

PRODUCTIVITY COMMISSION
HEALTH WORKFORCE REVIEW

Submission by the
Committee of Deans of Australian Medical Schools
(CDAMS)
July 2005

EXECUTIVE SUMMARY

1. About CDAMS

- CDAMS represents the Heads of Australia's 18 medical schools, and our submission presents the considered views of the leaders of Australian medical education.

2. The changing scene of medical education in Australia

- There is a growing realisation across the continuum of medical education that education programs need to be contextualised to the workplace, take account of the growing provision of healthcare by teams and be coordinated vertically across the continuum and horizontally with the education of other health practitioners.

3. Workforce shortages and maldistribution

- To address the problems of healthcare workforce shortage and maldistribution, there is a need for appropriate short- and long-term planning underpinned by well-validated evidence and real understanding of the community's needs which requires a coordinated and cooperative approach and a long-term vision which transcends electoral cycles.

4. Responses to changes in the environment

- Changes to the environment of medical and other health professional practice have not yet been met by an appropriate redistribution of healthcare professionals, or a marked shift in the context or funding of training of those professionals.

5. Workforce planning

- CDAMS strongly supports the continued funding of AMWAC but also recommends the creation of mechanisms to ensure that its recommendations are effectively implemented.

6. Medical school places - Planning

- There is no current coordinating strategy which links all aspects relating to the medical workforce across the education and training continuum – its size, distribution, training needs and linkage of the various levels of training so that efficiencies may be appropriately considered and to ensure that training is appropriately provided in the context of practice.
- Medical schools are keen to provide their educational expertise in an enhanced role in the management and provision of the education and training programs across the whole continuum of medical education.

7. The impact of funding models on medical workforce in both the educational and service domains

- Funding models now applying in universities have led to: an increase in international students, many of who may now choose to practice in Australia; the reintroduction of domestic fee-paying students; bonded student programs; and the introduction of private medical schools. None of these developments appears to have been linked to workforce planning.
- The large loan burdens carried by many domestic full-fee paying and international students by the time of graduation may distort their choices of subsequent practice to the more lucrative procedural-based aspects of medical practice. Bonded students who 'buy' themselves out of their bonds will also fall into this category.

8. The 'product' of medical education

- The traditional roles of the individual health professional groups and their education and training, particularly of medical practitioners, are now being questioned.
- Medical education expertise resides predominantly within the medical schools and yet currently is only indirectly utilised in the postgraduate domain through the role of clinical academics as individuals in postgraduate vocational education. Medical schools believe that a wider more formal role for them across the continuum of medical education should now be considered.

9. Management of the continuum of medical education

- Although the current fragmented responsibilities and their funding mechanisms are major inhibitors to change, a national coordination mechanism for the continuum of medical education is essential so that flexible, viable and innovative new models can be explored and, if feasible and successful, funded.

10. Educational approaches recently embraced by medical schools

- In response to the challenges presented by a demanding accreditation process, medical schools have embraced the need to ensure that their programs are educationally sound and relevant to a modern professional education. Medical schools are well placed to extend these changes across the whole continuum of medical education.

11. Context of learning/training

- Universities are the leaders in the promotion of the concept of a 'teaching health system' which facilitates 'learning in context' in contrast to the well-established but now outmoded concept of a 'teaching hospital system' which still predominantly applies in the postgraduate domain.

12. Education and training for rural medical and health practice

- There is a largely untapped opportunity for the postgraduate sector to engage and integrate with the range of rural health education initiatives in the medical schools through the Rural Clinical Schools and University Departments of Rural Health.
- The educational remit of universities could be extended to include responsibility for rural education and training programs at the early postgraduate, vocational training and continuing professional development levels.

13. Resourcing

- An effective change in the context of learning across the continuum of medical education to better reflect the context of practice will require an imaginative national approach to organisation, governance and resourcing different from that which has grown up in our now fragmented and uncoordinated system.
- In the future medical schools should have a major role in the management and provision of education and training across the continuum of medical education.
- Change in approaches to medical and other health professional education will require the ability to shift resources across jurisdictional boundaries to enable the change.
- Consideration of some rationalisation in relation to accreditation and certification should also be considered.

14. Management of postgraduate education and training

- At the CDAMS & AMC sponsored conference 'Medical Education Towards 2010: Shared Visions and Common Goals' in March 2005, one of the major recommendations was the establishment of a National Healthcare Education Council, responsible for placing medical education in the context of the continuum of health provider education, facilitating vertical and horizontal integration of medical education and training, and linking professional groups, stakeholders, community and government.

15. Independent practice phase

- The predominant fee-for-service system in our community has a major influence on career choice independent of community need.
- Currently there are inadequate incentives to recruit and retain a sustainable high quality workforce in the nation's public health system, as clinical academics in the medical schools or as practitioners in the areas of workforce need such as outer metropolitan areas and rural and remote Australia.

1. About CDAMS

The Committee of Deans of Australian Medical Schools (CDAMS) represents the Heads of all university-based medical education and training programs in Australia, some but not all of who have the title 'Dean'. All CDAMS members have overall responsibility for their university's medical course as at least one of their various roles, and some members also have responsibility for other health professional education programs. All members of CDAMS are either senior practising academic clinicians or highly respected biomedical scientists, and all have a long experience of being practitioners, educators, researchers and administrators within Australia's health system and in many cases the health systems of other countries.

CDAMS has been meeting as a group since 1990 and has increased its profile and influence over the succeeding period. It now meets as a full body twice yearly and has an active Executive which meets regularly with government and other relevant stakeholder organisations. CDAMS is represented on a wide range of government and statutory bodies with responsibility for different aspects of medical education and training.

