SUBMISSION IN RESPONSE TO DEVELOPING A WORKFORCE STRATEGY FOR QUEENSLAND
12 August 2016

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To whom it may concern

The Stroke Foundation is the peak national non-government organisation for Stroke in Australia and appreciates the opportunity to provide a submission in response to the Queensland Health Discussion Paper: Developing a Health Workforce Strategy for Queensland.

With over 8,300 stroke patients being admitted to stroke units in Queensland in 2015, the Stroke Foundation is keen to ensure the Queensland workforce strategy will meet the growing demand for services in the future particularly noting that it is estimated that there will be over 182,000 stroke survivors in Queensland by 2050.

Please do not hesitate to contact me if you have any questions or need further information.

Yours Sincerely

Libby Dunstan
Executive Officer - Queensland
Stroke Foundation
Background to stroke in Australia

Stroke is a leading cause of disability in Australia. A complex and highly individual health condition it is often a life changing event – for the stroke survivor, their family and their carers. Stroke happens suddenly meaning there is no time to prepare for its consequences. Many people have little knowledge about stroke before it happens to them or a loved one and unfortunately it is not well understood in the community. Lack of knowledge increases the difficulties experienced after stroke and impacts people’s ability to participate in decisions about their treatment and care, particularly when they have experienced an acquired brain injury and may have cognitive impairment. Lack of knowledge in the general community has a negative impact on the availability and quality of support and services for stroke survivors, families and carers which can result in delayed recovery and a significant impact on a survivor’s ability to participate fully in society.

This year alone, there will be over 50 000 strokes in Australia – including 8 300 admissions in Queensland. These new incidences will add to the existing 440 000 stroke survivors in the Australian community. Almost 88 000 of these stroke survivors live in Queensland. Some of these strokes will lead to premature death, while others will result in permanent disability, reduce functional independence and future quality of life. Many survivors will require individualised and ongoing care support. It is estimated that around 58 000 stroke survivors in Queensland live with some form of disability.

Stroke survivors, carers, family members and friends often rely on the Stroke Foundation for information on stroke treatment, care, impact and recovery. Where possible the Stroke Foundation begins providing people with information and support immediately after their stroke and continues for as long as required. Disease-specific organisations are often a first point of call, and in the case of stroke, the Stroke Foundation strives to raise awareness of supports and services for stroke survivors.

Stroke in Queensland

The Stroke Foundation currently collaborates with the Queensland Statewide Stroke Clinical Network and provides multiple programs including surveillance and health promotion programs such as the Know Your Numbers program and StrokeConnect post discharge follow up services. It actively contributes to research and the development of clinical guidelines\(^1\), has developed interactive web based resources such as InformMe and EnableMe, provides quality improvement programs such as Strokelink; and conducts annual National Stroke Audits.

Being a large state with a geographically dispersed population, Queensland faces challenges with access to services for regional and remote communities across sixteen Hospital and Health Service (HHS) areas and Primary Health Networks (PHN). One of the challenges for the provision of health services across a large regional area is the need to transfer patients across HHS’s and collaborate in a ‘spoke site’ model with specialist metropolitan services.

The delivery of health services is also increasingly impacted by an ageing population and the increasing prevalence and incidence of chronic diseases such as stroke. In 2010-2012 chronic disease accounted for approximately 80% of premature deaths, 38% of all hospitalisations and had an

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\(^1\) National Stroke Foundation. Clinical Guidelines for Stroke Management 2010. Melbourne, Australia
allocated expenditure of $9.6 billion in Queensland.\textsuperscript{2} Stroke was reported as one of the leading sources of premature death and disability.

In Queensland, the capacity to plan, deliver and evaluate high quality stroke services and an appropriate health workforce strategy continues to be a health priority for Queensland, with stroke sites demonstrating slightly lower average adherence to elements of the Acute Stroke Clinical Care Standards compared to national figures (see Figure 1 below).

The National Acute Services Stroke Audit 2015 \textsuperscript{3} (covering both an organisational survey and clinical audit) of 185 hospitals revealed that just one stroke service in Australia achieved adherence to all Acute Clinical Care Standard elements and qualified as a comprehensive stroke service.\textsuperscript{4}

Stroke medical management continues to undergo significant transformation as clinical trials demonstrate increasingly beneficial outcomes from endovascular clot retrieval interventions compared to standard intravenous thrombolysis and this becomes standard practice.\textsuperscript{5} Rapidly changing hyperacute medical management requires innovation, organisation of services (eg. dedicated stroke medical leads and stroke coordinators) and overall collaborative workforce management to ensure access to thrombolysis and endovascular therapy.

Strategic workforce organisation and resourcing, including whole of government collaboration and partnership with non-government organisations, such as the Stroke Foundation, will ensure the achievement of quality patient outcomes and reduce the overall burden of disability and mortality.

