Productivity Commission Health Workforce Study

Submission by the ADIA

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1 EXECUTIVE SUMMARY

- The promotion of a career in diagnostic imaging in the context of international workforce shortages will require maximising the competitiveness of the industry. This will need the Government and the profession working together to enhance the professional standing of radiologists, support access to new technologies, and to create a level of profitability which sustains competitive salaries for radiologists.
- The distinct contribution of the complementary roles of professional radiologist and technologist must be maintained and supported, in the interests of efficient, high-quality imaging services.
- The rules relating to supervision of imaging must be made flexible enough to support the efficient delivery of the technical service whilst maintaining the important professional role of the radiologist, for example, by allowing remote supervision and reporting to service rural or regional areas.
- Additional funding for radiologist training positions should be made available on a contestable basis, to allow competition for those places by the private sector. In addition, funding for training places must be quarantined within the Australian Health Care Agreements.
- Joint approaches to training between the private sector and public hospitals to find places for the significant number of trainee positions that have gone unfilled due to lack of funding should be seriously investigated.
- Salary packaging should be carefully reviewed as a policy which penalises the private sector. Remuneration should match skill and be independent of favourable tax treatment.
- The federal government must intervene immediately to prevent cost shifting by public hospitals; diversion of funding from private practice is having a negative impact on the ability of the private sector to recruit and retain an adequate workforce.

2 INTRODUCTION

The ADIA is making this submission to emphasise that issues in the delivery of diagnostic imaging are having a serious impact on:

- A sustainable workforce
- Sustainable service provision
- The ability to recruit radiologists
- Access to and affordability of high quality diagnostic services.

Health care is a complex web of interrelated components, which means that change in one part of the system will inevitably have an effect, sometimes unintended, in other parts. Placing control of health care under one federal authority, managed by people with expertise and real experience in the health sector, and accountable to the Australian public by the Minister and the Government through the parliamentary process, has the potential to reduce much of the inefficiency and duplication in the current system.

The lack of a defined national heath care policy means that resources are being wasted by a system that is increasingly failing to meet the needs of its consumers, namely patients and their doctors. Current policy is not addressing the need for an integrated system of delivery that includes a clear articulation of who is responsible and by what criteria will they be measured.

Currently the government seems to expect that a rational delivery system meeting the needs of all Australians will happen by default, and that depressed facilities in metropolitan suburbs, both public and private, where there is no potential for gap payments, will attract the workforce. The current system is unsustainable, as insufficient Medicare funding is eroding the quality of the services and access to them. Where there is choice due to workforce shortages, people choose to work where their services are appreciated and more appropriately rewarded. Current workforce issues will progressively and quite rapidly lead to a decline in rural services, which are already barely viable, and the further erosion of outer metropolitan services.

Considering radiology as a commodity overlooks the essential nature of what is a medical consultation using imaging techniques. By any measure, radiology services are efficient and bridge the areas of early diagnosis and prevention, disease management, risk stratification and wellness maintenance. Yet the system is failing to recognise these roles, with many receiving no public funding at all. Through capped funding arrangements the industry is being compensated progressively less while government reaps significant benefits.

Interventional radiology techniques, including endoluminal repair of aneurysms in the brain and aorta, abscess drainage, breast biopsy, angioplasty and many others, has delivered massive savings to the health system and markedly reduced trauma to patients, including shortening the length of hospital stays, yet none of these savings has been recognised and passed on to the profession. The profession is trying to deliver world class services in a system that has perverse incentives. Disenfranchising radiologists from MRI and PET scanning, as happens under current policy, results in deskilling of the workforce and

compromises patient care. While unequivocal evidence confirms the advantages of MRI, present policy does not allow delegation of this choice to the professional radiologist.

The impact of this on the workforce is self evident. How can there be a sustainable career structure when many of the essential tools of examination are rationed by government policy and the professional disenfranchised from the essential skills required for continued professional development? Why would a professional choose to practice in an area of medicine where government policy is compromising patient care and forcing inappropriate treatment choices? Such professional constraints impact workforce sustainability in the face of a global shortage of radiologists.

There is no substitute for radiologist-supervised, appropriate, clinically-oriented integrated diagnostic services.

3 COMPETING IN A GLOBAL MARKETPLACE

- The health system relies on high quality, professional diagnostic imaging services in order to deliver appropriate care to the community.
- A global shortage of radiologists means Australia must develop innovative solutions to attract and retain adequate numbers of diagnostic imaging professionals.
- Cost containment policies that restrict professionals' access to particular imaging techniques make practising in Australia less attractive to the workforce in a global market.
- Good regulatory practice means balancing bureaucratic rules with pragmatic, flexible solutions that support efficient and accessible health care delivery.