CDAMS is currently managing a number of important government-funded projects, particularly in relation to Indigenous health education and long-term evaluation of the outcomes of basic medical education. CDAMS has close ties with the medical Deans in New Zealand, Fiji and Papua New Guinea, providing a broad focus to the development of medical education in the Australasian region.

CDAMS is pleased to present our submission to the Productivity Commission's Review of the Australian Health Workforce. The submission represents the considered views of the leaders of Australia's 18 medical schools, and of the academic, clinical and administrative staff within the schools who participate in the universities' programs in medical education and research.

2. The changing scene of medical education in Australia

Since the 1988 Doherty Report into medical education and the medical workforce (Committee of Inquiry into Medical Education and Medical Workforce, *Australian Medical Education and Workforce into the 21st Century*, 1988), there has been a process of rapid change in Australia in the education of the next generation of medical practitioners. Prior to this period, there was a sense of relative complacency and conservatism relating to medical education, and in assumptions about the number, distribution and type of medical practitioners the community needs.

In part the stimulus to the Doherty Report was the perception that there was an oversupply of doctors associated with increasing outlays through Medicare and unregulated entry of overseas-trained doctors into Australia. The impetus provided by the Doherty Report and the influence of the Australian Medical Council's (AMC) process of accreditation of medical school programs has prompted medical schools into questioning what they do and how they do it, leading to a complete revolution in educational programs across all medical schools. This process has also had a major influence on the various approaches chosen by more recently created medical schools.

The change in medical education has happened predominantly at the level of Bachelors programs in universities and in the early postgraduate years, especially in the first postgraduate year (PGY1). The reform process has only recently started to be recognised as a necessity in postgraduate vocational education and training and in continuing professional education.

In its broadest sense, medical and indeed all of health education is still essentially conducted in silos, although there is now a growing recognition that medical education needs to be contextualised within the needs of the health workplace and coordinated across the education/training/practice continuum. In this regard, the growing provision of health care by teams rather than individuals, particularly for the aged and chronically ill, has presented the as yet largely unrealised challenge of interprofessional education and learning.

Over some 50 years from the establishment of the specialist medical Colleges in Australia and New Zealand in the late 1930s and the gradual emergence of subspecialties, medical practice and medical education had become dominated by the metropolitan teaching hospitals, in which medical care has become compartmentalised. In the 1970s the pioneering work of innovative medical schools such as McMaster in Canada, Maastricht in the Netherlands and Newcastle in Australia provided some stimulus to considering a different and more broadly-based approach to medical education, which also suggested a different paradigm of medical practice, one which was more community-based and more generalist. More recently there has been a realisation that education for and practice in this generalist paradigm has particular relevance to the health care needs of the community, particularly in regional, rural and remote Australia, and is thus influencing a further change in the balance of medical practice.

As medical, and more broadly health professional, education has become increasingly engaged in a process of continual adaptation and change, the biggest challenges have come as State and Commonwealth governments have realised that there is a crisis in our health workforce. As a result, they are challenging medical educators to help them with innovative solutions.

A major issue is the need to break down the silo mentality both within and between the health professions with the aim of providing the most appropriate and cost-effective care to patients. A better understanding of each professional's role, redefinition of the roles of the individual health professionals and their contribution to the team effort to improve individual and public health, and the changing desires of health professionals in relation to their work and life goals are major issues which we must understand and embrace as we work towards innovative and sustainable solutions for the future.

3. Workforce shortages and maldistribution

The training of medical students is almost uniquely subject to government constraints on numbers, driven by the perception that market forces cannot be relied upon to provide an adequate, but not excessive, supply for the needs of communities. In retrospect, government attempts to limit health care spending by limiting practitioner numbers has been considered to have been misguided. Until relatively recently there has been inadequate recognition at government level in Australia that there is both an overall inadequacy of numbers and a maldistribution of the Australian health workforce.

Although the public concern has often focused on the medical workforce, the problem is at least as acute across the whole health sector. As government is not only the major funder of health provision but also of health workforce education and training, failure to recognise the problem has resulted in inadequate consideration of the range of complex issues which impinge on the health workforce and inadequate leadership and resourcing to underpin the necessary changes to ensure the sustainable provision of a well-trained, high quality health workforce for the whole community in all regions of Australia.

There have been some important initiatives, such as the various rural programs, predominantly with a medical focus, as well as the enhancement of places in medical schools, but these initiatives have been driven as much by political expediency as by a real understanding of the community's needs and appropriate planning underpinned by well-validated evidence. There is a need for acknowledgement on both sides of politics and at both Commonwealth and State levels that the issue is one of national importance which requires a coordinated and cooperative approach and a long-term vision which transcends electoral cycles.

As exemplified by the situation in the medical workforce, any solutions which are introduced will all have a very long timeframe in coming to fruition. The recent rural initiatives and the increased places in medical schools will not have their impact in the workplace for at least 10 years after their introduction, yet the workforce problems exist now. Addressing the long-term situation to achieve an adaptable and sustainable outcome should be the goal of any review such as the current one. However, there does also need to be adequate consideration of the solutions required to address the situation in the short-term.

From the medical workforce viewpoint, the long-standing expedient short-term solution to both the overall numbers and the maldistribution of the workforce has been the importation of medical graduates from outside Australia, mostly in an unplanned and ad hoc manner. While the problem was relatively minor and the majority of overseas-trained doctors entering the Australian workforce were from the similar systems of training and standards in the UK, New Zealand and South Africa, this was an easy and relatively benign solution to a problem, which was unrecognized at the public and political level.

