Meeting report – 18th BSH Annual Autumn Meeting 2015
Pathways of care

The autumn meeting in November 2015 provided the Society with its annual opportunity to gather and network, as well as to socialise, with colleagues and friends. The programme directors, Mrs Annie MacCallum (Gloucestershire), Dr Jim Moore (Cheltenham), Professor Iain Squire (Leicester) and Dr Simon Williams (Manchester) took as their theme pathways of care.

The BSH Board strives each year to provide a high-quality educational event; the effort which goes in to organising the meeting should not be underestimated. This meeting was no exception and, as well as Faculty from around the UK, the conference was graced by a contribution from Professor Marc Pfeffer (Boston, USA) who delivered the Philip Poole-Wilson Lecture.

In the UK we are fortunate to have so many clinicians – medical, nursing and others – dedicated to the care of patients with heart failure and to research into the condition. The BSH is a healthy society with a growing membership and a successful annual meeting. We aim to ensure that this continues in 2016 and beyond.

Session 1: New for 2015 – trials and updates

Session 1, as usual, was an update on clinical trials and the long-awaited National Heart Failure Audit (NHFA) results. Professor Theresa McDonagh (London) took us through the 2013–14 figures (the 2014–15 data will be published in March 2016). The good news is that beta-blocker use is up to 86%. The audit confirmed previous years’ data telling us that it is good for our patients to see a heart failure specialist whilst in hospital. Professor Martin Cowie (London) then presented one of the big trials of the year, SERVE-HF*, which surprisingly did not show any benefit of assisted servo-ventilation in patients with central sleep apnoea and heart failure. A summary of recent trial data was presented by Professor John McMurray (Glasgow) and included several type 2 diabetes trials – TECOS, ELIXA and EMPA-REG – the latter suggesting that treatment with empagliflozin reduced cardiovascular death and new-onset heart failure. The SPRINT trial showed that tight blood pressure control is good and leads to a reduction in heart failure endpoints. A phase 2 trial, COSMIC HF, suggested promising signs with a myosin activator, omecamtiv; a phase 3 trial is awaited. The Society’s current Chair, Professor Iain Squire (Leicester) rounded Session 1 off with an overview of the regulatory processes involved in getting a drug approved and available for clinical use after trial results become available, using sacubitril–valsartan as an example.

*A list of study acronyms can be found on page 7.
Session 2: Integrated heart failure care in a deprived inner city – transforming outcomes – good news

Session 2 was based around the development of integrated heart failure services across acute hospitals and the community. The speakers provided three inspiring examples of how to develop and improve heart failure care based on their experience.

Dr Suzanna Hardman (London), a past Chair of the BSH, set the scene with a presentation around the development of heart failure services over a 16-year period in Islington, North London, beginning in 1991 when the area was identified as an outlier with high cardiovascular mortality related to acute admissions. Closer data analysis identified this as largely due to excess heart failure deaths. Dr Hardman’s presentation reflected the emergence and development of the heart failure service. The latest data for Islington suggest that the area remains an outlier, but this time because of low cardiovascular mortality driven by low mortality associated with heart failure. This talk outlined the importance of an integrated heart failure service with input from primary, secondary and tertiary care.

In his presentation Dr Simon Woldman (London), while recognising that assessing the performance of individual providers of heart failure care by a process measure such as the NHFA is a step forward, emphasised that this provides only part of the overall picture. Assessing individual providers tells us little about the complete picture of heart failure care in a given community. Dr Woldman described the inconsistencies in heart failure data sourced from different systems. More in-depth analysis shows that areas of low heart failure prevalence often have the highest admission rates, presenting opportunities to improve health care by sharing statistics across healthcare providers and, as a consequence, potentially reducing costs, morbidity and mortality.

Professor David Patterson (London) described a potential answer to the question “Does information technology have a part to play in supporting people with heart failure and other long-term conditions to self-manage their conditions?” Professor Patterson gave examples of the Unique Online Solution for Shared Care system he has been involved in developing at UCL using other conditions such as atrial fibrillation (AF) as an example. As fragmented service delivery is partly blamed for the escalating consequences of health and social care, the example of integrated IT solutions using electronic health records, clinical governance analytics, clinical decision support, and clinical and patient education may provide an approach to more personalised patient management.