To date, Australia has failed to train enough radiologists to meet the current levels of demand.[1] The 2001 Australian Medical Workforce Advisory Committee (AMWAC) report on the specialist radiology workforce concluded that the radiologist workforce was inadequate, with a shortage of not less than 37 FTE specialist radiologists. As a result, it recommended that the graduate output of the Royal Australian and New Zealand College of Radiologists (RANZCR) training program be increased from an average of 36 per year to 52 per year.[2] Despite attempts to rectify the shortfall, the 2004 RANZCR Workforce Survey has *found "a significant possibility of some widening in the gap between supply and demand of radiologist services over next few years, assuming historical and predicted supply and demand trends continue. The degree to which productivity gains (for example, via digital image management systems) can continue to bridge this deficit over the next few years is unknown, but is possibly limited."*[3]

1 Jones DN (2002), 2002 Australian radiology workforce report, Australasian Radiology 2002 September; 46(3):231-48.
2 AMWAC (2001) The Specialist Radiology Workforce in Australia: Supply, Requirements and Projections 2001 – 2011, AMWAC: Canberra.
3 RANZCR (2005) 2004 Diagnostic Radiologists and Radiology Trainee Report – Australia, RANZCR: Sydney.

The increasing reliance on recruiting overseas trained doctors (OTDs), does not deal with the underlying shortage of Australian graduates for whom the health system is competing in a global health workforce market. For example, the supply of South African trained radiologists, which has been vital to maintaining quality services, has now dried up. Australia is no longer the destination of choice for graduates. It is imperative that Australia becomes self-sufficient in training its radiology workforce; one way to achieve this would be through boosting the number of training places available in the private sector.

In the context of an acknowledged shortage of radiologists it is essential that the workforce is able to be adaptable. The complexity of current provider number and medical registration processes is a barrier to Australian graduates working in Australia that needs to be removed. A uniform national medical registration system is critical. To obtain greatest advantage from the new IT capabilities, scarce super-specialist resources need to be nationally available.

Increasing sub-specialisation in all areas of medicine,[4] and self-referral of diagnostic imaging tests by consultant physicians, is devaluing the role of the radiologist as a cost-effective deliverer of problem-oriented, radiologist-supervised investigation. Self-referral also eliminates one of the critical internal audits, that of 'arms-length' referral, which holds significant clinical and economic advantages. Recent US studies have shown that non-radiologists order more tests than radiologists, particularly where a non-radiologist physician is self-referring for imaging tests, as in cardiology.[5] In addition, a review of the evidence on self-referral in the US found that deficiencies in image quality and patient safety were up to 10 times as common among non-radiologists (including non-physician providers) as among radiologists.[6]

Furthermore, the current funding arrangements in radiology are arbitrary and inflexible. They discourage or prevent appropriate substitution of services or funding flexibilities between modalities based on actual demand. Radiologists do not have the legal power to determine what is best for the patient even when they are best placed to advise. The current restrictions on test substitution are framed within a regulatory framework which sends the message that radiologists cannot be entrusted with this responsibility as are their colleagues. When the ability to practice is so constrained, the attractiveness of the profession is diminished.

Under the capped silo funding arrangements, a superseded technology can continue to be promoted and the rebate for these tests goes up as demand falls and the cost shift has to be borne by the other silo. This means greater gaps and eventually greater safety net payments. But it also means doing more for lower rebates and this impacts morale and is creating increased workloads that impact on recruitment. The radiology profession has made $408 million of savings under the last MOU and these have been returned to the Australian people by subsidisation of MRI in public hospitals and stable outlays. This is simply the wrong solution.

The future models and roles of the imaging specialist need to be understood against the background of an analysis of demand drivers, principal among which

[4] Wilkinson D, Dick MLB, Askew D (2005), General practitioners with special interests: risk of a good thing becoming bad?, Medical Journal of Australia 183(2); 84-86.

[5] Levin DC, Rao VM (2004) Turf Wars in Radiology: The Overutlization of Imaging Resulting from Self-Referral, Journal of the American College of Radiology 2004; 1:169-172.

