The opening day offered a choice of accredited training sessions including the Multidisciplinary Rehabilitation training organised by UK Stroke Forum Chair Professor Marion Walker, the British Association of Stroke Physicians (BASP) training chaired by Dr Ronald MacWalter and the National Stroke Nursing Forum (NSNF) training chaired by Dawn Good.

The remaining two days had a busy programme of plenary and parallel sessions including the British Stroke Research Group (BSRG) awards presentation by Shadow Health Secretary, Andrew Lansley CBE MP. Prizes were given to Kate Hill from the University of Leeds and Kate Radford from the University of Central Lancaster.

Delegates were also able to visit over 190 research posters, a packed exhibition hall and the ideas fair which showcased innovative research and technology projects.

With thanks to our sponsors – sanofi-aventis, Bristol-Myers Squibb and GE Healthcare.

Copies of the 2008 conference presentations are now available at www.ukstrokeforum.org
A highlight of last year’s forum was a keynote address about the National Stroke Strategy for England, by Health Secretary Alan Johnson. This year, we invited four leading stroke specialists to reflect on the strategy’s impact...

Introducing the session, Professor Roger Boyle OBE, National Director for Heart Disease and Stroke, Department of Health, expressed his thanks for the huge amount of work done to transform services within the first year of the National Stroke Strategy for England.

Dr Damian Jenkinson, of the NHS Stroke Improvement Programme, explained the ways in which the ‘Working Together’ elements of the strategy will help narrow the gap between the National Stroke Strategy and current stroke service and highlighted the importance of the stroke networks.

Major workforce issues remain with, for example, only about 25 per cent of stroke units fully staffed. However, a workforce planning tool kit and training for stroke doctors and other health professionals should help to address this.

In an inspirational talk on the ‘Life after Stroke’ aspect of the National Stroke Strategy, Dr Sally Byng from Barnwood House Trust welcomed moves to increase active involvement of service users in shaping services, citing peer-led initiatives in Cornwall for people with stroke and aphasia. These include a befriending scheme, conversation groups and a group active in awareness-raising, all run by trained people with stroke and aphasia.

Discussing acute stroke care Dr Pippa Tyrrell, from the University of Manchester, emphasised that simple changes in service delivery could save vital time. Rapid transfer of patients with acute stroke must be followed by immediate access to stroke teams and early transfer for scanning. She also said that encouraging people with transient ischaemic attacks (TIAs) to call 999 will help to ensure that they get to a clinic quickly.

‘...working as networks we can drive change surprisingly quickly... we can save time, we can save brains and ultimately what’s really important is that we can improve stroke outcome...’

Dr Pippa Tyrrell

Raising awareness, a key element of the National Stroke Strategy, remains a high priority if people are to benefit from improvements in hyperacute stroke services, said Joe Korner from The Stroke Association.

The FAST (Facial weakness, Arm weakness, Speech problems, Time to call 999) campaign has proved valuable in getting the public to understand and remember stroke symptoms.

The Department of Health major awareness-raising campaign, to be launched in February 2009, aims to dramatically improve symptom recognition among health professionals and the public.

Leading stroke experts reflect on a year of implementing the National Stroke Strategy for England
Exploring some European perspectives on stroke

Raising standards and building on European stroke guidelines

Professor Bo Norrving from Lund University Hospital in Sweden, reviewed the demanding recommendations in the Helsingborg Declaration 2006 European Stroke Strategies, with which he was involved. He stressed the importance of setting priorities because everything in the guidelines cannot be achieved with the limited resources available.

Stroke unit care improves stroke outcome by more than any other aspect of acute stroke care. Professor Norrving noted that the Helsingborg Declaration defines the minimum criteria for stroke units.

The declaration states that all countries should aim to reduce major risk factors for stroke, particularly hypertension and smoking. Stroke shares many risk factors with coronary heart disease and cancer. Professor Norrving believes the stroke world should join in WHO global strategies to reduce risk factors and that governments have an important role to play.

‘...I think organisation of stroke care is possibly the single most important thing if there is going to be success in the delivery of efficient stroke services...’
Professor Bo Norrving

Implementing research evidence into acute stroke care

Dr Peter Heuschmann from King’s College, London, a founding member and former speaker of the German Stroke Registers Study Group, showed how this group monitors the implementation of research evidence into stroke care in Germany.

The group is a largely voluntary network of ongoing stroke registers for quality assurance and health care research. It aims to standardise and collect data on acute stroke care, monitor the quality of care, and provide regular feedback on hospital performance and inter-hospital benchmarking.

The standardised development of quality indicators had substantially improved acceptance of audit activities. Data collection efforts were minimised by using software tools allowing basic patient data to be directly extracted from the hospital information.

The large dataset means that these data can also be used for health services research. Regular comparative analysis of data from different registers is used to identify patterns of stroke care, for monitoring the implementation of new therapies, and to identify time trends in stroke care.

