LEAD CLINICIANS GROUPS:

Enhancing Clinical Engagement in Australia's Health System

The National Stroke Foundation in consultation with the Australian Stroke Coalition provides the following response to the Australian Government's Discussion Paper. We welcome the Discussion Paper and the opportunity to provide the following submission.

This submission addresses:

- evidence for clinical leadership in stroke care;
- current clinical engagement mechanisms in stroke care in Australia; and
- the specific issues listed for consideration in the Discussion Paper.

BACKGROUND

In Australia, there are approximately 60,000 new or recurrent strokes per year. Around half of these occur in people over the age of 75 and as the population ages the number of strokes occurring each year is expected to increase. The impact on individuals, families and the workforce is substantial. Approximately 89% of people who have a stroke are admitted to hospital, one in five of those who have a first-ever stroke will die within a month, one in three will die within the first 12 months [1] and about 88% of those who survive live at home, most with a disability.[1] The burden of stroke for Australia is significant, with one study estimating the total lifetime costs for all first-ever strokes in 2004 at $2 billion.[2]

National Stroke Foundation

The National Stroke Foundation is the peak national not-for-profit organisation that focuses on reducing the impact of stroke by preventing stroke, improving treatment and support for those with stroke. The National Stroke Foundation promotes evidence based practice by developing and coordinating *the National Clinical Guidelines for Stroke Management 2010*[3] , the national stroke audit program and a clinical quality improvement program called "StrokeLink". Significant advances in treatment over the last 20 years now mean the provision of evidence-

based stroke care, as outlined in the guidelines, can significantly reduce death and disability. It is also cost effective.

Stroke Society of Australasia

The Stroke Society of Australasia (SSA) is an organisation formed in 1989 by clinicians and researchers to tackle the enormous burden of stroke in our community. Membership of the Stroke Society of Australasia is open to professionals working in the field of stroke, or in kindred fields, who have an active interest in the work and aims of the Society.

Australian Stroke Coalition

The Australian Stroke Coalition (ASC) was established by the National Stroke Foundation and Stroke Society of Australasia on 11 July, 2008. The Coalition brings together representatives from groups and organisations working in the stroke field including the following:

> Stroke Society of Australasia, National Stroke Foundation, Stroke Services NSW, QLD Stroke Clinical Network, Victorian Stroke Care Network, SA Stroke Network (SASUN), WA Stroke Network (WASN) ,Tasmania Stroke Network (TASSUN), Northern Territory, Australian Capital Territory, Australian Physiotherapy Association, Australasian College for Emergency Medicine, Dieticians Association of Australia, Occupational Therapy Australia, Royal College of Nursing Australia, Royal Australasian College of Physicians, Australian and New Zealand Association of Neurologists, Australasian Faculty of Rehabilitation Medicine, Speech Pathology Australia, the Council of Ambulance Authorities, and Stroke Consumers.

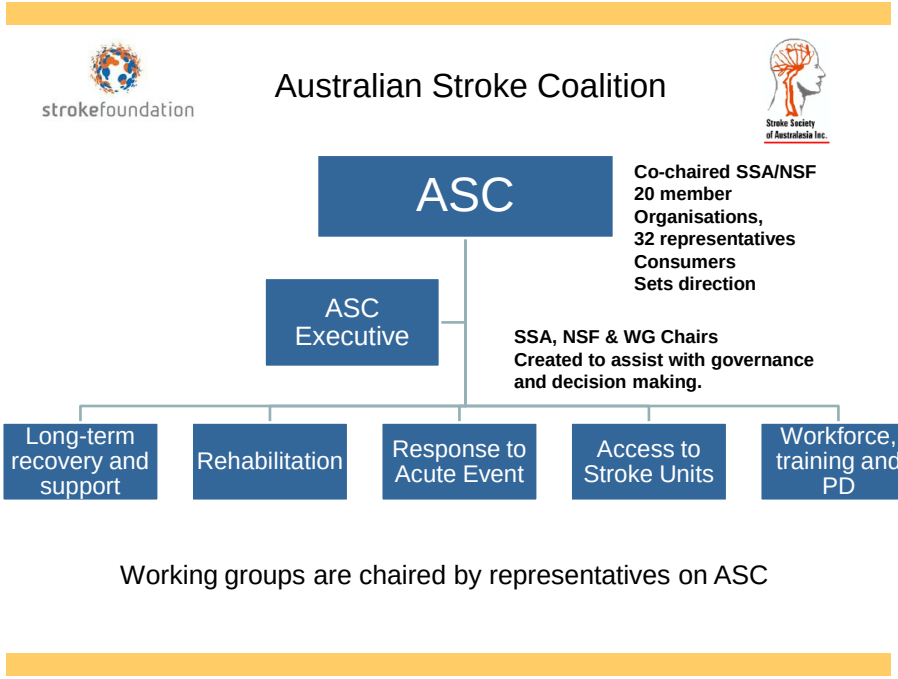
This group works together to tackle agreed priorities to improve stroke care, reduce duplication among groups and strengthen the voice for stroke care at a national and state level.