[6] Kouri BE, Parsons RG, Alpert HR (2002), Physician Self-Referral for Diagnostic Imaging: Review of the Empiric Literature, American Journal of Roentgenology: 179, October 2002.

is technology change. There is little if any rigorous information about these. Having access to the latest diagnostic imaging technologies can increase the attractiveness of Australian radiology practice. Many private radiology practices are providing MRI as a loss leader, as a means of attracting the limited workforce to the practice. It is simple. No magnet, no recruitment; no financial incentive, no recruitment, as this inevitably means uncompetitive salary packages.

MRI and other recent advances such as expanding applications in CT and other modalities have added value to clinical decision-making and have lead to substantial increases in the productivity of treating doctors and broader ranges of patient treatment and management options, leading to substantial improvements in their patients' quality of life. These have been achieved with great lowering of costs due to a reduction in invasive testing and the savings in bed stays. These new imaging technologies and techniques mean that less invasive, better quality images and more sophisticated and accurate measurements are available almost instantly (at least in urban areas) to treating doctors. This is a critical issue. GP efficiency is driven by clinical confidence and this is in large part due to testing. Recent research shows that clinical examination has been largely replaced by testing and that physical examination is not undertaken until test results are available. GP efficiency is predicated on an efficient imaging system.

ADIA RECOMMENDS THAT:

- Current efforts to increase transportability and mutual recognition of qualifications among the state medical boards are finalised as soon as possible.
- The Government should more explicitly support the 'arms-length' referral system as the most effective method of promoting access and quality and containing costs in the health system.
- The promotion of a career in diagnostic imaging in the context of international workforce shortages will require maximising the competitiveness of the industry. This will need the Government and the profession working together to enhance the professional standing of radiologists, support access to new technologies, and to create a level of profitability which sustains competitive salaries for radiologists.
- The rules governing radiology services be modified to allow the radiologist to substitute modalities where appropriate to achieve the best clinical and cost-effective outcomes for all involved.
- The rules relating to supervision of imaging be made flexible enough to support the efficient delivery of the technical service whilst maintaining the important professional role of the radiologist, for example, by allowing remote supervision and reporting to service rural or regional areas.

4 WORKFORCE SUBSTITUTION

- Radiology is a professional medical service where a patient is examined using imaging techniques to provide a medical opinion. It is the combination of good technical images and the critical contribution of the radiologist in

appropriately interpreting their relevance in the context of medical management that ensures effective and efficient diagnosis and treatment.

- Productivity is enhanced when the role of the radiologist is complemented by a supportive infrastructure, including adequate and well-trained technical staff.

It is questionable whether the current policy drive for provider substitution will achieve greater equity and overall efficiency, rather than having limited, short-term cost-driven outcomes. There is evidence from the United States that the use of nurses or physician assistants increased radiologist productivity by as little as 0.2%.[7] Furthermore, radiologists practising in Australia "appear to have relatively high productivity, including by some international comparisons".[8] There are also worldwide shortages in many of the professions earmarked to substitute for professional services; in radiology this includes technicians.[9]

A high quality radiology service involves the radiologist consulting with the patient to decide on an appropriate investigation, tailoring the study to the patient's specific needs, interpreting the images in the context of the clinical history obtained during the consultation, providing a diagnosis or differential diagnosis and finally advising the referrer on the future management of the patient. Attempts to reduce radiology services to a purely technical function will inevitably result in reduced care.

The courts have also upheld the view that the images belong to the radiologist who provides the opinion on them; that is, they have recognised that the service is not simply a technical commodity. The specialist practitioner also carries the medicolegal responsibility for care. Although the workforce impacts related to professional insurance have largely stabilised, it is arguable whether referring doctors would be prepared to carry an additional liability if the service being provided is reduced to a purely technical one.

Technologists perform an intermediary technical role between the referral and the radiologist's opinion. Proper use of multidisciplinary teams can improve the delivery of care, and nurses and technologists have a significant role in the radiology team. However, less qualified professionals cannot be expected to provide the same level of service as the specialist medical professional.

Role extension of technical staff may lead to a range of unforeseen consequences, including negative cost impacts of staff shortages, increased education costs, potential entrepreneurial costs, and costs of repeating inappropriate and poorly performed tests where technicians do not have the clinical experience to provide meaningful, holistic reports. Lack of expert knowledge may drive the use of expensive, high-risk technologies that are neither cost-effective nor appropriate. Independent radiographer practice was a contributing factor in the expansion of 24-hour bulk billing clinics, which created an artificial demand for services by facilitating self-referral and non-arms length arrangements and resulted in legislative change.