Professor Peter Heuschmann outlines the work of the German Stroke Registers Study Group

3rd UK Stroke Forum Conference
Andrew Lansley CBE, Shadow Secretary of State for Health and Chair of the All-Party Parliamentary Group on Stroke, himself a stroke survivor, briefly described the work of the parliamentary group. He introduced Professor Peter Langhorne from Glasgow Royal Infirmary, whose Princess Margaret Memorial Lecture illustrated the challenges of getting research evidence into practice.

Professor Langhorne said that one problem with implementing some trials is that they focus on highly selected patients in specific circumstances leaving the physician to judge whether the results are applicable to other patients. Another problem is the complexity of interventions, which may have interacting components that require behaviour change, sometimes involving many people.

To implement a complex intervention we need to understand its key components and processes, identify relevant, robust and reliable performance indicators for routine monitoring, and assess whether we see the expected changes in healthcare outcomes when the intervention is applied.

In the case of stroke units, trials had shown that they reduce the likelihood of death or long-term dependency, their key components can be described and their use can be monitored. When use of stroke units was increasing steadily, fatalities during the six months after stroke decreased correspondingly, indicating the important benefits of their implementation.

He expressed regret that thrombolysis, a potentially effective treatment, is not yet more widely available because of the many challenges to its implementation. The Europe-wide Safe Implementation of Thrombolysis in Stroke (SITS) register of the use of thrombolysis in routine care had now demonstrated acceptable levels of safety giving reassurance about implementation. We need to clarify how best to organise services to deliver thrombolysis so that it complements other stroke services. Professor Langhorne emphasised the importance of evaluating the impact of new interventions on the rest of the stroke pathway and, in the case of thrombolysis, ensuring its broader implementation does not reduce stroke unit use.

He touched on the problem of global implementation, where resources may be very limited. One inspiring example was a hospital in a South African township where attempts to set up a kind of stroke unit, despite minimal resources, had halved the death rate.

Professor Langhorne believes that researchers need to try to understand and describe interventions better and to design trials with better external validity. He advocated better process indicators to ensure the key aspects of complex interventions are working and more outcomes research to ensure that interventions are having the expected impact. The aim would be to give us confidence that we are providing the best care for our patients.
Professor John O’Brien and Professor Hugh Markus discussed the problem of vascular cognitive impairment – a growing UK health burden...

Vascular cognitive impairment (VCI) or vascular dementia, said Professor John O’Brien from Newcastle University, is the second most common cause of dementia, and a huge and growing public health burden in the UK.

In about 30 per cent of stroke survivors VCI occurs within three months and in a further 20–25 per cent it develops subsequently.

The cognitive effects in VCI vary but the main impairments are in attention, information processing and executive function, while non-cognitive features include depression, anxiety, emotional lability and apathy. Many features are common to Alzheimer’s and VCI but memory is less frequently affected in VCI.

Professor O’Brien regretted that studies of potential drug treatments have not yet found any with significant efficacy in vascular dementia. The cholinesterase inhibitors do not help in vascular dementia but people with mixed (Alzheimer’s and vascular) dementia do benefit. Even so, vascular dementia should be diagnosed to facilitate appropriate non-drug management. In the prevention of VCI or vascular dementia, Professor O’Brien noted that studies of both cholesterol-lowering drugs and anti-hypertensive treatment were so far negative or equivocal.

Professor Hugh Markus, from St George’s University of London, discussed future research directions in VCI particularly in stroke populations. Many people are potentially at risk and could be treated to prevent progression to cognitive decline, but treatments are currently limited. The Stroke Research Network and The Dementias & Neurodegenerative Diseases Research Network (DeNDRoN) have decided to work together to set up studies in this area.

The challenges include the varied nature of the disease process, overlap with Alzheimer’s disease, the difficulty of assessing change in the disease and the selection of the right tools. For example, the mini-mental state examination (MMSE) is often used but is not sensitive to the types of change seen in VCI. A patient may score virtually normally in a memory test, such as the MMSE, but be quite disabled in daily living because of other impairments, for example in executive function. Many trials have used only the MMSE test, and this, said Professor Markus, might be a possible reason why they have not shown treatment benefits.

‘...we still need to understand a lot more about the importance of vascular factors in Alzheimer’s disease and interactions between the two [vascular cognitive impairment and Alzheimer’s disease]. However… simple transfer of an Alzheimer’s concept to vascular dementia is not applicable...’
Professor John O’Brien
Secondary prevention and risk reduction

**Antiplatelet therapy trials**
Recently-completed trials of antiplatelet therapies for secondary prevention of non-cardioembolic stroke or TIA were reviewed by Professor Philip Bath, from the University of Nottingham.

The PRoFESS (Prevention Regimen For Effectively avoiding Second Strokes) trial compared the combination of aspirin and extended release dipyridamole with clopidogrel in 20,300 patients worldwide who had had an ischaemic stroke or TIA. This non-inferiority study did not indicate that either treatment was better than the other, and Professor Bath thought it unlikely that the results of would change the NICE guidelines.

