Neurosurgical Society of Australasia
ABN 50 283 605 567 Incorporated in New South Wales

Submission
Productivity Commission 2005

Introduction
This response is on behalf of the Neurosurgical Society of Australasia (NSA) and relates to the provision of neurosurgical services to the Australian community, the training of neurosurgeons and workforce issues. Although the NSA is also involved in New Zealand training this paper relates only to Australia.

Current Neurosurgical Workforce
There are currently 119 practising consultant neurosurgeons in Australia. They are fairly evenly distributed over the states as shown in the table below. There are 8 consultant female neurosurgeons. This number will increase as the percentage of female neurosurgical trainees is currently 22%. We do not see that an increasing feminisation of the workforce will alter the hours worked as all female neurosurgeons and trainees are very committed and work equally as hard as the male neurosurgeons.

Total Neurosurgeons			Population (millions)		Ratio	Female
Queensland	20	16.8%	3.93	19.7%	196,500	3
NSW/ACT	42	35.3%	6.81	34.1%	162,143	1
Victoria	33	27.7%	5.03	25.2%	152,424	3
Tasmania	3	2.5%	0.48	2.4%	160,000	0
SA/NT	9	7.6%	1.74	8.7%	193,333	1
WA	12	10.1%	2.01	10.1%	167,500	0
AUSTRALIA	119	100.0%	20	100.0%	168,067	8

Current Neurosurgical Trainee Numbers
There are currently 57 trainees in Australia registered in the Royal Australasian College of Surgeons Specialist Surgical Training Program in Neurosurgery. The Training Program takes a minimum of 5 years after several years of basic surgical training. Most trainees spend 1 or 2 years in overseas positions on completion of the Training Program before returning to practise in Australia. The average age of commencement of independent neurosurgical practice is 35. The Training Program, selection and supervision of trainees and all matters relating to training are undertaken by the NSA on behalf of the Royal Australasian College of Surgeons in accordance with the Memorandum of Understanding between the two organisations.

Adequacy of Numbers
The NSA is of the view that the numbers of consultants and trainees is about right. There will from time to time be a local shortage due to retirement or illness but looking in a 5-15 year time frame the numbers are about right. The number of trainees that we have trained in the last 6 years is actually in excess of the AMWAC recommendations (the AMWAC study of 2000 into the neurosurgical workforce recommended 6-8 new trainees per year; there have been an average of 12 new trainees per year taken into the Training Program in the time frame 2000-2005). In view of the small community of neurosurgeons and the fact that 97% of neurosurgeons are members of the NSA we believe that we are in a unique position to be able to assess needs, training numbers and to respond rapidly to changing requirements. We are keen to work with government and AMWAC to further define requirements and projections. Our society has made such an offer to AMWAC in a letter dated 31 May 2005 but to date have received no reply.

Training Mechanisms
As a small community the only realistic option for training the next generations of neurosurgeons is for the continuation of the current system in which members of the neurosurgical community on an unpaid and voluntary basis are involved in the selection, training, mentoring and supervision of trainee neurosurgeons. About 50-70% of all consultants are involved to some degree in training, some devoting as much as 6 hours per week to this task. (There are a few key persons who devote up to half their time in training issues on an unpaid basis). Ideas such as universities or other organisations taking over training are so far fetched as to not warrant comment. There is some use of private facilities for training – this will probably increase but there is a limit; the contract for private operative treatment is between the surgeon and the patient and does not allow for surgery by the trainee.

Rural Services
Neurosurgery by its nature requires extensive support from Intensive Care Specialists and units, other health professionals and the highest quality of facilities. The equipment requirements are expensive and include MRI Scanners, CT Scanners, Digital Subtraction Angiograms and extensive theatre equipment. A conservative estimate of the cost of setting up an adequate neurosurgical unit is in the order of $6 million. It is also our view that a single man unit is not viable because of exhaustion (on call all the time), lack of colleague support, professional isolation. For these reasons we are of the view that the minimum population requirements is in the order of 300,000-350,000 with two neurosurgeons. Consequently neurosurgery is limited to the larger population centres. In general most units are in the capital cities but there are a small number of viable and quality units elsewhere, namely Townsville, Penrith, Wollongong, Newcastle and Gold Coast. We do not believe that there are any other rural or non-capital centres that satisfy the criteria for a quality neurosurgical unit. However many rural and remote areas are served by visiting neurosurgeons – examples are Darwin, Ballarat, Launceston, Northern NSW, Broken Hill, Cairns and Rockhampton. The advent of modern web based transmission of radiological images has meant that in emergencies remote areas can benefit from transmission of images and the advice of a neurosurgeon in another city. Such services need to be expanded.

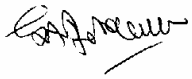
Indigenous Issues
The issue of indigenous health is of concern to the NSA. The outreach services provided either in person or by phone link to the areas of major indigenous population is a means of providing neurosurgical services to these communities. We rely heavily on the local primary health providers for emergency care in such communities and have available in print or on line “The management of acute neurotrauma in rural and remote areas”. (www.nsa.org.au)

Public and Private Sectors
Virtually all neurosurgeons provide public hospital services at some time in their career and most provide some service for their entire professional career. However the public sector is proving to be an increasingly unpleasant environment for neurosurgeons. The sources of dissatisfaction include inadequate operating time availability, poor theatre facilities, increasing bureaucratic interference in clinical matters, lack of acknowledgement of the contribution of the neurosurgeon to emergency care and marginalisation in regard to governance decisions. An increasing number of neurosurgeons are voting with their feet and leaving the public sector because of these factors. There needs to be an urgent and major revamp of the public hospital sector to improve efficiency and lessen wasteful practices. Much more money needs to be spent to expand services in the public sector. There is no point in having surgeons and theatre staff sitting around doing nothing because a theatre list has been cancelled because of no beds. Neurosurgeons are keen to operate in the public sector if they are given the opportunity. There needs to be innovative ideas and cooperative planning.

Job Satisfaction
Most neurosurgeons are content with their professional lives but have in recent years been very dissatisfied regarding medical indemnity issues. The Federal government package has alleviated this enormous financial burden to some degree but any reversal of the measures instigated by the reforms would again see neurosurgeons looking at early retirement or a change from clinical work.

Migration Issues
As we are confident that our training numbers reflect the needs of the community and the projected future requirements there is no need at all for overseas recruitment of neurosurgeons.

Prepared by



Glenn McCulloch on behalf of the Neurosurgical Society of Australasia
31 July 2005