The ASC provides a critical communication link between relevant organisations and their members regarding stroke care in Australia and has the following objectives to:

- Develop a communication strategy to link ongoing and new stroke initiatives at a state and national level;
- Improve the delivery of clinical care across the entire stroke care continuum;
- Develop a set of national priorities for stroke care based on gaps identified in the national audit and other data sources;
- Determine a coordinated strategy by which to improve these priority areas; and to,
- Promote the activities of the coalition through its members and other avenues.

The ASC uses five working groups which are representative of the stroke care continuum to undertake projects that improve evidence based clinical care and standards, safety and quality improvements and deliver more effective care processes. It does this through the representatives of the ASC and the working groups piloting new projects and then implementing them throughout hospital and community networks in Australia.

An executive group of the ASC consisting of representatives from the National Stroke Foundation and the SSA as well as the chairs of the five working groups oversees the operations of the coalition. The ASC structure is shown below:



Working groups are chaired by representatives on ASC

The ASC and its working groups are supported by a secretariat that is funded by the National Stroke Foundation.

ISSUES IDENTIFIED IN THE AUSTRALIAN GOVERNMENT'S DISCUSSION PAPER

1. **What would the key role(s) of the National Lead Clinicians Group(s) need to include to effectively complement existing National level activity and in meeting the objectives?**

We suggest key roles to be:

- To link with developers of clinical guidelines and promote and champion evidenced based practice.
- To assist with the development of national clinical standards and clinical indicators.
- To promote the development and publication of local, state and national quality and safety initiatives aimed at improving clinical care.
- To highlight areas requiring change and improvement.
- Central point of information and communication between existing groups to ensure accurate information can be fed-up and in to the health reform process.
- To assist in identifying barriers and potential solutions to implementation of evidence based practice.
- Identify and eliminate duplication of resources and ensure efficient use of these resources.

2. **Are there alternative/additional opportunities or roles to those identified here?**

We believe the roles and opportunities indentified in the paper are comprehensive. The identified role of acting as a conduit for both the systematic dissemination of best practice guidelines could be expanded to include involvement with implementation activities as dissemination alone will have little impact on changing practice.

It should also be noted that any suggested roles and responsibilities should be complementary to already existing and effective clinical engagement strategies as noted in further detail below.

3. **How should a National Lead Clinicians Group(s) be structured and operate in order to provide optimal support to Local Lead Clinicians Groups (e.g option 1 or 2)? How could a National Lead Clinicians Group(s) best support clinicians, health care organisations and other structures under the NHHN reforms more generally?**

The treatment of stroke in the acute and post-acute phase requires significant inter-disciplinary team-work and coordination between pre-hospital, hospital and community services to deliver the most effective evidence-based care. As a result, the current models for leading stroke at the local, state and national levels are also interdisciplinary. For example, the National Stroke Foundation has a National Clinical Council consisting of experts from medical, nursing and allied health as part of its governance structure. As discussed earlier, the Australian Stroke Coalition (ASC) is also representative of all disciplines that actively manage stroke care. The ASC also includes consumers on its working groups.

Having a disease specific approach to clinical leadership enables clinical support and direction to be highly focused for the clinicians involved in that disease group. The leaders within the group are already motivated, passionate and driven to improve clinical care in their specific disease group. The clinical leadership group then becomes a highly specialised and informative group that is a point of reference for both clinicians and health care organisations at state, local and community level.

A disease specific approach to clinical leadership will also enable appropriate funding streams based on the case mix of the disease. This also enables outcomes and key performance indicators to be easily measured against the performance of the leadership teams. Evaluating the effectiveness of this reform will be much simpler with a disease specific approach. Established programs such as the National Stroke Foundation audit and the Australian Stroke Clinical Registry (AuSCR), which have excellent clinical engagement, could be readily used to measure such effectiveness. It is therefore preferable that any National Lead Clinician Group (NLCG) be disease specific allowing the many disciplines involved to be able to provide high level leadership and contribute to the quality of stroke care at the highest level.

