A Strategy for Stroke Research in Wales

2015 – 2020

1 INTRODUCTION

Stroke is one of the top three causes of death and the leading cause of adult disability in Wales. This is why it is a Tier One priority for the Welsh Government along with cancer and heart disease. Building on the foundations of Together for Health: Stroke Delivery Plan – A Delivery Plan for the NHS and its Partners, a comprehensive, cross-sector, stroke-specific, collaborative research strategy is now needed to harness the opportunities offered in Wales, creating an ambitious and innovative research environment. This takes advantage of an infrastructure in Wales that has developed to facilitate world-leading research and innovation in the prevention, diagnosis, treatment and care.

Stroke research is therefore a critical enabler in the health of our nation, contributing to the effective delivery of evidence-based medicine in our NHS, attracting investment and high quality research talent and vital for laying the foundation to the next phase of health and social care delivery in Wales. The stroke service in Wales already benefits from leading local research in related specialties and from worldwide research through the evidence-based National Clinical Guidelines. Wales must now develop its place on both the UK and the world scene for stroke.

This document therefore sets out the five-year strategy to support the development of a robust and sustainable stroke research environment in Wales.

2 WHY DOES STROKE RESEARCH MATTER?

Research prevents stroke

Research saves lives

Research improves the lives of stroke survivors

Research gives hope for a better future

A major international study published in 2014 showed that the global burden of disease from stroke is set to more than double by 2030. Increasing stroke prevalence in Wales will place rising pressure on families, friends, the NHS and social care services, and is only likely to grow unless further developments in stroke research to deliver effective prevention, treatment and rehabilitation are supported.

Wales as with many health and social care services around the World are facing increasing expectations of better quality, access and communication whilst at a time of restricted finances, increasing ill-health and inequality. The case for investing in stroke research has already been made: an international review of the evidence in stroke and cardiovascular disease demonstrated a return of 39%. In other words, a £100 investment in public and charitable expenditure on stroke produces a stream of benefits thereafter equivalent in value to £39 each year in perpetuity.
Vital investment in stroke research has prevented strokes, saved lives and reduced disability. For example, research shows that immediately treating patients after a TIA can prevent 80% of them going on to have a full stroke, and led to the development of the ABCD2 score that helps doctors identify TIA patients most at risk. Research also led to the use of thrombolytic drugs to dissolve stroke causing blood clots, and more recently to the development of devices to remove clots manually, both of which reduce brain damage and improve function.

New evidence from the Stroke Association shows that funding for UK stroke research continues to lag behind other major conditions despite the fact that stroke is the single biggest cause of complex adult disability. It is also known that patients who are involved in clinical studies tend to have better health outcomes.

To do this we need a clear stroke research agenda in Wales, and one that plays to its strengths. We need agreement on where the academic leadership locus should be situated and then we must develop it. At the same time we should create a research aware NHS workforce to stimulate greater involvement in stroke research and, crucially, a greater number of ‘home grown’ research studies.

“I never thought I’d get involved in anything to do with research, but research is the key to eliminating the impact of stroke on people’s lives. Only through research and involving people like us will critical issues about prevention, treatment and rehabilitation be answered and fully understood.”

Judith, lay member, Clinical Research Network, UK

I have benefitted enormously from Stroke Association groups in Wales and the coordinators who help me with my speech. Aphasia support is lacking in Wales so the more that can be done to improve research and then support would help. I did benefit from having thrombolysis and this has considerably improved my quality of life together with being on Nice approved drugs rather than warfarin.

Continuing research to help improve the quality of life after stroke is critical in Wales.

Nick C, Stroke Survivor, South Wales
4 AIMS

This strategy is based on the principles of prudent healthcare, engendering a culture that ensures stroke research is based on the legitimate needs identified in a co-productive approach with those affected by stroke. Wales must aspire to be as good as the rest of the UK, the latter being a world leader in stroke research.

To achieve our vision we have three major interrelated aims:

1. **Set a clear research agenda and funding streams**: To create opportunities for researchers and the public to participate in, and steer, the development of a clear research agenda for stroke in Wales for the benefit of the people of Wales. Using these priorities to identify and develop partnerships to target high impact research funding streams, including the European Union’s Horizon 2020 programme.