As the workforce problem has escalated, medical graduates from an expanded range of countries with different languages, cultures, and educational and practice standards have entered medical practice in Australia in either a temporary or permanent capacity. The regulatory systems through the State and Territory Medical Boards and by extension the whole system of medical practice have been ill-prepared to cope with this change. A symptom of this inadequacy has been the widely publicised case of an unacceptable standard of practice by an overseas-trained surgeon at a regional hospital in Queensland.

It is only in the last 1-2 years that the needs of overseas-trained medical graduates in terms of entry standards, induction, acculturation, professional support and ongoing education and training have been properly recognised at a government level and started to be addressed in any coherent manner. Consideration of the ongoing needs of this overall program and coordination of effort are definite short-term requirements of governments in all jurisdictions.

4. Responses to changes in the environment

Apart from the apparent lack of awareness of the inadequacy and maldistribution of the health workforce, there have also been a range of changes relating to the environment of medical and other health professional practice which have and are continually changing the nature and setting of practice and for which the workforce has been inadequately prepared.

The Australian community is no longer predominantly Anglo-Celtic with widely similar expectations of the provision of health care. Australia is now a culturally diverse nation with over 200 nationalities and cultures represented. We are also an ageing society with a consequent greater burden of health problems, chronic disease and health care needs placing an increasing demand on both institutional and community-based health care provision.

The high standard of health care which Australians traditionally enjoy, together with the high standard of living, mean that the community expects the best and latest of health care innovations and treatments. This demand has been enhanced by health consumers' increased access to information about health matters through the internet and other media.

Advancements in medical and health care and the constant technology-driven introduction of new diagnostic and treatment modalities provides challenges not only for their appropriate resourcing but also for the education and training of staff and the organisation of health care delivery to maximise the advantages to the community of these innovations. The changing demography of the population, the increased demand for health care and the costs of provision of health care innovations have caused a disproportionate increase in the costs of health care delivery which are constantly being challenged by health care funders.

Changes in the demands on the hospital sector together with better understanding of care needs have caused a major shift in health care delivery with a greater concentration of care occurring in the community being provided by multi-disciplinary teams and being delivered through disease management rather than acute episode response models of delivery. This has not been matched by either an appropriate redistribution of health care professionals or a marked shift in the context of training of those professionals.

A barrier to such shifts is the service funding models with Commonwealth funding being predominantly directed to the community sector and State-based funding to the hospital sector. A similar split in funding means that Commonwealth support of education is dependent on major financial and in-kind contributions from State-supported hospitals, which no longer identify discrete funding streams to support health and medical education.

In addition to these changes in the health care environment, major changes have occurred in the health care workforce. The expectations of health care workers have shifted in relation to their conditions and places of work. There has also been a realisation that the inappropriate working hours of many hospital-based health professionals, particularly junior medical staff, has been a significant contributor to the high number of adverse events which occur in that environment. Legislation for safer working hours has therefore reduced the hours worked by any individual necessitating an increase in the total workforce.

The demography of the workforce is also changing. Most if not all medical courses now have either an equal number of men and women entrants or a greater proportion of women. Female medical graduates as a group tend to work at about 70% of the lifetime working hours of male medical graduates, particularly early in their careers when they share their professional and family responsibilities. There has also been a trend for many medical practitioners of either gender to seek more socially acceptable working hours, often therefore working fractions of a 'full-time equivalent'.

Thus the establishment of safer working hours, the feminisation of the workforce and the desire for a more socially acceptable work pattern have increased the demand for medical practitioners at a time when there has been an overall undersupply and maldistribution. This has been further compounded by graduate entry programs, a more diverse range of career options for graduating health care workers, and the increasingly global market for health professionals.

5. *Workforce Planning*

With respect to the medical workforce, the creation of the Australian Medical Workforce Advisory Committee (AMWAC) has been a considerable advance, as previously there was no process by which the national medical workforce could be enumerated either in total or in relation to its component parts.

Nevertheless, despite the excellent policy work done by AMWAC, it has often been slow in being translated into agreed action because of the lack of any national mechanism to plan for and implement its recommendations. Some of AMWAC's decisions have not been widely promulgated, eg. overall medical workforce needs, but they have been used to drive politically-motivated decisions about the introduction of either more medical school places or new medical schools. There is currently no agreed statement of overall medical workforce needs which could serve as the basis for future planning. Provision of such a statement by AMWAC should be an urgent priority.

Another urgent priority is the creation of a coordinating mechanism to implement the specific recommendations of AMWAC as they become available from each of the detailed studies on individual components of the medical workforce. CDAMS therefore strongly supports the continued funding of AMWAC but also recommends the creation of mechanisms to ensure that its recommendations are effectively implemented.

A key to understanding the needs of any component of the health workforce is the availability of adequate information. From the point of view of the medical workforce, the AMWAC studies are just one component. Currently there are no national longitudinal data on the career profiles of medical graduates and no mechanism to understand either whether initiatives such as the Commonwealth-funded rural incentives to medical schools or the bonded medical student programs will produce the desired outcomes. There was no planning for such long-term evaluation mechanisms when these programs were initiated.

CDAMS has been an advocate for ensuring that such information is collected and utilised for effective long-term planning. With the assistance of the Department of Health and Ageing (DHA), CDAMS is now engaged in a project involving all medical schools to produce a uniform data source relating to all entrants to and graduates from Australia's medical schools, the Medical Schools Outcomes Database (MSOD) project (see CDAMS website, www.cdams.org.au), which will serve as the basis for a much-needed longitudinal tracking study. AMWAC is one of the major supporters of the MSOD project. CDAMS looks to the Productivity Commission to ensure through its recommendations that adequate long-term government funding is provided for this project to ensure the ongoing availability of this information source which will be an important component of the continuing dynamic process of medical workforce planning.