The ASC provides a useful model that may inform this discussion and would be prepared to support further development of National Lead Clinician Groups (NLCGs). The structure of the ASC has provided a useful forum for gathering opinion about issues such as implementation and

clinical improvement, communicating across disciplines and through the many state and national stroke organisations and in many instances it has reduced duplication of effort. A similar approach would allow a NLCG to focus on the many facets of stroke care and its complexities and provide a formal clinical governance structure at the national level. The ASC could be used as an avenue to recruit experts in the stroke field for the NLCG to avoid duplication of effort. The NLCG could be a conduit to communicate national priorities including changes in evidence based care, safety and quality improvements and more effective care processes to Local Lead Clinician Groups and bring local and state agendas together nationally.

4. **What linkages (e.g. membership, information flows, work programming) would be required between the National Lead Clinicians Groups and relevant existing organisations to embrace these opportunities/roles? How would this impact on a National Lead Clinicians Group(s) model?**

   In order to embrace opportunities presented by the NLCGs linkages with a number of existing organisations is required with some specific organisations relevant if a stroke specific NLCG is established.

   In general, linkages will be required with a range of organisations, for example:

   - Those currently developing clinical guidelines (in stroke, the National Stroke Foundation);
   - Those coordinating and developing tools to improve quality of care such as the ACHS (in stroke, State Clinical Networks, the National Stroke Foundation, the Australian Stroke Coalition and the Stroke Society of Australasia);
   - Those promoting data collection such as registry coordinators (in stroke, the Australian Stroke Clinical Registry consortium and the National Stroke Foundation); and
   - Research bodies.

Linkages could be established in a number of ways. The Australian Stroke Coalition provides a working example that may inform this thinking. For example:

- **Membership**

  The membership of a stroke specific NLCG should be inclusive of all medical, nursing and allied health disciplines actively involved in stroke care and may consider membership from organisations that are critical to the group's objectives, even if this membership is not clinical. Participation in meetings of the NLCG by these organisations would ensure clear communication at all times. The NLCG may also benefit from including representation from health consumer groups and carers to ensure services are responsive to their needs. The membership of the NLCG might be sourced from existing lead groups (such as the ASC) which already have well established relationships with existing professional organisations and networks specifically relevant to stroke.

- **Work programming**

  Communication and relationships between the NLCG and relevant organisations could ensure that programming of relevant work include appropriately timed briefings between the two, consultation with the NLCG and even LLCG, piloting of relevant material, etc. Links between the Australian Stroke Coalition and its member organisations has been successfully attained using these methods since the Coalitions inception.

- **Information flow**

  Information flow through the NLCG member back to their professional colleagues and to the NLCG will assist in ensuring clinicians not actively involved in the NLCG are aware of key issues and their input, via group members may also be gathered through consultation and fed back to the group. Regular information about activities of the group, or of relevant organisations will also be important. The establishment of a disease/issue specific model for NLCGs allows this process more readily.

- **Consultation**

  Consultation by the NLCG with relevant existing organisations and vice versa will also assist in maintaining linkages.

The importance of these linkages may impact on the NLCG as membership may be broader than clinical only, with the model considering membership, or regular attendance for briefings, by relevant organisations.

In the stroke domain, it will be important for the NLCG to link with peak non-government organisations such as the National Stroke Foundation, which is currently responsible for guideline development and is significantly active in developing programs to improve quality of care. There are also a number of well-established state stroke networks and these networks already have excellent relationships with the National Stroke Foundation. These relationships have developed through the dissemination and implementation of the clinical guidelines and subsequent sharing of audit data. Data has been a major driver of clinical activity in the state networks.

Local Lead Clinicians Groups

5. **What are the opportunities for improved local clinical engagement in achieving the objectives? What additional clinical engagement needs could be met by Local Lead Clinicians Groups?**

Engagement with clinicians at a local level is critical in achieving the objectives of the health reform. Experience in the stroke field tells us that without coordination and effective communication between regional/state and national networks to the local level, there is duplication of effort and potential misinterpretation of evidence, which can in turn lead to locally developed protocols that may not reflect best practice. As outlined in the attachment A, *Clinical Engagement Mechanisms in Australian States and Territories,* much work has occurred, at a state level to, improve clinical practice within each state and territory. Within South Australia, New South Wales, Victoria and Queensland vibrant and effective clinical networks already exist. All of these networks have been developed around disease groups or issues and have significant links to other health structures such as local health networks.