[7] Batchelor J (2004) Technology, technique help ease radiologist shortage, http://www.auntminnie.com/index.asp?Sec=sup&Sub=imc&Pag=dis&ItemId=63446, accessed 20/7/05.
[8] Jones (2002), op cit.
[9] Reuters Health (2001) Healthcare workforce shortage already serious, http://www.auntminnie.com/index.asp?Sec=nws&sub=rad&pag=dis&ItemId=50916, accessed 20/7/05.

The ADIA acknowledges that professional frustration is causing many radiographers to leave the profession, the result of a training program which has selected highly intelligent people into a career constrained by barriers that cannot be removed without additional clinical training. However, ADIA opposes role extension if this means giving technologists the right to accept referrals and make Medicare claims. The Australian medical system must not be allowed to deteriorate into a two-tiered system that provides second-rate care for those who cannot afford gaps, or for patients in parts of rural Australia who cannot access locally-trained doctors, through the imposition of short-sighted, short-term cost-cutting measures.

Technology can bridge some of these gaps in availability. New developments in e-health and tele-radiology will allow remote supervision in country areas where the front line will be technologists working under technological supervision. Diagnostic imaging is an industry leader in IT applications and in remote supervision and provides a model for improving access to other services, however uptake has been held up by a lack of Government support. Common IT platforms that deliver national broadband access in health care have major cost implications for the industry and for patients. There is reluctance in the private sector to invest in particular technology when policy may make the investment obsolete. Guidelines for IT use in radiology must have no cost or medical barriers to uptake and support the radiologist's overall responsibility for the episode of care.

The provision of radiology services is inherently more efficient when appropriate investment is made in IT infrastructure, equipment and professional management. Enabling the private sector to move quickly into this area is critical to the best deployment of radiologist resources and to the maintenance of rural services.

ADIA RECOMMENDS THAT:

- The distinct contribution of the complementary roles of professional radiologist and technician is maintained and supported, in the interests of efficient, high-quality imaging services.
- Government invests in the urgent development of common IT platforms and connectivity standards to promote greater use of e-health and tele-radiology and support better access to radiology services in rural and regional areas.

5 EDUCATION AND TRAINING FOR QUALITY DIAGNOSTIC IMAGING SERVICES

- A variety of factors are contributing to the shortages in the radiology workforce.
- The decline in outpatient teaching in public hospitals has lead to an increasingly important role for the private sector in radiologist training, provided appropriate funding is made available.

- In an international workforce market, all areas of the diagnostic imaging industry must compete for appropriately qualified workers.

"The supply and demand of radiologists in Australia are [sic] influenced by many factors. For example, radiologist supply can be influenced by factors such as the perceived attractiveness of radiology as a career, the availability and nature of training positions, immigration barriers, state licensing issues, and site/ provider accreditation."[10]

Current medical training has resulted in deskilling in anatomy, physiology and understanding of the mechanisms of disease. The intern training programs have serious deficiencies when it comes to achieving experience in complex disease management which is the essence of radiology. This inevitably puts pressure on the early years in radiology training.

Radiology training involves a five-year postgraduate program, with Part 1 covering the College curriculum in basic sciences (completed by the second year) and Part 2 involving on the job training, visiting lectures, and specific training in pathology and diagnosis. Trainees can also do an additional year for a senior sub-specialty fellowship. Training places are continuous for the five years (except for paediatrics rotations). The scope of the specialty is seen to be too general when graduates are looking for acknowledgeable expertise in smaller areas of practice. Currently there is very little sub-specialty training in Australia, which leads many radiologists to seek further experience in the USA and elsewhere, compounding the problem of workforce sustainability.

The role of the tertiary hospital as an academic institution has also declined, diminishing the strength of the training program. The dissipation of outpatient infrastructure in the public hospital system, with outpatient services being shifted onto private clinics, has lead to a loss of training opportunities for radiology. A whole spectrum of work has moved into the private sector.

Funding for training is provided by State Governments. This funding is not under any professional control. The Royal Australian and New Zealand College of Radiologists (RANZCR) has been principally a coordinating and examining body, which sets the syllabus and conducts the examinations. Teaching is generally locally organised, unremunerated and performed in addition to service work. There is a high dependency on registrars in training to undertake public hospital work and limited scope for trainees to move around the states. The private sector thus has an increasingly important role in the education and training of the health workforce.

ADIA believes that additional funding separate from the Australian Health Care Agreements and Medicare must be made available for more recognised training positions in radiology. Funding must be allocated at an appropriate level for salaried training positions and quarantined from service delivery budgets. It must cover the full program of training (in addition to PGY 1 and 2). Further, the private sector should be allowed and encouraged to tender for specific funding for training positions on a competitive basis.