In the final presentation of this session Dr Lisa Anderson (London) shared her experience of developing an acute heart failure unit as a cardiologist at St George’s Hospital, London. Her journey described the importance of finding champions to support the service proposal, develop the business case and provide the information necessary to win the support of colleagues and commissioners.
Session 3: Non-invasive imaging: what the heart failure specialist needs to know

The first afternoon session of day 1 brought enlightening presentations from three speakers on different non-invasive imaging modalities, respectively briefed to clarify the role of cardiac magnetic resonance imaging (MRI), cardiac computed tomography (CT) and echocardiography as diagnostic tools for the heart failure specialist. Dr Ceri Davies (London), with typical clarity and calm, explained the many advantages of MRI with an emphasis on reproducibility and accuracy, particularly in the context of ventricular function. An additional strength of this form of imaging is the ability to establish in many cases the underlying aetiology of any identified dysfunction. Among numerous examples, Dr Davies gave us a brief overview of how important this has become in the assessment of patients with thalassaemia, where the accurate diagnosis of cardiac iron overload alongside effective treatment has transformed outcomes over the past 30 years in this population.

Dr Paramjit Jeetley (London) presented a number of striking images using cardiac CT in patients with heart failure. Cardiac CT images using modern scanners require a lower radiation dose and can be acquired very quickly (in less than a few minutes). Images are of very high quality and can be used to define the aetiology, reliably excluding coronary artery disease (CAD) as the cause in many patients.

Beta-blockers can be used cautiously, and ivabradine can be used in some patients (but is an off-licence indication) to slow the heart rate to optimise image acquisition. CT also has some value in defining pericardial disease and some valvular heart disease.

The final talk of this session was an impressive run through of the best of echocardiography, and if we all had a Dr Alison Duncan (London) running our imaging departments there might be less of a call for other imaging modalities. We were given very clear messages as to the broad utility of echocardiography as the primary imaging modality. Here, it is a highly cost-effective tool in establishing diagnosis, refining any differential diagnoses and identifying associated features, which then direct further investigations and allow the appropriate targeting of treatment for individual patients. First illustrating the careful assessment of cardiac morphology, detailed pathophysiology and haemodynamics of the heart through diverse images, Dr Duncan then moved on to explore the role of echocardiography in assessing response to treatment and prognosis in patients with heart failure – and all this for a fraction of the price of CT and MRI – whilst, however, emphasising the complementary need for those modalities.

Philip Poole-Wilson Memorial Lecture

Therapeutic advances in heart failure: the non-vicious cycle of basic and clinical investigations

Professor Marc Pfeffer treated the audience to an outstanding journey through the development of drugs which we today recognise as pivotal to the management of heart failure, namely agents that antagonise the renin-angiotensin-aldosterone system. Professor Pfeffer’s lecture lit up the meeting and was a true tribute to Philip Poole-Wilson in whose memory this lecture is given.

Session 4: Heart failure research/Hyde Park

The Young Investigators’ Award attracted 14 submissions that were independently scored by 5 judges (without conflicts of interest). The top four were invited to present at the Annual Autumn Meeting in a format involving a maximum of four data slides and 2 minutes of questions from a panel. Judging was carried out by four independent BSH Board Members (not necessarily on the panel). The BSH Chair, Professor Iain Squire (Leicester), presented the award to the winner, Dr Søren Lund Kristensen (Copenhagen, Denmark), for a talk entitled ‘Employment following first hospitalisation for heart failure in patients of working age – a Danish nationwide cohort study’. The runners up, Mr Paul Forsyth (Glasgow) (‘Left ventricular systolic dysfunction: the burden of stability – findings from the Heart failure and Optimal Outcomes from
Pharmacy Study’), **Dr Prathap Kanagala** (Leicester) (‘Diagnostic and prognostic utility of cardiovascular magnetic resonance in heart failure with preserved ejection fraction’) and **Dr Ahmad Shoaib** (Hull) (‘Characteristics and prognosis of patients according to the severity of peripheral oedema – a report from the National [England & Wales] Heart Failure Audit’) all received well-deserved runners-up awards.

**Dr Jane Cannon** (Glasgow), the BSH Research Fellow (supported by an educational grant from Servier), was invited back to provide an update on the success of her ongoing work evaluating cognitive impairment in heart failure.