Strong coordination will be needed between the significant number of local lead clinician groups associated with local health networks and national lead clinician groups. The ASC is currently able to achieve this by having membership drawn from across the care continuum

with representatives encompassing state-based clinical networks, national health professional associations relevant to stroke and the lead NGO as well as through strong communication.

It will be important to consider the role of state clinical networks in local clinician engagement and their relationship to the NLCG and Local Lead Clinician Groups (LLCGs). Currently state clinical networks for stroke are active supporters of engagement and improved clinical care at a local level. This may mean the make-up of state based clinical networks, is altered slightly to ensure representation of local lead clinician groups on one state group. This model is already in place within some of the state based stroke clinical networks having representation from all of their area health networks.

6. **What linkages (e.g. membership, information flows, work programming) could be made with existing structures to best meet the objectives? What linkages would be required between Local and National Lead Clinicians Groups to allow each to effectively fulfil their roles?**

From a stroke perspective, there are a number of existing structures that are relevant to the role of the Local Lead Clinician groups and work on promoting evidenced based guideline development, guideline implementation, clinical frameworks, standards and indicators. Groups such as the NICS guidelines development group, the National Stroke Foundation, the National Vascular Disease Prevention Alliance and the Australian Stroke Coalition have already developed systems for communication, looking at representative membership and efficient planning.

The NLCG and LLCGs must be aware of all groups that have significant overlap with their stated objectives. In order to link effectively to existing structures, cross group membership, particularly between groups that share aims and objectives, should be encouraged. For example, the ASC has membership from each state clinical network to ensure national representation but also to assist with communication. The NHMRC guidelines development network has encouraged clinical guidelines developers to share information outside of their area of health in order to improve the process and efficiency of guideline development. With cross group membership information flows can then be at an individual to individual level as well as group-to-group.

As well as cross group membership, understanding of these groups structures, planning cycles, and methods of communication will assist the NLCG and LLCGs add to the current complex

make-up of clinically related groups. Linkage between the NLCG and LLCGs could include an overlapping planning cycle that allows influence for higher-level policy to be made

The NLCG would have work plans aimed at promoting evidence based clinical practices and standards, safety and quality improvements and more effective (and efficient) care processes. They would work with state and local networks to trial strategies to achieve change in these areas. Local networks could feedback success or other wise of these locally implemented strategies that could be fed back up for discussion and review.

Communication with multiple Local Lead Clinician Groups will be paramount. Given the number of LLCGs planned, and their anticipated diversity, the strongest link may be best achieved through clear communication, regular consultation and strong networks (see response to Q9).

7. To what extent does clinical engagement currently translate into decisions about clinical care? What are the factors that influence this (e.g. barriers and enablers)?

From a stroke perspective, clinical engagement currently translates highly into decisions about clinical care and is critical to work being done in the stoke community to improve quality of care. For example:

- **Knowledge and dissemination of clinical guidelines.** Clinicians from all relevant disciplines in stroke care are engaged through advisory committees, the National Stroke Foundation clinical council, the ASC, state networks and through consultation and discussion about implementation. This high level of engagement has meant the guidelines have then been promoted and discussed at many of the meeting and forums held by these clinical groups. Clinicians gain ownership of clinical guidelines. This in turn increases guideline use and improves the way in which they are shared between colleagues.
- **Clinical data collection.** Clinicians actively participate in the National Stroke Audit and are involved in the Australian Stroke Clinical Registry which has been promoted and supported by the ASC and state-based clinical networks. The data is then fed back to clinicians within individual health services and through the state based networks and is used to inform future quality and safety initiatives.

- **Quality and safety initiatives.** Clinicians were consulted and directly involved in the development of national stroke performance indicator set and the National Acute Stroke Framework. These two initiatives, in combination with the clinical guidelines and clinical data, identify gaps and set benchmarks for clinical care in Australian Hospitals. Clinicians and clinical networks can then develop strategies to address these gaps and improve care.
- **Activities of the ASC**. Clinicians involved in the ASC working group projects have developed protocols, rehabilitation assessment tools, care plans and education frameworks to promote implementation of best practice evidence-based care. This has been achieved through high levels of engagement within the working groups and across the ASC as well as through local networks where these projects are being piloted.