Workforce planning can never be a precise science and future trends cannot be entirely predicted. As a result, bodies such as AMWAC can only be expected to set likely broad parameters of need. More locally responsive mechanisms to fine-tune short term fluctuations in need must also be established, such as flexibility to increase scholarship-supported or bonded places for particular needs or areas with shorter decision-making lead times to implementation. Another shorter-term response mechanism would be variations in the ease with which Australian-trained overseas students could be offered permanent residency to practice long term in Australia.

In addition there is a need to consider planning based on service needs rather than as silos of discipline-based planning efforts conducted in isolation. Flexibility in patterns of service delivery can be factored into future care delivery and planning and therefore should incorporate the opportunity for some role substitution around the edges of traditional job demarcations. It is not clear that traditional professional stakeholder groups are the correct bodies to facilitate such planning other than through multidisciplinary forums.

6. Medical School Places - Planning

With a health system such as that in Australia which is to a large extent reliant on either direct or indirect government funding, it is inevitable that government will want to exert some control over health spending. For many years one of the mechanisms that has been employed by government to help limit health spending has been to limit the size of the medical workforce by the imposition of a cap on medical school entry places. Such capping does not apply directly to any other professional or general university course.

The problem is that there has never been any agreed basis by which the total number of commencing places in medical schools is determined nor on how these places should be distributed amongst existing or newly created medical schools. Likewise there has not been any agreed basis for understanding the appropriate distribution and size of medical schools. Lack of such forward planning, information sharing and consultation by government led to decisions in the early 1990s which significantly reduced medical school intakes. More recently, total medical school intakes have been increased by approximately 50% since 1999 comprising increases within existing schools as well as in the creation of 8 new medical schools over the same period. This rapid period of expansion has created serious and ongoing challenges for the medical education and training sector.

To those charged with running the nation's medical schools, the decisions about increasing intakes and new medical schools appear to have been ad hoc and politically motivated with only a tenuous relationship to the nation's medical workforce needs. As medical schools interact closely with partner health care institutions to ensure appropriate opportunities for clinical training, establishment and maintenance of good working relationships with these partner institutions is essential. The lack of consultation and planning relating to the creation of new medical school places and new schools has produced chaotic effects in the health care sector, and has threatened to undermine many effective long-term relationships between individual medical schools and their partner health units and practitioners. It has created a climate of uncertainty which has contributed to the breakdown of trust established over decades. Creation of new medical schools must take account of the availability of clinical placements and not continually create the need for reactive responses to political whim.

Further major issues which appear to have had no consideration by those making the decision to enlarge the medical student intake are the provision of appropriate extra staff to provide the programs for the increased numbers of students, the potential for the currently high standards to be eroded if staff of inadequate quality have to be appointed, and the capacity of the regulatory system through the Australian Medical Council to deal with the additional load posed by the enlarged cohort of medical schools. There are currently major workforce shortages in several key clinical academic disciplines such as Anatomical Pathology, Obstetrics and Gynaecology and Psychiatry. Often such vacancies need to be filled by the appointment of overseas-trained clinical academics with the attendant problems related to acculturation, registration and professional recognition.

Following the development and release of the *National Health Workforce Strategic Framework* in 2004 (Australian Health Ministers Conference, 2004), there has been a realisation of the need for better planning for an appropriate number of training places in the public and private health sectors relative to the increased number of medical graduates that will be produced over the next 10 years. However there is currently no coordinating strategy which links all aspects of the overall consideration of the medical workforce, its size, distribution, training needs and linkage of the various levels of training so that efficiencies may be appropriately considered and to ensure that training is appropriately provided in the context of practice. Such a coordinating strategy could be the responsibility of a body such as a National Healthcare Education Council which will be discussed later in this submission (see Section 14). The medical schools believe that, as they are the major education providers in the sector, there could be an enhanced role for them in the management and provision of the education and training programs across the whole continuum of medical education.

7. The impact of funding models on medical workforce in the educational and service domains

Since 1996 Australia's universities have needed to be more reliant on non-government funding for their operation. In relation to medical education, the outcomes have been larger cohorts of international students in medical schools and the appearance of full-fee paying domestic students for the first time since the 1960's. Although international students broaden the profile of our student body, enhance international understanding and help provide a global perspective to our education programs, a major driver for the influx of international students has been income generation to ensure survival, especially in the smaller universities and medical schools.

Up to recently these international students have absorbed reserve capacity in the medical education system, particularly in relation to clinical placements. The impact of a large number of international students in the clinical workplace has in some places stimulated a climate of resentment among clinical teachers that they are being required to teach and train people who will not subsequently work in Australia. This has created unnecessary tensions between hospital and practice-based teachers and the university staff who manage the medical courses, and in some cases has led to withdrawal of services by clinical teachers. There is often poor knowledge among clinical teachers of the changing scene with regard to our international graduates and the real possibility that many of them might now elect to continue practice after graduation in Australia.

International graduates of Australian medical schools have until recently been strongly discouraged by the immigration system from subsequent practice in Australia. With the realisation at government level of the overall inadequacy of the Australian medical workforce, visa regulations have been relaxed so that our international graduates can now contemplate their subsequent careers in this country. This has the advantage of providing a cadre of additional locally-trained individuals for our medical workforce rather than having the broader range of problems relating to overseas-trained doctors particularly those from non-English speaking countries.