The Queensland Acute Services State Report 2015 indicated that 8305 stroke patients were admitted to stroke units in Queensland. The report noted opportunities for increased adherence to quality indicators. The following were areas specifically mentioned as needing improvement:

- Rapid transfer, assessment and investigation via coordinated regional stroke systems.
- Access to onsite endovascular stroke service.
- Number of patients receiving thrombolysis.
- Dedicated stroke medical lead.
- Early access to standardised rehabilitation processes.
- Provision of telehealth services for acute assessment and treatment.
- Regional responsibility (eg. coordination across a health service).
- Rapid access to transient ischaemic attack (TIA) assessment and clinics.
- Patient to bed ratio in hospitals with a stroke unit.

Despite significant advancements in the treatment of stroke many patients continue to miss out on access to best practice care and are continuing to experience poor outcomes, increased mortality, morbidity and disability.

Nationally only 26\% of appropriate patients received thrombolysis within 60 mins of hospital arrival compared to the United States of America (43\%) and the United Kingdom (56\%).

\textsuperscript{2} The health of Queenslanders 2014: Fifth report of the Chief Health Officer Queensland
\textsuperscript{3} Stroke Foundation National Acute Service 2015 State Report - Queensland
\textsuperscript{4} Australian Commission on Safety and Quality in Health Care Acute Stroke Clinical Care Standards 2015
In Queensland the percentage of stroke patients that access intravenous thrombolysis with no exclusion was only 16% and although this has improved marginally over the past few years it is still considerably lower than accepted levels of best practice Figure 1 below provides a snapshot of Queensland’s adherence to the national indicators of care.

<table>
<thead>
<tr>
<th>Recommended care</th>
<th>QLD 2009 %</th>
<th>QLD 2011 %</th>
<th>QLD 2013 %</th>
<th>QLD 2015 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received stroke unit care (all hospitals)</td>
<td>40</td>
<td>46</td>
<td>49</td>
<td>77</td>
</tr>
<tr>
<td>Swallow screened/ assessed before oral intake</td>
<td>54</td>
<td>65</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Received intravenous thrombolysis (no exclusions)</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Door to needle time intravenous thrombolysis within 4.5 hours of stroke onset (median, hours)</td>
<td>NA</td>
<td>NA</td>
<td>1:36</td>
<td>1:30</td>
</tr>
<tr>
<td>Assessed by physiotherapy within 48 hours</td>
<td>55</td>
<td>58</td>
<td>67</td>
<td>72</td>
</tr>
<tr>
<td>Discharged on antihypertensives (all stroke)</td>
<td>76</td>
<td>80</td>
<td>78</td>
<td>76</td>
</tr>
<tr>
<td>Antithrombotics on discharge (if ischaemic stroke)</td>
<td>93</td>
<td>97</td>
<td>94</td>
<td>96</td>
</tr>
<tr>
<td>Received behaviour change education</td>
<td>33</td>
<td>49</td>
<td>47</td>
<td>69</td>
</tr>
<tr>
<td>Received carer training</td>
<td>5</td>
<td>44</td>
<td>34</td>
<td>57</td>
</tr>
<tr>
<td>Care plan provided</td>
<td>48</td>
<td>54</td>
<td>52</td>
<td>66</td>
</tr>
</tbody>
</table>

Figure 1. Comparison of Queensland’s adherence to national indicators of care (Clinical Audit data)

**Stroke Prevention**

A workforce strategy for health should include a strong focus on prevention.

In 2015 a Queensland Parliamentary Committee reviewed the possible establishment of a Queensland Health Promotion Commission. The Parliamentary Committee agreed that there was strong support for the establishment of a Queensland Health Promotion Commission and noted that costs to the Queensland healthcare system are underestimated as not all healthcare expenditure is allocated by disease and there is a transfer of costs associated with management of chronic disease, such as the provision of disability services and residential care.

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In 2013 the total cost of stroke health expenditure was estimated by Deloitte \(^7\) to be $881 million with State Governments contributing $233 million 26.4%, the Australian Government 42.7% $376 million and the cost to individuals, families and carers $111 million 18.3%.

The overall direct and indirect costs are likely to be grossly underestimated and the associated strategic workforce planning in relation to stroke is much broader than the direct cost to Queensland Health. Consideration of the costs to Government, such as the cost associated with long term disability support and care needs to be considered in a National Disability Insurance Scheme (NDIS) context where the NDIS rollout budget is estimated to be $22.2 billion.

Queenslanders have access to a good quality of life and are amongst the healthiest in the world however there are increasing risk factors leading to increased levels of chronic disease, poorer health outcomes and increasing health system costs. Health promotion is an important driver of prevention of risk factors and can contribute to the reduction of risk through programs targeted at individuals, settings or whole communities.\(^8\)

Currently in Queensland the model for health promotion is the responsibility of the Preventative Health Branch within Queensland Health. For prevention to be cost effective and achieve positive health outcomes, a comprehensive and systemic approach is required.

Moving forwards there are increasing opportunities in Queensland through whole of government collaboration and partnership with non-government organisations, such as the Stroke Foundation, who have access to established systems of program delivery and advocacy across state jurisdictions to target and deliver priority action areas in health promotion, service delivery, advocacy and quality improvement.