The stroke experience has demonstrated that the following factors facilitate engagement:

- **Effective planning and collaborative priority setting**.
- **Strong clinical leadership** in discussions.
- **Clinicians prepared to use their own networks** and work groups to provide practical solutions to the issues that are then implemented nationally.
- The **use of clinical data** to drive change. Self reported clinical data collected through the National Stroke Foundation National Stroke Audit, state clinical networks and other mechanisms has been crucial in engaging clinicians. This data is used to identify gaps in service delivery and clinicians can then explore strategies for change.
- **A patient-centred approach to care**, that is, improving quality and safety by focussing care on patients and consumers, increases clinician engagement and satisfaction with their work.
- **Targeted communication from networks to clinicians** on topics of interest, networking and relationship building through educational forums and face-to-face workshops and site visits to study innovative clinical practice.
- **Presence of organisational support** is needed for clinicians to be involved in a clinical leadership group and its associated activities. Often clinicians lose interest when the projects that they have committed their time to are not funded or resourced well enough.

- **Resource management control.** Clinicians are also further enabled when they have some level of control over the management of the resources within the leadership group.

Based on our experience with the ASC and other stroke networks, factors that may be a barrier to engagement include:

- membership changes which affect continuity;
- over commitment of specialised clinicians due to competing interests;
- lack of specialists in the required discipline; and
- lack of support including specific funding for the majority of the projects.

8. **What local level investments would achieve the greatest progress towards the objectives of Lead Clinicians Groups? What form would this investment need to take (e.g. time, focus, funding etc? Should funding be block funding, project based funding, investment in tools, education or other activities)?**

A common thread amongst successful clinical networks and quality improvement strategies has been the provision of a project funding and a dedicated human resource to coordinate the network, engage clinicians and facilitate communication. In both NSW and Victoria as part of their commitment to improving stroke services, funds have been provided to employ staff within health services. In Victoria, stroke clinical facilitators have been employed to facilitate quality improvement processes. The facilitators established local multi-departmental/level and multi disciplinary stroke committees, chaired by executive members of staff who reviewed data, identified priority areas for change and develop action plans with regular review. One crucial element of any successful clinical network is the commitment of the clinical lead. In Victoria clinical leaders have been employed one day a week to commit more fully to the task at hand.

Project funding also drives clinical engagement and commitment to change. Funds can be allocated for a specific clinical improvement task, overseen by the clinical leadership group, for the sole purpose of improving care. This approach has been successful with many of the stroke clinical networks for projects such as improving swallow screening rates and improving the provision of education to primary care.

In Queensland the National Stroke Foundation has been funded to provide the StrokeLink program. StrokeLink is a comprehensive, multifaceted quality improvement program (similar to a modified breakthrough series) designed to link clinical audit data with best practice care outlined in the guidelines. This program coordinates its activities with the stroke clinical network. In Queensland, where the program is funded, StrokeLink offers a range of interventions based around outreach visits by trained staff using interactive educational formats and local consensus processes. A key component of the program is the identification of local barriers to quality improvement and the development of an agreed action plan to overcome these barriers.

Another common investment in the state clinical networks has been the appointment to a network manager, an experienced and knowledgeable health professional charged with supporting the function of the network. This person works closely with clinical leads in establishing work programs and ensuring communication is clear between members and between national and local health bodies.

9. What communication pathways should be established from the National Lead Clinicians Group(s), and from State-wide committees/structures, to Local Lead Clinicians Groups?

Establishing communication between groups will be critical with any planned changes. The ASC, with members from national and state representative bodies has developed a communication strategy that ensures information flows both into the ASC from its members and back out again to the organisations and subsequently to the clinicians they represent and provides a working model that may be useful in this thinking. Successful communication strategies include:

- Regular updates provided to all members to lessen the likely hood of duplication and overlap of work;
- Clearly defined terms of reference, roles, responsibilities and communication methods;
- Cross-representation of membership between groups, committees and structures provides strong linkages between standard setting and coal-face engagement;
- Use of survey, questionnaire and engagement tools. Use of a variety of communication tools such as surveys and questionaries has proven to be a useful mechanism for

feedback and communication between ACS national membership and the broader engagement in issues of clinical best-practice; and,

- Regular email updates and newsletters outlining current activities and outcomes.

