Submission to the Productivity Commission's Health Workforce Study, on behalf of the Australia and New Zealand Society of Nephrology

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On behalf of the Australia and New Zealand Society of Nephrology

Background

The Australia and New Zealand Society of Nephrology (ANZSN) thanks the Productivity Commission for the opportunity to make a submission to its study of the health workforce.

ANZSN is the professional body representing the interests of nephrologists in both Australia and New Zealand. The functions of the society include standards setting and maintenance, education, training, organisation and running of scientific meetings and educational workshops, and advocacy on behalf of nephrologists, allied health groups, and patients.

The practice of nephrology (or renal medicine) encompasses physicians, registered through the Royal Australasian College of Physicians (RACP), who care for patients suffering from the range of diseases affecting the kidneys. A significant proportion of the workload is taken up by the care of those with end stage kidney failure, where "renal replacement therapy" by either dialysis or kidney transplantation is utilised.

ANZSN, on behalf of its members, is extremely concerned about the current shortage of trained nephrologists in this country, and fearful that the shortage will significantly worsen within the next 5-10 years. The reasons for this current and evolving shortage are many and complex, and this submission will summarise key areas.

Nephrologists work almost exclusively as consultant physicians, with little or no scope for procedural work. Most of the practice of nephrology takes place within the public hospital system, with relatively little scope for meaningful or lucrative private practice. A significant reliance on expensive technology, investigations and treatments, has largely kept dialysis and transplantation within the public system. Nephrology traditionally has a strong academic base, and nephrologists have long contributed greatly to the teaching and research effort within the public hospital system.

While the practice of nephrology is highly specialised (and so much of it is somewhat mysterious to most other medical practitioners), nephrologists also share many features with the other threatened species known as the "general physician".

These shared features include:

- caring for complex patients with multiple medical problems, requiring long consultations and much work separate from direct patient contact;
- managing multiple medical issues in multiple systems in the one patient, rather than simply concentrating on one organ or system;
- working as a consultant rather than a procedural physician;
- poor remuneration due to the disparity between reimbursement for consultation vs procedural work;
- difficulty attracting new trainees into the field; and,
- difficulty attracting qualified individuals into regional Australia.

These are the features of a specialty characterised by "high stress but low income", which is a poor combination when faced with a competitive market place for attracting and retaining medical graduates. Nephrologists in Australia share this

peculiar disadvantage with general physicians compared to other medical specialists. Simple examination of Medicare reimbursements confirms that nephrologists rank the lowest amongst specialist physicians. Unavoidably the level of reimbursement is a powerful driver of career choice and working hours. Other busy and highly stressful areas of medicine (for example, cardiology and neurosurgery) have dramatically higher rates of reimbursement. In contrast, other relatively low income specialists (eg rheumatology) are not burdened by the complexities, stresses and after-hours work of the life-threatening acute medicine that is typical of nephrology. In even more stark contrast, some specialist areas have managed to combine low stress with high income.

The low remuneration rate of nephrologists in Australia is not typical of other developed countries. In the USA, Canada and most of Western Europe, nephrologists are amongst the highest paid of specialist medical practitioners. This is mainly because nephrologists in those regions of the world are reimbursed for the supervision of dialysis patients, little of which is available in this country.

It is also a reality that the current wave of graduates are and will continue to work shorter hours as doctors, and so the busy and relatively low-paid specialty of nephrology is fighting a losing battle to attract such individuals. In the past, a perceived attraction of nephrology practice was the complex, challenging medicine that it involved, but that is now proving to be our “Achilles heel”.

The diminishing attractiveness of nephrology practice is already impacting on our ability to service the needs of patients with kidney diseases. Of great concern, though, is that even conservative projections of the future workload reveal a much more worrying picture.

Renal disease is increasingly common in Australia, and there has been a steady increase in the prevalence of patients with end stage kidney disease (ie requiring dialysis and/or kidney transplantation) for several decades. This comfortably exceeds the rate of population growth over the same period. The rate of increase in number of end stage kidney disease patients is steady at 5-6% per annum over the last 10 years + (**Table 1**). All projections are that this increase will continue, largely driven by two factors:

- the increasing rate of diabetes, which is now the most single common cause of end stage kidney disease; and,
- more successful care of patients with end stage kidney disease, so that patients on dialysis or with a kidney transplant are surviving longer.

ANZSN has commenced a survey of the current nephrology workforce in Australia, and relevant results are attached to this submission (**Table 2**). Currently Australia has approximately 171 (full-time equivalent (FTE)) adult nephrologists in practice, which equates to 8.6 per million population (or 1 nephrologist for every 116,000 residents), or 1 nephrologist for every 79.5 patients with end stage kidney disease (dialysis and transplant patients). It is estimated that 33 (FTE) nephrologists will retire in the next 5 years.

Assuming a continued growth of 5.5% per year in end stage kidney disease patients, Australia will have 18,787 dialysis and transplant patients by the end of 2009. In order

to keep the same ratio per nephrologist (79.5), we will need 236 FTE nephrologists by the end of 2009.

Taking into account the projected FTE retirements (33.0), that equates to an additional 97.6 FTE nephrologists. Based on the current ratio of full-time to part-time (136/82), it means that we will need to train approximately 150 nephrologists to fill those positions. Currently approximately 10-15 trainees enter nephrology training programs in Australia each year – assuming that they complete training, this approximates to 50-75 new nephrologists in the next 5 years. Again, based on the ratio of full-time to part-time work, this number will be barely enough to cover retirements, and will not compensate for the additional workload.