With the expansion of local places in existing schools and the creation of new schools, the capacity of the system to train more students is being reached, particularly in the less populated states. The apparent solution in some universities is to replace international students with domestic full-fee paying students, although the numbers of these fee-paying students are also currently capped under government policy to 10% of the government-funded intake. There is currently no apparent linkage of any of these developments to workforce planning.

The notion of a student contribution to tertiary education is now well-embedded in the Australian context through the Higher Education Contribution Scheme (HECS). In the case of medical students, deferral of HECS repayments until a particular income threshold is reached and then payment through the taxation system has meant the financial impost has not been too large in relation to subsequent incomes, although recent increases in student contribution amounts set by government and universities will see most Commonwealth-supported medical students graduate with much higher HECS debts in future.

Total up-front fees in medical courses are between \$170,000 and \$240,000, depending on the annual fee and the length of the course. The recently introduced government FEE-HELP scheme for domestic fee-paying students limits the total loan amount to \$50,000 and thus for students accessing such a loan there will still be substantial financial gaps which will often need to be covered by loans obtained in the private sector. Unfortunately many international graduates of Australian medical schools have also funded their education by sourcing expensive loans which need to be serviced once they are in the workforce. The consequent need to generate an income after graduation to meet both lifestyle aspirations and to service education loan repayments means that these domestic fee-paying and international graduates may tend to choose careers in higher earning specialities rather than in the generalist domains which are now required to meet medical workforce needs. Such practice distortions have been observed in the USA for many years.

A further distortion of choice of medical practice may come from medical students or young graduates electing to 'buy' themselves out of the bonded student places which they have accepted on entry to medical school. This may also be financed by considerable loans at commercial interest rates with the attendant need to service such loans once in the medical workforce.

8. The 'product' of medical education

The health workforce debate has thrown into question the traditional roles of the individual professional groups. The driver is becoming, as it should, the outcome for the clients of the health industry (the 'patients') rather than the perceptions of their roles held by providers.

This has generated such questions as:

- What is the medical professional's (the 'doctor's') role?
- What is the real differentiation between doctors and other health professionals?
- What are the education and training needs for doctors?
- What guarantee is there that there is a consistency of standard of the graduates of Australian medical schools?
- Should there be a national qualifying examination to ensure such consistency?
- Is the accreditation system for medical schools too rigid and thus not encouraging of innovation?
- Are the generalist years of PGY1 and PGY2 necessary for all?
- Would it be more appropriate to have a system of achievement of competencies at the various stages of education and training rather than the fixed examination systems which currently exist?
- Why is medical education and postgraduate training so long and so rigid in its format?
- How can we devise a system to streamline postgraduate vocational training without compromising the quality of the end product?
- How can medical education and training be made more flexible and responsive to the needs of the community?
- How can there be better coordination across the vertical continuum of medical education and training?
- What roles traditionally undertaken by the doctor can be taken up quite appropriately by other health professionals ('role substitution')?

The medical school community is aware of this debate, keen to engage in it and help provide the solutions. The educational expertise in relation to medical education resides predominantly within medical schools and yet currently is only indirectly utilised in the postgraduate domain through the role of individual clinical academics in postgraduate vocational education. Medical schools believe that a wider more formal role for them across the continuum of medical education should now be considered.

9. Management of the continuum of medical education

Current fragmented responsibilities and their funding mechanisms are a major inhibitor to change. The undergraduate sector is managed by the universities and is Commonwealth-funded predominantly through the Education, Science and Technology portfolio. The postgraduate sector is largely State-funded through teaching hospitals, although there is a Commonwealth component related to general practice training funded through the Health and Ageing portfolio. Responsibilities for postgraduate training and accreditation rest with the State-based Postgraduate Medical Councils for undifferentiated early postgraduate training. Medical Colleges have responsibility for postgraduate vocational education, training and certification. Responsibilities for continuing professional education are partly College-based but are also often locally organised by a variety of unconnected bodies.

None of these bodies has the capacity to plan training needs throughout the educational continuum, or indeed training needs in newly emerging specialties, in models of chronic disease management that need multi-disciplinary input, and across jurisdictional boundaries. As previously alluded to, a national coordination mechanism for the continuum of medical education is essential so that new models can be explored and, if feasible and successful, funded.

In the United States and Canada responsibility for postgraduate education and training is vested in the universities with national standards and certification in the postgraduate domain being the province of the Speciality Boards (USA) or Colleges (Canada). Exploration of such a system should be considered in Australia. The recently introduced accreditation of College-based education and training programs by the Australian Medical Council has demonstrated the limitations of the Colleges as educational institutions, as their traditional functions have predominantly been national standard setting and certification.

As expert educational providers universities could, if properly funded to do so, provide the necessary education and training programs which could then link with and inform the certification processes managed by the Colleges. To do this would require a process of unbundling of the education component of State-based hospital funding as happened several years ago in the UK to create the 'Service Increment for Teaching (SIFT)', which could then be provided to universities to manage all of postgraduate education and training. This would have the advantage of the potential to train for service delivery model needs rather than speciality guild protection needs.

The medical schools have already shown their ability to engage in change across the whole sector. All existing schools have undergone major changes in their curricula in the past 15 years and through the AMC accreditation processes are now subject to continual challenges to maintain their current programs and ensure they are educationally sound. The concept of graduate-entry medical courses has been enthusiastically and successfully embraced by many schools with the resultant cohort of older graduates now providing a challenge to the established postgraduate training programs to consider ways in which training can be made more flexible and efficient and its duration reduced. New medical courses are now coming on line with the opportunity to be even more innovative in their programs.