In addition, as noted in Attachment 1, *Clinical Engagement Mechanisms in Australian States and Territories*, the state stroke networks in Australia have well-developed relationships with national groups such as the National Stroke Foundation and the ASC, across other state networks and with their local hospital networks. These networks are well placed to be able to enhance the communication between NLCGs and LLCGs by using their existing communication plans and frameworks. Representation from state networks on NLCGs and LLGCs may also increase communication capability.

CONCLUSION

The establishment of disease specific National Clinical Leadership Groups and Local Clinical Leadership Groups has the potential to significantly improve stroke outcomes across the Australian community by empowering clinicians to focus on clinical issues specific to their area of expertise.

The ultimate success of these clinical leadership groups will be reliant on appropriate organisational support and funding at all levels and their ability to communicate with existing well-established clinical networks and organisations.

We look forward to further discussions with the Department and its external advisory group regarding the introduction of Clinical Leadership Groups across the Australian health care system, and to the opportunity to provide further detail on this submission.

Appendix 1

CURRENT CLINICAL ENGAGEMENT MECHANISMS IN STROKE CARE IN AUSTRALIA

State-based stroke clinical networks exist in NSW, Victoria, Queensland, South Australia.

- **South Australian Clinical Network:** The SA Clinical Network was established in 2009 to implement the SA stroke plan. The SA Stroke Plan has a number of recommendations within it, many of which relate specifically to data collection programs and the StrokeLink program. These include the development of nationally consistent Key Performance indicators, state-wide quality improvement initiatives and benchmarking of data. It also states the need for a central database to collect data and that all hospitals should participate in national audits and associated quality improvement activities.

- **Victorian Stroke Clinical Network** was formed to assist with the development and implementation of the Stroke Care Strategy for Victoria (SCSV). The SCSV provides a framework for the delivery of public acute and sub-acute stroke services in Victoria from 2007 for the next five to 10 years.

- **Queensland Stroke Clinical Network:** supported by Queensland Health, is chaired and driven by clinicians. It has a strong emphasis on data as a key part of monitoring improvement, identifying gaps in service delivery and quality, and driving service planning. It is responsible for developing plans aimed at improving stroke services throughout Queensland. This network, has worked as part of the Clinical Practice Improvement Centre (CPIC) subsequently Centre for Health Care Improvement (CHI) since its inception in 2006. The network has encouraged a coordinated approach to data collection, through participation in ongoing clinical data collection as well as the National Stroke Foundation clinical audit and uses this data actively in quality improvement activity in conjunction with StrokeLink Queensland to create action plans aimed at driving change at a local level. This includes active integration with local hospital and district structures and administration.

- **NSW Stroke Clinical Network** is the most established clinical network and part of the NSW Agency for clinical innovation. (The Agency) The Agency builds upon the work of the Greater Metropolitan Clinical Taskforce (GMCT) and uses the expertise of its Clinical Networks to engage doctors, nurses, allied health professionals, the wider community, public health organisations, managers, industry, scientists and academia in the process of identifying high quality, safe and cost-effective ways to care for patients within the NSW public health system. The Stroke Clinical network has been responsible for supporting the employment of a state-wide network of stroke coordinators. Previously these coordinators have contributed to a NSW hospital audit and feedback program designed by the National Stroke Research Institute where each hospital gets a detailed hospital report used by the local stroke champions to make changes to clinical practice. These data are also used as part of planned education and traveling road shows undertaken across the state. Currently all of the coordinators and many other Hospitals are involved in the National Stroke Foundation stroke audit and a smaller number are pilot sites in the stroke registry. Rural stroke coordinators have also been employed to develop local solutions in more regional and remote locations.[5, 6]

- **Australian Stroke Coalition** – state clinical networks and professional organizations from all stroke-related disciplines are represented on this coalition (refer pages 2-3).

- **Stroke Society of Australasia (SSA)**

The Stroke Society of Australasia (SSA) was formed in 1989 by clinicians and researchers endeavoring to tackle the enormous burden of stroke in our community. The number of members has steadily increased to approximately 280. Membership of the Stroke Society of Australasia is open to professionals working in the field of stroke, or in kindred fields, who have an active interest in the work and aims of the Society. Their current membership includes physicians (e.g. neurologists, geriatricians, rehabilitation specialists), other medical professionals, non-medical clinicians (e.g. nurses, physiotherapists, occupational therapists, psychologists), researchers (e.g. basic scientists, epidemiologists), and professionals from government and non-government organisations.