This will require the accurate identification of training costs, to ensure educators are appropriately remunerated. Joint approaches to training between the private

[10] Jones DN (2000), Radiologist workforce issues, Royal Australian and New Zealand College of Radiologists Workforce Committee.

sector and public hospitals to find places for the significant number of trainee positions that have gone unfilled due to lack of funding should be seriously investigated. There is also scope for building bridges between the training program and international fellowship programs to increase the number of Australian trainees.

5.1 Technological work force

There is an urgent need to expand the radiographer workforce pool by making more trainee positions available outside the existing educational bodies. The evolution of the apprenticeship model into a specialised university course has slowed workforce availability; ADIA believes there is a need to reconsider the role of imaging technicians and the level of education required. It is a prevalent view that this workforce is disenchanted, and disillusioned by after hours and on-call work, which is performed to augment what are considered poorly paid positions when compared with other professions that have similar tertiary entrance scores and the level of skill required. The public system has dramatically increased the number of supervisory, essentially administrative positions for senior radiographers which have become the pinnacle of a radiography career.

Training of technologists should be more flexible and linked to work experience by utilising private practices and establishing rotations into public sector radiology to develop a wide range of skills. The Australian Institute of Radiography (AIR) should be encouraged to ensure that the process for assessing the qualifications of overseas-trained technologists is as simple and streamlined as possible. This would allow the industry to better compete in the international workforce market.

Private practice also struggles to compete with preferential tax benefits such as salary packaging that are available in the public system. Salary packaging creates a large tax saving that is not available to employees in the private sector, creating a non-level playing field and additional costs and recruitment pressures for the private sector.

ADIA RECOMMENDS THAT:

- Alternative methods of training future radiologists be investigated, such as a shorter general training period with the addition of sub-specialty blocks.
- Additional funding for radiologist training positions be made available on a contestable basis, to allow competition for those places by the private sector. In addition, funding for training places must be quarantined within the Australian Health Care Agreements.
- Joint approaches to training between the private sector and public hospitals to find places for the significant number of trainee positions that have gone unfilled due to lack of funding should be seriously investigated.
- Salary packaging should be carefully reviewed as a policy which penalises the private sector. Remuneration should match skill and be independent of favourable tax treatment.

6 COST SHIFTING

There has been very little activity by relevant government departments to audit and stop cost shifting. Under a capped funding agreement, cost shifting is impacting unfairly on the private sector. Specialists who used to practice fulltime are now deriving high incomes on a sessional basis, and are in addition able to undertake unlimited private work. Much of this private work is what used to be performed in outpatients departments, which have now been closed by administrators to allow revenue raising by cost shifting services onto Medicare.

The ADIA believes that fulltime radiologists should be properly and appropriately remunerated. But it further believes that funding for arms-length referred genuine private patients should not be diverted by contrived arrangements in public hospitals. This is impacting on profitability in private practice, which in turn impacts recruitment, re-investment, and capital expenditure on state of the art equipment and the like.

In addition, hospitals are able to provide these services without accounting for capital, equipment, wages or consumable costs, which are all paid for by the States and yet they receive a comprehensive fee which has moieties for each of these.

ADIA RECOMMENDS THAT:

- The federal government intervene immediately to prevent cost shifting by the states; diversion of funding from private practice is having a negative impact on the ability of the private sector to recruit and retain an adequate workforce.

7 IN CONCLUSION

The issues discussed above have a major impact on the recruitment and retention of qualified professionals into radiology.

The keystone of appropriate quality radiology services is an adequate supply of properly trained radiologists. This workforce needs to be aligned to the vision of the health care delivery system and not simply to a policy of hoping that a viable and fair system can evolve out of inequitable constructs and perverse incentives.

Fundamental to workforce sustainability is a national policy framework for health care delivery and performance indicators to measure outcomes. Not to do this urgently will see the collapse of rural services, a decline in outer metropolitan services and the retreat of private practice from many areas of service because at rebate levels they are not viable. To say that the solution to this is role extension is simply to compromise quality.

Radiology recruitment will only occur when it is perceived as an attractive and professionally rewarding specialty. High levels of work, undermining the key role of the radiologist by threats of role extensions, passive endorsement of self-referral and declining profitability are issues which need to be addressed. Efforts to restore the credibility of the specialty among medical graduates and in government policies are urgently needed.