Universities are taking the lead on foundation courses across the health disciplines that can be a forerunner to greater flexibility between health and medical disciplines so that re-training of specialties can occur across disciplines and between disciplines. As an example, the current system would require a diabetic specialist nurse to retrain from scratch as a pharmacist before picking up specialist diabetic pharmacy skills and roles. Clearly, this sort of rigid system is inefficient and does not make the most use of the existing skills and expertise of health professionals.

Having better vertical integration across the continuum of training through one educational management structure would enable a range of options to be explored to achieve the outcomes the community is now demanding. Such concepts and questions include:

- Progression based on achievement of predefined competencies rather than the current time-based training programs;
- Appropriate recognition of prior achievements;
- Provision of educational programs relevant to and coordinated across a number of speciality areas;
- Certification for some but not all roles in the workforce with opportunity for further training and certification at some later time (the 'skills escalator' concept);
- Greater flexibility for role substitution and cross-specialty boundaries with shortened re-training;
- Should final year medical students fill most of the current roles of interns as they have done in New Zealand and the UK and to a large extent also in the USA and Canada for many years?
- Is there a need for an undifferentiated period of postgraduate training or could specialisation happen at a much earlier time starting in medical school as it does in the USA?

- Can different educational and training pathways for generalists and specialists be managed more effectively and efficiently across the continuum of education by the university sector than by the current fragmented system?

Successfully addressing such concepts is part of the usual business of universities and is being applied across the sector in the burgeoning ‘industry’ of postgraduate courses which all universities have embraced in the past 10 years. By transfer of responsibility to the university sector, there would be greater ease of exploration of different models applied to the postgraduate workforce with the ability to respond to the challenge of the possible ‘compression’ of education and training raised in the recent health workforce debate.

10. Educational approaches recently embraced by medical schools

In rising to the challenge presented by the scrutiny of a regular rigorous accreditation process for their courses, medical schools have embraced the need to ensure that their programs are educationally sound and relevant to a modern professional education. Concepts which were rarely considered a decade or two ago and which are now embedded in all programs include integrated curricula, problem- or case- based learning and self-directed learning. All courses now give appropriate balanced consideration to population health, personal and professional development including ethics and law and quality and safety, and health informatics. Extension of these approaches across the educational continuum is currently disjointed and ineffective because of the fragmented management structure and would be more appropriately managed across the continuum by the sector in which the educational knowledge and expertise resides.

11. Context of learning/training

For many years university medical courses have been moving some of their clinical placements out of the teaching hospitals into the community. This initially involved students undertaking short placements in general medical practices but now embraces a whole range of settings including private general and specialist practices, private hospitals, community health centres and other community-based health providers. Universities are the leaders in the promotion of the concept of a ‘teaching health system’ in contrast to the well-established but now outmoded concept of a ‘teaching hospital system’ which still predominantly applies in the postgraduate domain.

Medical courses have embraced the concept of matching the context of education to the care needs of the community by providing appropriate ‘learning in context’. Community-based medical education is being enthusiastically introduced by many of the established and all of the new medical courses. The postgraduate sector is struggling to make any shift in the context of their educational and training programs because of the current rigidity of their organisational structure and the predominant direction of State-based funding to the hospital sector.

12. Education and training for rural medical and health practice

Over the past 10 years the university sector has been challenged to address the maldistribution of the medical workforce by responding to a range of Commonwealth initiatives to provide an appropriate education for rural medical practice. All established medical courses now have thriving Rural Clinical Schools or University Departments of Rural Health which are making their mark within their various rural communities. Rural placements funded through the Rural Undergraduate Support & Coordination program have been an integral part of medical courses for 10 years. The early graduates of these rural programs are now starting to take up rural practice or are indicating an intention to do so in future.

There is a largely untapped opportunity for the postgraduate sector to engage and integrate with these initiatives. The barriers are at both the organisational and fund-holding levels. The universities now have such established infrastructure and networks in the rural domain that it is logical that their remit be extended to embrace the relevant education and training programs in the postgraduate sector linked with continuing professional development.

Through these initiatives universities have also brought aspects of their other health professional programs to the rural environment. Positive influences of the university presence in rural areas have already been demonstrated through enhanced staff recruitment and retention, enhanced self-esteem amongst the participating practitioners, and the more ready adoption of modern approaches to higher standards and quality of care. Embracing the concept of a vertically-integrated 'teaching health system' in rural Australia led by the universities would provide a better milieu for rural practice with the aim of eliminating the type of situations which have recently attracted such attention in rural Queensland.

13. Resourcing

An effective change in the context of learning to reflect better the context of practice will require an imaginative approach to organisation, governance and resourcing different from that which has grown up in our now fragmented system.

At the undergraduate level, organisation is currently the responsibility of universities who to a variable extent fund some clinical teachers (largely Commonwealth funds or student fees). Most clinical teachers are either employed as specialists by teaching hospitals (State-funded) or are private practitioners with a variety of pro bono or funding arrangements between these individuals and the universities (significantly funded through the Commonwealth's Medicare Program). More recently the Commonwealth Government's Practice Incentive Program has been utilised to fund teaching in general practice.

At the postgraduate level, most funding for education and training at both the early postgraduate and vocational training levels is embedded in the operating revenue of State-based teaching hospitals, although under the case-mix funding system additional State-based payments have needed to be made to hospitals to cover activities such as teaching and research which are not covered by the case-based model. Funding for education and training for general practice as a speciality is Commonwealth-funded through the General Practice Education and Training (GPET) Program and the regional GPET providers. The movement to have training positions for early postgraduates in the community has been associated with a variety of ad hoc funding models, initially Commonwealth-based for pilot programs and now starting to be State-based. The Commonwealth has in the past 12 months engaged in an initiative to fund training places in the community sector predominantly in private specialist practices and private hospitals.