Finally, the Hyde Park session permitted presenters to provide brief tongue-in-cheek presentations on the important but controversial areas of heart failure with preserved ejection fraction, community care and acute kidney injury.

**Session 5: Cases (themes)**

The first session of day 2 involved four case presentations from Glasgow and Leicester.

**Dr Simon Beggs** (Glasgow) presented two cases of breathlessness. The diagnosis was nephrotic syndrome in the first and lactic acidosis in the second. Dr Beggs’ point of repeatedly reviewing a patient, especially when they are not responding to treatment as expected, was very resonant to the audience.

Also from Glasgow, **Mrs Yvonne Millerick** presented a very poignant case of end-of-life care in heart failure. Mrs Millerick highlighted how uncertainty and unpredictability in prognostication can be used as an opportunity to have an earlier honest and open dialogue with patients and their families. She showed how a multi-disciplinary approach using anticipatory care planning supported a patient and his family to achieve the patient’s aim of dying at home.

**Dr Aidan Bolger** (Leicester) presented an excellent case of a patient with Grown Up Congenital Heart Disease (GUCH). Dr Bolger’s jaw-dropping pictures were backed up by a take-home message of ensuring continuous follow up from paediatric cardiology into adult services.

**Dr Jackie Taylor** (Glasgow) presented a case of dizziness in an elderly patient with heart failure. Dr Taylor’s message of an holistic approach to the management of such patients, including a comprehensive geriatric assessment and thorough review of multiple possible causes of dizziness, was the key point of this excellent presentation.

**Session 6: Device therapy for all disciplines**

Whilst there have been many fantastic advances in device therapy for heart failure over the past 10–20 years, session 6 illustrated that our enthusiasm for these treatments still requires a degree of grounding.

**Professor John Morgan** (Southampton) gave a précis of the currently available – and often disappointing – home-monitoring studies (e.g. TELE-HF and TIM-HF). Unfortunately, the REM-HF study – an event-driven trial that recruited 1651 patients – is yet to report, and we await the results with interest.

**Dr Ewen Shepherd** (Newcastle) highlighted the often under-appreciated and understated risks of device implantation. He sought to identify UK-specific written information concerning device therapy used in the consent process, and found that they invariably understate the risks – in both the short and long term.

**Dr Tim Betts** (Oxford) summarised the difficulties that a cardiac resynchronisation therapy (CRT) implanter can face. Although improved catheter and lead design has made CRT implants quicker and more successful, anatomical challenges sometimes dictate that the left ventricular lead can’t be placed during the implant. Traditionally this has meant that surgical epicardial lead placement was required; however, endocardial left ventricular lead placement may become a realistic option.

**Dr Jay Wright** (Liverpool) described the process that should be adopted when considering patients for device therapy – from appropriate patient selection by a multi-disciplinary team to robust and audited standard operating procedures for each step of the pathway.

Each speaker gave their take on where device therapy will be in the next few years, and future meeting attendees will see if they are right.
Session 7: Co-morbidities and collaboration

Session 7 began with Dr Derek Connelly (Glasgow) reviewing the management of AF in patients with heart failure. Methods of achieving rate control and rhythm were discussed and the role of rate versus rhythm control was reviewed. The AF-CHF trial comparing rate versus rhythm control found no difference in survival or any other endpoint. Rate control is preferred for most patients, but rhythm control can be offered in those with poor rate control. A recent meta-analysis of AF ablation in patients with heart failure has suggested that there might be an improvement in left ventricular function.

Dr Alison Evans (Gloucestershire) followed with a review of the difficult interaction between diabetes and heart failure. Dr Evans pointed out the common co-existence of these conditions. The use of drugs for diabetes has been fraught with problems, with no demonstrable benefit of any class of drug in terms of major cardiovascular outcomes. More recently, suggestions of harm had become evident (especially with some drugs increasing rates of heart failure hospitalisations), prompting a host of safety trials newly being conducted. Some good news was presented with regard to the recent EMPA-REG trial, in which empagliflozin had surprised all by not only being safe but also by reducing mortality and hospitalisations for heart failure (albeit not in an exclusively heart failure population).