In addition to the above comments on the impact of stroke on the Queensland health workforce, the Stroke Foundation also has a specific response to some of the discussion questions.

**Discussion questions**

1. **Which factors do you consider will have the most significant impact on the health workforce in the period to 2026?**

Globally, health care systems are faced with escalating costs, the need to improve quality and outcomes and expanding access.\(^9\) At a local level in Queensland additional challenges include a vast State and geographically dispersed population which creates barriers to access services in regional and remote communities. Additionally, there are 16 HHS with challenges to develop collaborative protocols to deliver health services across HHS boundaries.

The delivery of health services will also be increasingly impacted by changing demographics with an ageing population and increasing prevalence and incidence of chronic diseases. In 2050 there will be

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\(^7\) Deloitte, The Economic Impact of Stroke in Australia 2013  
\(^8\) Parliamentary Committee Submission, QUT: Inquiry into the establishment of a Qld Health Promotion Commission. 2015  
\(^9\) Ernst and Young, Megatrends 2015 Making sense of a world in motion
over 183,000 Queenslanders living with stroke which will require additional resourcing for acute management, rehabilitation and result in long term costs of disability management.

Changing models of health care service delivery will require Governments to adopt whole of government approaches and increasingly invest in health promotion and disease prevention in collaboration with not for profit organisations and private service providers to seek sustainable systems.

Increasing use of data and mobile health technologies is also enabling real-time information creation and analysis. These trends are driving fundamentally different approaches beyond the delivery of health care “sick care” to an increasing focus on healthy behaviours, prevention and real-time care.10

Better data collection enables smoother pathway for patients between different elements of the health system, potentially reducing duplication of services and more efficient health care delivery. Data can also drive quality improvement reducing bed stay in hospitals and improving health outcomes.

The emergence of new medical management protocols and standards of clinical practice will require collaborative workforce planning strategies in Queensland. Best-practice stroke care requires patients to be treated in a dedicated stroke unit with multidisciplinary specialist clinicians. The Acute Stroke Services Framework recommends that these units be established only in hospitals that see more than 75 patients per year to ensure that specialist skills can be maintained. Consideration needs to be given to appropriate resourcing to support the establishment of primary stroke centres and comprehensive stroke centres, noting the latter including infrastructure and workforce to support delivery of hyperacute therapy such as thrombolysis and endovascular clot retrieval.

The availability of these comprehensive stroke centres will need particular workforce planning strategies to ensure the development of specialist skills in the workforce, particularly with the increasing use of endovascular clot retrieval and equitable access to these services for all Queenslanders.

3. What do you consider are the top three priorities for the health workforce in Queensland?

One of the key priorities in relation to stroke management is the establishment of comprehensive stroke services which include the following elements of service:

- Organised pre-hospital services - includes the use of validated screening tools by paramedics, appropriate pre-notification systems, established transfer and back transfer protocols.
- Coordinated emergency department systems (includes use of validated screening tools; agreed triage categories; protocols for tPA intervention e.g. “Code Stroke”; pathways to facilitate urgent access to imaging etc)
- Coordinated regional stroke systems - this includes protocols for hospital bypass, transfer from non-stroke hospital to Primary Stroke Service or Comprehensive Stroke Service etc.

10 Ernst and Young, Megatrends 2015 Making sense of a world in motion
• Acute stroke team - currently only a medical lead and stroke coordinator are detailed as the minimum standard however the literature recommends access to an interdisciplinary team is the minimum standard.

Consideration should be given to including performance measures for each of the elements to drive improvements in service delivery particularly in the larger centres.11

4. What are the key barriers and enablers in delivering on these priority areas?

The Stroke Foundation is a strong advocate for the establishment of clinical guidelines and standards as they enable consistency across health systems. The Acute Stroke Clinical Care Standard was released in June 2015 by the Australian Commission on Safety and Quality in Health Care (ACSQHC) which details 19 suggested process indicators covering seven quality statements. While many of the indicators are based on existing national performance indicators for stroke this report provides all indicators, except assessment by ambulance services.

14. What do you consider is the greatest challenge in redesigning the health workforce and how should this be approached?

The Stroke Foundation recognises a significant challenge will be redesigning the health workforce to ensure collaborative models of service delivery across the continuum of care and equitable access for all Queenslanders.

For people impacted by stroke, living with ongoing disabilities and impairments there also needs to be a focus on collaborative delivery of services that support interaction between national health and disability systems to improve wellbeing and quality of life for the person with a disability, particularly for people with complex needs.12 13

11 National Acute Stroke Services Framework 2015 - Summary of data and literature review
12 Considerations for the NDIS design: The health and Disability interface for people with complex needs living in shared supported accommodation, 2015
13 Centre for Disability Research and Policy University of Sydney, Young People in Nursing Homes National Alliance, 2014, Service Coordination for people with high and complex needs: Harnessing existing cross-sector evidence and knowledge