There is no current way of linking the work of AMWAC with both the requirements of the medical workforce and the education and training sector. Any effective changes need to consider medical education and training as a continuum encompassing undergraduate, early postgraduate, vocational training and continuing professional development. Ideally there needs to be a national coordinating mechanism and consideration of how best to manage and fund an appropriately resourced system for the future. Although the current system has in many ways served us well, it is compartmentalised, fragmented and inefficient, and has very little capacity to embrace change.

CDAMS believes that medical schools should have a major role in the management and provision of education and training across the continuum. Education and training is our core business. Medical schools have consistently demonstrated their ability to enhance their educational capabilities and move the context of teaching to match the realities of practice. As would be expected, medical schools have been innovators in bringing new paradigms of education and training to the Australian scene and have been international leaders in many respects. In addition, medical schools have the necessary links with other health professional programs through placement within Faculties of Health Sciences to allow them to engage in the interprofessional education necessary for modern team-based care. Medical schools are appropriately placed to work across all health disciplines to explore new models of service provision based on role substitution and a dynamic understanding of the appropriate ongoing roles of professionals in the health system.

Unbundling of the funding as has happened in the UK should be seriously considered leading to arrangements such as those in the USA and Canada in which education and training in both the undergraduate and postgraduate domains is managed by the universities. Change in approaches to medical and other health professional education in Australia will require the ability to shift resources across jurisdictional boundaries to enable the change.

In both the USA and Canada, there is a national system of accreditation and certification separate from the universities at both undergraduate and postgraduate levels. In Australia we now have a national system of accreditation at both undergraduate and postgraduate levels split between the Australian Medical Council for undergraduate and College-based programs and the State-based Postgraduate Medical Councils at the early postgraduate level. Universities are responsible for *assessment* at the undergraduate level, while State Medical Boards are responsible for *certification*, based on completion of the basic medical degree and successful completion the first postgraduate year (PGY1). The medical Colleges provide a national system of standard setting and certification for postgraduate vocational training and are also responsible for programs within each of the speciality disciplines for maintenance of professional standards. As this fragmentation of organisation suggests, some rationalisation in relation to accreditation and certification should be considered.

14. Management of postgraduate education and training

CDAMS and the Australian Medical Council hosted a conference in March 2005 titled 'Medical Education Towards 2010: Shared Visions and Common Goals'. The main problem identified by conference delegates was the lack of an overarching policy framework in health professional education as a whole. The 'policy vacuum' has led to decisions being made on a reactive basis rather than being proactive. A further problem identified was the lack of any unified approach between the States and Territories and the Commonwealth and no mechanism to coordinate any response. The conference Recommendations are at Appendix 1, and copies of the full conference proceedings are available via the CDAMS website.

As discussed earlier in this submission it was identified that there were a number of important current issues relating to the whole health workforce which urgently needed policy development. Problems included:

- Fragmented responsibility for training;
- Need for matching education, workforce and services to national health priorities;
- Workforce shortage and distribution;
- Disproportionate increase in healthcare costs.

Priorities requiring a coordinated response included:

- New technology, skill requirements, teamwork;
- Streamlining the continuum of education and training;
- Consumer knowledge and empowerment.

The vision proposed at the conference for such policy development was that it should be:

- Responsive to health workforce needs and health outcomes for the community;
- Place medical education in the context of the continuum of health provider education;
- Facilitate vertical and horizontal integration of medical education;
- Link such entities as DEST, DHA, State and Territory jurisdictions and non-government organisations.

It was proposed that a National Health Care Education Council be established by the Australian Health Ministers Conference (AHMC) and the Ministerial Conference on Education, Employment, Training and Youth Affairs (MCEETYA). This Council should be established and funded by, and report to, AHMC but be independently incorporated and employ its own staff. It should ideally represent all professional groups in the health workforce but could initially be focussed on the medical workforce.

The membership of this Council could include a variety of stakeholder groups such as:

- Universities
- Other education providers, eg Medical Colleges, Postgraduate Medical Councils, TAFEs, Registered Training Organisations
- Consumers
- Regulators
- Government and other health providers
- Professional associations and unions
- Students

The Council should have an independent chair – a person with knowledge of health and education systems but fully independent of stakeholders.

At the conference Terms of Reference for this Council were proposed as follows:

- Policy Framework
 - Establish framework for policy development for healthcare education in Australia which links health professional education to healthcare provision;
- Information Gathering
 - Collection of appropriate evidence to inform policy development;
- Policy Development
 - Policy development to address identified problems in healthcare education;
- Promote Collaboration
 - Promote collaboration between stakeholders in healthcare education;
- Funding Models and Strategies
 - Develop the funding strategies to enable policy implementation;

- Advising Government
 - Advising government about appropriate policy and funding for healthcare education;
- Communication
 - Communication of the developed policies and strategies for their implementation by stakeholders. The conference suggested that a 'top-down' approach should be avoided and that key individuals from relevant groups should start the process.

Since the conference, senior individuals representing the groups across the continuum of medical education (Committee of Presidents of Medical Colleges, Confederation of Postgraduate Medical Education Councils and CDAMS) together with the Australian Medical Council initially met separately and then subsequently with senior representatives of the Department of Health and Ageing. As a result of these meetings it has been proposed that a national working group be established under the auspices of the Australian Medical Council, to be co-chaired by the AMC and the Commonwealth Department of Health and Ageing. This group will meet for the first time on August 8 2005. CDAMS is represented on this group through its chair. CDAMS is fully supportive of this initiative and has been a major player in its establishment.