Dr Carol Whelan (London), who has been pioneering the management of cardiac amyloid, described the types of amyloid and how heart failure clinicians should recognise them. Dr Whelan described how vigilance can result in early diagnosis and often excellent medium- and long-term outcomes. The role of cardiac imaging, cardiac biopsy and blood testing was emphasised.

Professor Ruth Newbury-Ecob (Bristol) tackled the emerging field of cardiac genetics in everyday practice. The major advances in the knowledge of genes associated with dilated and hypertrophic cardiomyopathies were summarised. Referral to specialist teams was highlighted. Strategies of identifying candidate genes are evolving rapidly with cost versus completeness competing.
Session 8: New approaches to heart failure treatment

Dr Mark Petrie (Glasgow), in discussing ‘other mechanical treatments’, summarised the evidence for left ventricular assist devices (LVADs) as a bridge to transplantation and as destination therapy. He mentioned important possible complications, such as bleeding, thrombi and infection, and the need for long-term efficacy data. He went on to describe extracorporeal membrane oxygenation as a treatment in advanced heart failure to improve oxygenation of the blood, short-term ventricular assist devices (VADs), such as the Impella device and the novel Parachute device, as well as an intra-atrial shunt device for use in heart failure with preserved ejection fraction.

Next, Professor Michael Frenneaux (Norwich) discussed ‘metabolic treatment’ and commented that energetic impairment is present in virtually all heart muscle diseases. He described multiple mechanisms that contribute to this. Trials involving two agents, perhexiline and trimetazidine, which cause a metabolic shift to increase left ventricular mechanical efficiency in experimental models, were described. Improvements in New York Heart Association class and exercise capacity were observed in heart failure with reduced ejection fraction.

Dr Bernard Prendergast (London) asked the question “Percutaneous treatment: is mitral clip a treatment for heart failure?” He noted that in other countries, such as Germany, the technique, for the treatment of severe mitral regurgitation, has expanded rapidly, with over 25,000 procedures worldwide. Whilst safe and supported by international guidelines for appropriate patients, long-term efficacy has not yet been established. New technologies such as the Tendyne device, ARTO system and transcatheter mitral valve implantation were all described. It was felt that enrollment into international collaborative clinical trials, with robust clinical endpoints, are both appropriate and essential to answer this important question.

Lastly, Dr John Baxter (Sunderland) posed the question “Is it ‘doable’ – should we do it just because we can?” With characteristic, classic, comedic delivery, and a cry of “Why aye man!,” Dr Baxter taught us how to influence our current hospital pathways to improve patient care and to use opportunities such as the Best Practice Tariff for heart failure admissions to drive change and allow us to do what is best for our patients.
Message from the BSH Chair

We would like to hear from you at info@bsh.org.uk if you have any particular issues or ideas that you would like to discuss further with the BSH Secretariat – either relating to the Annual Autumn Meetings or other BSH activities.

Study acronyms

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<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>AF-CHF</td>
<td>Atrial Fibrillation and Congestive Heart Failure</td>
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<tr>
<td>COSMIC HF</td>
<td>Chronic Oral Study of Myosin Activation to Increase Contractility in Heart Failure</td>
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<tr>
<td>ELIXA</td>
<td>Evaluation of Lixisenatide in Acute Coronary Syndrome</td>
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<tr>
<td>EMPA-REG</td>
<td>BI 10773 (Empagliflozin) Cardiovascular Outcome Event Trial in Type 2 Diabetes Mellitus Patients</td>
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<tr>
<td>REM-HF</td>
<td>Remote Management of Heart Failure using Implanted Devices and Formalized Follow–up Procedures</td>
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<tr>
<td>SERVE-HF</td>
<td>Treatment of Predominant Central Sleep Apnoea by Adaptive Servo Ventilation in Patients with Heart Failure</td>
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<tr>
<td>SPRINT</td>
<td>Systolic Blood Pressure Intervention Trial</td>
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<tr>
<td>TECOS</td>
<td>Trial Evaluating Cardiovascular Outcomes with Sitagliptin</td>
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<tr>
<td>TELE-HF</td>
<td>Telemonitoring to Improve Heart Failure Outcomes</td>
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<td>TIM-HF</td>
<td>Telemedical Interventional Monitoring in Heart Failure</td>
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18th BSH Annual Autumn Meeting: acknowledgements

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