Two additional sources of more work for nephrologists are also highly relevant.

Firstly, the rate of renal disease amongst the indigenous population of Australia is catastrophically high, usually associated with multiple medical co-morbidities, and largely sited in remote communities. It is very difficult to find nephrologists willing to take on the daunting challenges of this disadvantaged group.

Secondly, there is now a major and appropriately scientifically-based strategy to screen more widely and aggressively for kidney disorders. Ultimately this should lead to both reduction of severe or end stage kidney disease, and better care of those with established kidney disease. While much of this strategy is aimed at primary caregivers, unavoidably an increase in the workload for nephrologists will also result.

Suggested solutions

ANZSN submits that the current and future quality of care of patients with kidney disease in Australia is under great threat due to reduction in the ability of the nephrology workforce to cope with the workload. While the society is hopeful that more effective preventative and treatment strategies will eventually lessen the workload, such benefits are unlikely to significantly impact for several decades. In the meantime, ANZSN is strongly of the opinion that major changes are necessary in order to cope with the expanding burden of kidney disease.

Remuneration

ANZSN believes that improving remuneration for nephrologists is a key (or the key) to solving the nephrology workforce problem. Caring for patients with kidney disease is complex, often involving much work away from direct patients contact, and nephrologists regularly care for non-kidney disease in these patients (eg, often fulfill the role of diabetes, cardiology and hypertension specialists). This complexity should be recognised by the reimbursement system.

A specific answer to the remuneration question would be to introduce a standard fee for supervision of patients with end stage kidney disease. This could commence when the patient reaches an agreed level of renal dysfunction (eg, creatinine clearance of 20 ml/minute), and continue through dialysis and/or transplantation. It would be over and

above the fees for direct patient contact, and would recognise the considerable burden of supervision of such individuals 365 days of the year.

Funding training and consultant positions

Currently there are sufficient training positions within Australia to cover the projected workforce requirements, but many of them are not filled by RACP accredited trainees in nephrology. Maintenance of the number of training positions is vital.

Most of the workload of caring for patients with kidney disease is centred on the public health system, as is the vast majority of teaching and research in the field. Even those nephrologists in private practice usually maintain a significant public hospital presence, in order to access the high technology necessary for care of dialysis and transplant patients. It is vital that funding of public hospital consultant positions is maintained and keeps pace with the workload requirements.

Alternative workforce

Renal medicine has a long and very successful tradition of utilisation of "non-nephrologists" to care for patients with kidney disease. The day-to-day process of haemodialysis (usually for several hours 3 times per week) is conducted by highly specialised dialysis nurses, who have considerable autonomy in decisions about patient care matters. In some centres, these roles have been formalised into nurse practitioner positions, in recognition of their skilled and essential nature. This process will continue to evolve, and ANZSN submits that maintenance and expansion of this highly specialised workforce is vital to appropriate care of patients with kidney disease.

An alternative and already currently utilised source of additional nephrologists is overseas trained physicians. A number of such physicians are already employed in Australia, particularly in the more remote areas of the country, and the current and future difficulties in meeting our workload demands make it very likely that this will increase. The majority of such physicians come from India, and are very well trained, but this removes skilled medical practitioners from their home countries. Assessment of overseas trained physicians, and maintenance of standards, places a considerable burden on the RACP as well as the ANZSN, but is and will continue to be a necessity in the absence of sufficient Australian trained nephrologists.

Summary and conclusion

The current nephrology workforce is struggling to cope with the demands of caring for patients with kidney disease. While the workload is increasing, the workforce is aging and diminishing in number. The ANZSN wishes to alert the Productivity Commission to this impending crisis, and respectfully requests that important (but relatively minor) changes to the current system are necessary to alleviate this situation.

Table 1

Number of end stage kidney failure patients in Australia, at 31st December
(number per million population)

Year	#dialysis patients	#transplant patients	Total
1994	4100 (230)	4045 (227)	8,145 (457)
1995	4529 (251)	4210 (233)	8,739 (484)
1996	4893 (268)	4413 (241)	9,306 (509)
1997	5197 (280)	4649 (251)	9,846 (531)
1998	5549 (296)	4865 (259)	10,424 (555)
1999	6021 (318)	5053 (267)	11,074 (585)
2000	6410 (335)	5250 (274)	11,660 (609)
2001	6850 (353)	5454 (281)	12,304 (634)
2002	7265 (370)	5725 (291)	12,990 (661)
2003	7674 (386)	5951 (299)	13,625 (685)
2004	7952 ()	6269 ()	14,221 ()

(data from Australia and New Zealand Dialysis and Transplant (ANZDATA) reports – http://www.anzdata.org.au)

Table 2: Number and workload of Australian Nephrologists, March 2005

Full-time	136
Part-time	82
Full-time equivalent (FTE)	171 (estimated)
#nephrologists per 10^6 population	8.6
#dialysis patients per nephrologist	44.8
#transplant patients per nephrologist	34.7
#end-stage kidney failure patients per nephrologist	79.5
Estimated #retirements in next 5 years (FTE)	33