The MATCH (Management of ATherothrombosis with Clopidogrel in High-risk patients with recent TIA or ischemic stroke) trial of aspirin and clopidogrel versus clopidogrel showed a non-significant reduction in vascular outcomes with aspirin and clopidogrel but an equivalent increase in life-threatening bleeds, a result that was broadly confirmed in the CHARISMA (Clopidogrel for High Atherothrombotic Risk and Ischemic Stabilisation, Management and Avoidance) and FASTER (Fast Assessment of Stroke and Transient ischemic attack to prevent Early Recurrence) trials.

The upcoming TARDIS (Triple Antiplatelets for Reducing Dependency after Ischaemic Stroke) trial will assess all three antiplatelets together compared with two (aspirin and dipyridamole) in patients with ischaemic stroke or TIA. Trials of a number of new agents or combinations were also underway.

**The Stop Stroke Study**
Strategies to prevent recurrence, particularly by reducing risk factors, are currently suboptimal. Interventions to improve adherence to such strategies have so-far had limited success. Dr Judith Redfern of King’s College London presented first results of the Stop Stroke Study, which assessed an intervention intended to improve secondary prevention.

The intervention consisted of advice tailored to patients risk factors, and targeted at stroke survivors, carers and the primary care team. The advice was delivered to over 500 stroke survivors within ten weeks and then five and eight months after a first stroke. After one year, this intervention had no statistically significant effect on the key outcomes of improved blood pressure management, treatment with antiplatelets and smoking cessation, compared with usual care. Dr Redfern hoped that evaluating why this intervention did not succeed should help with developing future interventions.

**Telephone follow-up**
Dr Katja Adie, from the Royal Devon and Exeter Foundation Trust Hospital, outlined a smaller trial to assess whether telephone follow-up improved risk-factor management in recent stroke survivors with hypertension. Delivering four focussed telephone interviews within four months had no influence on changes in systolic blood pressure, weight, cholesterol, exercise or health-related quality of life between baseline and six months although medication knowledge was improved.

‘...further research needs to be looking at exploring in depth the motivators for change in health behaviour in patients after stroke and TIA so we can actually target our interventions properly...’
Dr Katja Adie
Life after stroke – care, recovery and mood

Towards client-centred long-term care

Chris Clark, Director of Operations at The Stroke Association spoke about the evolution of services, their rapid growth and new and innovative approaches now developing alongside the better known family and carer support and communication support services provided by The Stroke Association.

New and extended services will include increased family support, health promotion, community integration, day services and new long-term support groups. The future direction of services will be client led, promoting empowerment and control and informed by R&D.

He also launched the results of The Stroke Association’s impact survey, demonstrating the effect that its services were having in demonstrating that there is ‘life after stroke’.

This was illustrated by the story related by Anna Corr, a senior nurse from Northern Ireland, who had a stroke when aged 31 and who found that statutory services ended just weeks after her stroke. She felt lost and found it hard to cope before being introduced to The Stroke Association Northern Ireland’s Speechmatters programme and her problems began to be addressed. She steadily regained confidence and is now involved in training professionals, supporting peers, fundraising and awareness raising.

Anna’s story was an impressive illustration of The Stroke Association’s work in helping clients to feel better able to face the world, more in control and more positive about the future.

Electrical stimulation to assist recovery of upper limb function

Geraldine Mann, of the National Clinical FES Centre, Salisbury, reported a study to assess whether electrical stimulation, initiated by the patient’s movement and combined with practising meaningful tasks, restored useful upper limb function in people with chronic stroke.

In a ten-week feasibility study this approach helped the 15 volunteers with chronic stroke to improve their functional ability and quality of life, effects that were maintained after treatment stopped.

The group is starting a single-blind randomised controlled trial (RCT), and hopes to use the device at a more acute stage of recovery.

Mood after stroke

Kate Hill from the University of Leeds, BSRG award winner, presented her group’s study of mood state after stroke and its effect on outcome. Measures of mood and function and psychiatric assessments were made at intervals up to 12 months after stroke in over 400 stroke survivors.

Trajectories of mood symptoms in the six months after stroke showed four distinct classes of stroke survivors. Persistent depression in the first six months after stroke was associated with substantially poorer physical outcomes at 12 months, suggesting that a single mood assessment may not adequately identify those at risk of poor outcomes.
The UK Stroke Forum is delighted to be holding its fourth conference in the city of Glasgow. Hosted by The Stroke Association, the 2009 event will offer a high-quality programme specifically tailored for the needs of the modern multidisciplinary stroke care team.

This is the largest UK stroke conference of the year and we are expecting over 1,400 attendees. The event is accredited and will contribute towards continuing professional development.

For the latest information on the 4th Stroke Forum Conference 2009, visit the website at www.ukstrokeforum.org

Highlights will include:
- A varied programme of presentations by expert speakers in the field of stroke
- The latest developments in stroke research and patient care
- Poster displays of selected abstracts covering a range of categories
- A choice of educational training sessions free to all pre-registered delegates
- Company-supported additional satellite symposia
- The Ideas Fair presenting the latest innovations in the area of stroke
- Exciting social events including the spectacular Gala Dinner
- Civic Welcome Reception to be held at a unique city venue.

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