The Stroke Society of Australasia currently has two special interest groups. These are the Australasian Stroke Trial Network (ASTN) and the Australasian Stroke Unit Network (ASUN). Membership of both networks is open to members of the Stroke Society of Australasia. History and special interest groups

The SSA has strong ties with the National Stroke Foundation, as the two organisations share the common objective of overcoming the problem of stroke.

The main activities undertaken by the Stroke Society of Australasia include:

- Conducting an annual scientific meeting. (Go to conferences and invited speakers)
- Providing awards for New Investigators, members travelling overseas for stroke-related work, and acknowledging people who have championed stroke.
- Providing input to guidelines on stroke care.
- Contributing to the Australian Stroke Coalition.
- Providing representation on federal and state committees which formulate government policy on stroke.

The aims of the SSA are to:

- further the study of all aspects of stroke
- improve standards of management of stroke in Australia and New Zealand
- foster investigation and research in all aspects of stroke
- disseminate and promote the exchange of information about stroke within Australasia, and with similar bodies overseas
- solicit and enlist financial support from any source to fund and promote scientific work within the field of stroke
- build capacity in the stroke academic and clinical workforce
- provide a vehicle for education and increasing knowledge about stroke
- provide forums for setting priorities in stroke and stroke research

Australasian Stroke Trial Network (ASTN)

In 1996 the SSA formed the Australasian Stroke Trial Network (ASTN). Its main aim is to facilitate participation of stroke units around Australasia in national and international multicentre therapeutic trials. This covers both industry-funded and investigator-driven research, and includes trials in both acute stroke treatment and secondary prevention. The ASTN is the coordinating body for stroke trial centres in Australasia and allows a professional interface between researchers/clinicians undertaking stroke trials and the pharmaceutical industry.

The chief aim of the network is to ensure a coordinated strategy for involvement of the Australasian Pacific region in International Stroke Trials and to facilitate optimal communication and collaboration between centres in our region.

The ASTN currently includes 35 centres in Australia, New Zealand, Singapore and Hong Kong.

Currently work is in progress to form an Australian Stroke Research Network to expand on the ASTN.

Australasian Stroke Unit Network (ASUN)

The Australasian Stroke Unit network (ASUN) is a sub-group of the SSA and was established in 2002. Its main aim is to facilitate best clinical practice in stroke care by developing a communication network for information transfer regarding stroke care service delivery.

The Australasian Stroke Unit Network (ASUN) was initiated to:

- establish a network and resource to promote and facilitate the development of effective models of stroke care delivery
- facilitate the dissemination of information on standards and policies of stroke care as identified as being relevant for stroke care in Australia and New Zealand.

ASUN has played an important role in the development of the state stroke clinical networks. ASUN continues to support the activities of these networks and represent many stroke clinicians at a national and state level.

The current activities of the network include:

- establishing ongoing communication and networking amongst stroke specialists for discussion of clinical issues
- providing a distribution point for information about current updates in clinical practice including initial versions and updates of National Stroke Foundation/Stroke Society of Australasia endorsed practice guidelines
- providing a forum for development of stroke care performance indicators

REFERENCES

1. Australian Institute of Health and Welfare and S. Senes, *How we manage stroke in Australia.* Australian Institute of Health and Welfare, 2006. **AIHW cat. No. CVD 31**.
2. Cadilhac, D.A., et al., *Estimating the long-term costs of ischemic (IS) and hemorrhagic (ICH) stroke for Australia: new evidence derived from the North East Melbourne Stroke Incidence Study (NEMESIS).* Stroke 2009(40): p. 915-92
3. Australian Commission on Safety and Quality in Health Care (ACSQHC), *Patient-centred care: Improving quality and safety by focusing care on patients and consumers – discussion paper*, 2010.
4. Cadilhac DA, Kilkenny M, Longworth M, Pollack M, Levi C. The metropolitan-rural divide for stroke outcomes: Do stroke units make a difference? *Intern Med J* 2010; *available online 7th June*.
5. Cadilhac DA, Pearce DC, Levi CR, Donnan GA. Improvements in the quality of care and health outcomes with new stroke care units following implementation of a clinician-led, health system redesign programme in New South Wales, Australia. *Qual Saf Health Care* 2008;17(5):329-33.