2. **Build an infrastructure able to deliver a stronger portfolio of research**: To develop grass-root research infrastructure to support the growth of stroke-specific research capacity and capability across sectors in Wales. To nurture ideas and turn these into fundable proposals. To provide mentoring to novice researchers and provide opportunities for professional exchange and support. Critically, attracting expertise and creating sustainable academic posts.

3. **Sustainable research environment**: Develop collaborations locally with existing world class neuro-vascular research. Enable the research infrastructure to build national and international links to promote Wales as a great place for stroke research.

This research strategy will address the knowledge gaps in service provision and reduce the inequalities around Wales paying particular attention to the needs of the rural areas and be consistent with the Prudent Health Care agenda in Wales.

We want stroke to have the same access as other major diseases to cutting edge research, to the best people and to resources. With a level playing field we can substantially accelerate improvements in treatment and rehabilitation of stroke in Wales.

The stroke specialty research lead will provide research leadership for methodology, workshops and collaborate with the new Centres and Units as well as HCRW and other potential funding bodies. They will encourage stroke survivor’s participation in multidisciplinary research.

There will be a further, key role in assisting partners in the Universities to attract senior academic stroke researchers for whom funding streams have already been identified.
In order to deliver the aims of this strategy a number of high-impact objectives to be implemented by 2020 have been identified and are listed in the table below.

Table 1. Aims and Objectives of a Maturing Stroke Research Environment in Wales

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<th>Research Identity, Priority Setting and Funding Streams</th>
<th>Infrastructure Development and Capacity Building</th>
<th>Sustainable Research Environment</th>
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<tr>
<td>- National Stroke Research Advisory Board including external advisors and Health Board/Trust executive leads</td>
<td>- Stroke Clinical Research Hub</td>
<td>- National Stroke Academic Health Research Institute</td>
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<td>- Stroke Research User Panel ensuring plans for full public and patient Involvement</td>
<td>- Training in research methodology</td>
<td>- Recruitment and retention of stroke expertise</td>
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<td>- Research priority setting programme for Wales</td>
<td>- Workshops and collaborations</td>
<td>- Membership of international organisations, e.g. European Stroke Organisation</td>
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<td>- Stroke Research Themes</td>
<td>- Supporting applications for further training and development opportunities (e.g. SA, BHF, etc)</td>
<td>- National target setting</td>
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<td>- Stroke Research Portfolio</td>
<td>- Supporting teams to get involved in trials</td>
<td>- Promoting Wales as a place for Stroke Research excellence worldwide</td>
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<td>- Stroke Research Network</td>
<td>- Mentoring scheme</td>
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<td>- Informing health and social care policy and practice</td>
<td>- Question writing and bid development</td>
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<td>- Calendar of events-themed workshops and Welsh Stroke Conference</td>
<td>- Collaborations with new Centres and Units</td>
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<td>- Website</td>
<td>- Clinical Chair leading stroke research</td>
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<td>- Annual reports of academic achievements</td>
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<td>- Funding to support the research program</td>
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<td>- Stroke research nurses/consultant nurses and therapists</td>
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Stroke care is a Tier One priority in Wales and multidisciplinary stroke research needs to be seen as an equal partner. We have a defined vision for stroke research in Wales that is intended to improve health and social well-being for the population. The strategy will be reviewed annually to ensure it remains in line with strategic intent.

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*Advances in stroke research can improve quality of life, influence patient care, and save resources. Research has the ultimate aim of making stroke a preventable and treatable disease, and improving the quality of life for people affected by stroke.*

*Stroke Delivery Plan Annual Report 2014*

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*The infrastructure in Wales allows for Wales to successfully contribute to world leading research and innovation in the prevention, diagnosis and treatment of many areas of ill health. I have been involved in working with the Stroke Association and stroke physicians, in both England and Wales since surviving a stroke in 2004, aged just 37 years old. Over the past 10 years, having lived through the effects of stroke and then having developed an increased understanding of the wider effects of stroke that encompass other people, their families and society as a whole I remain increasingly dismayed that, despite the expertise and care of our physicians, recent opportunities to develop stroke research agenda in Wales have been unsuccessful. Nevertheless, the ambition of an outstanding future for stroke research remains and I urge all with influence to support this strategy.*

*Andy McC, stroke survivor, South Wales*

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