initiated at 25 mg once daily and titrated to the recommended maintenance dose of 50 mg once daily preferably within 4 weeks, taking into account the serum potassium level. Eplerenone therapy should usually be started within 3-14 days after an acute myocardial infarction. Patients with a serum potassium of  $>$  5.0 mmol/L should not be started on eplerenone therapy. If serum potassium fluctuates after initiation, dose adjustment may be necessary. Periodic monitoring of serum potassium is recommended, particularly in the elderly, in patients with diabetes and in patients with renal impairment. Frequent and regular monitoring of serum potassium is recommended in patients with mild-moderate hepatic impairment. **Use in children:** Not recommended. **Contra-indications:** Hypersensitivity to eplerenone or any of the excipients. Patients with serum potassium level  $>$  5.0 mmol/L at initiation. Moderate to severe renal insufficiency (creatinine clearance  $<$  50 mL/min). Severe hepatic insufficiency (Child Pugh Class C). Patients receiving potassium-sparing diuretics, potassium supplements or strong CYP3A4 inhibitors. **Special Precautions:** Consistent with the mechanism of action, hyperkalaemia may occur with eplerenone. Serum potassium levels should be monitored in all patients at initiation of treatment and with a change in dosage. Thereafter, periodic monitoring is recommended especially in patients at risk for the development of hyperkalaemia, such as (elderly) patients with renal insufficiency and patients with diabetes. The use of potassium supplements is not recommended. Potassium levels should be monitored regularly in patients with impaired renal function, including diabetic microalbuminuria. Electrolyte levels should be monitored in patients with mild to moderate hepatic impairment. Coadministration with strong CYP3A4 inducers is not recommended. Lithium, cyclosporin and tacrolimus should be

avoided during treatment with eplerenone. Inspra tablets contain lactose, therefore lactose intolerance should be considered. **Drug Interactions:** In addition to the above, care should be taken with the coadministration of eplerenone with trimethoprim, ACE inhibitors or angiotensin-II receptor antagonists as this may increase the risk of hyperkalaemia. Coadministration with alpha 1 blockers, tricyclic antidepressants, neuroleptics, amifostine or baclofen may increase the risk of postural hypotension. Care should be taken when prescribing eplerenone with NSAIDs, as treatment with NSAIDs may lead to acute renal failure by acting directly on glomerular filtration, especially in at-risk patients (elderly and/or dehydrated patients). Co-administration of glucocorticoids or tetracosactide with eplerenone may potentially decrease antihypertensive effects. Care should also be taken when coadministering digoxin, warfarin, CYP3A4 inhibitors (e.g. verapamil, diltiazem, amiodarone) and CYP3A4 inducers. **Driving/Use of Machinery:** No studies have been performed, but it should be taken into account that dizziness may occur during treatment. **Use during pregnancy:** Caution should be exercised when prescribing eplerenone to pregnant women. **Lactation:** It is unknown if eplerenone is excreted in human breast milk. Because of the unknown potential for adverse effects on the breast fed infant, a decision should be made whether to discontinue the drug, taking into account the importance of the drug to the mother. **Side-Effects:** *Common:* Hyperkalaemia, dizziness, hypotension, diarrhoea, nausea, abnormal renal function. *Uncommon:* eosinophilia, dehydration, hypercholesterolaemia, hypertriglyceridaemia, hyponatraemia, insomnia, headache, atrial fibrillation, myocardial infarction, left cardiac failure, postural hypotension, arterial leg thrombosis, pharyngitis, flatulence, vomiting, pruritis, increased sweating, back pain, leg cramps, asthenia, malaise, increased BUN, creatinine increase, pyelonephritis. See SmPC for full details. **Legal Category:** POM. **Basic NHS Cost:** 25 mg, 28-tablet pack = £42.72. 50 mg, 28-tablet pack = £42.72. **PL numbers:** 25 mg: PL 00057/0615; 50 mg: PL 00057/0616. **Marketing Authorisation Holder:** Pfizer Limited, Sandwich, Kent, CT13 9NJ, United Kingdom. Further information on request from: Pfizer Limited, Walton Oaks, Dorking Road, Walton-on-the-Hill, Surrey, KT20 7NS, United Kingdom. Date last revised: January 2006 (REF: IN 2\_1)

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Reference: 1. Pitt B et al. J Am Coll Cardiol 2005;46:425-431.

Date of preparation: November 2006, INS729

For further information please visit  
[www.insprax.com](http://www.insprax.com)