15. Independent practice phase

A larger issue which underlies many of the problems relating to the medical workforce is the organisation of and funding for practice in the independent practice phase of a medical practitioner's working life. The predominant fee-for-service system in our community has a major influence on career choice independent of community need. There is a tendency for practitioners to train for and engage in the more highly lucrative procedural medical specialities at the cost of the community need in relation to the more generalist domains such as general practice, internal medicine, paediatrics, surgery and public health. There is ongoing concern that individual professional groups engage in restrictive trade practices in relation to the control of training opportunities so as to limit the number of practitioners entering particular fields in medicine irrespective of community need or the recommendations of bodies such as AMWAC.

Currently there are inadequate incentives to recruit and retain a sustainable high quality workforce in the nation's public health system, as clinical academics in the medical schools, or as practitioners in the areas of workforce need such as outer metropolitan areas and rural and remote Australia. The lure of the income available in private practice together with the increasingly difficult conditions of working in the public sector have meant that there is a continual 'brain drain' away from the areas of the medical workforce that are vital for the provision of cutting edge care and community-oriented care and of the education and training of the future generation of medical practitioners.

In other developed countries such as the UK, Canada and New Zealand there is much less emphasis on private medical care and thus a better substrate to match medical care with community needs. It would require substantial courage and long-term vision at a government level to consider a wholesale change to the provision of health care and this is unlikely to be politically acceptable. It therefore must be concluded that providing the most appropriate solutions to the standards, size and distribution of the health and particularly the medical workforce and its relevance to community needs will always need to accommodate the freedom of individual practitioners to pursue that career path which best meets their professional and financial aspirations and their lifestyle.

APPENDIX ONE:

Recommendations from ‘Medical Education Towards 2010: Shared Visions and Common Goals’, 7-9 March 2005, Canberra

A national health care education council should be established and funded by the AHMC (and therefore report to AHMC) but should be independently incorporated. Membership should include all stakeholders, including universities and other education providers, consumers/community, regulators, government and other health providers, professional associations and unions, and students. The terms of reference for this council would be to:

- establish a framework for policy development for health care education in Australia
- collect appropriate evidence to inform policy development
- develop policy to address identified problems in health care education
- promote collaboration between stakeholders in health care education.

The council should cover the entire spectrum of health care (including workforce needs etc), rather than looking at medical education in isolation. For this reason, the term ‘health care’ was deliberately included in the council’s title. Delegates felt that such a group would work best through one ministry (rather than straddling both the health and education portfolios). It was felt that the health ministry was the most appropriate.

To avoid a ‘top-down’ approach, the conference suggested that it would be useful to bring together key individuals from the relevant groups to start the process. To ensure that all stakeholders are represented, it might be necessary to explicitly nominate people (especially community representatives, trainers, doctors at all stages of training etc), who could then work together and present their recommendations to the minister.

Currently, registration and accreditation focus on processes rather than outcomes. The conference favoured a more flexible approach that would link progress to competencies rather than time spent in education and training. This was illustrated using the concept of a career ‘escalator’, where it would be possible to get on and off at different professional levels, rather than everyone following a single pre-determined path (see discussion group 4 — Medical workforce planning). Delegates identified the need for a framework, so that individuals would be aware of the ‘escalator’ concept and the career options available to them.

It was suggested that CDAMS could establish a taskforce to look at all basic sciences (including behavioural and social sciences) and other clinical discipline areas (the relative contribution of some basic sciences and clinical disciplines will continue to change, as will the point in training at which individuals need to acquire specific knowledge and skills). The taskforce would need sufficient resources to get views from different stakeholders on the competencies and curriculum content required. The aim could be to create a ‘core curriculum’ (although this should not be prescriptive).

Delegates agreed that there needs to be further thought and planning on how to improve clinical teaching and learning — how and where it is delivered, and how it is resourced. Australia needs a national taskforce to examine worldwide best practice in this area. This could be a partnership between universities and colleges. Given that any changes should be informed by evidence, it may be necessary to look at international theories about work-based learning.

Those delivering health care need to think about their responsibilities to teaching providers. For example, hospitals could have a line item in their budgets for training (at present, hospitals may be receiving funds for this area but not providing sufficient training). Making changes to funding of clinical teaching and learning may require costs to be ‘unbundled’, so that it is possible to determine where current funding comes from (New South Wales is currently working on this to some extent).

Health care education and training needs to be on the agenda of state and Commonwealth health and education ministers. Currently, there is a ‘disconnect’ between health service delivery and policy changes, and between those teaching clinical students (eg the medical colleges) and the universities (although GPET is a partnership between the universities and the colleges).

Currently, many clinical teaching sites with excellent educational potential are not being utilised. Therefore, each site should be considered in light of the educational benefits, appropriate teaching methods, educational environment and resources, indemnity issues and any other relevant factors. This could be a national project by the national health care education council. Any initiative should be evidence-based, and should look first at existing literature and research on using community-based sites as teaching environments.

Medical education must match the needs of the health care workforce, at a whole-of-system level. Suggestions included:

- reviewing admission policies
- defining the goals of the undergraduate period
- defining the role of the prevocational period
- developing flexible models of specialty training
- scoping for models of education and service delivery in areas such as Indigenous health, mental health and aged care.

Currently, every part of the health workforce is understaffed, so the strategy of substitution (eg of nurse practitioners for doctors) solves some problems but creates others, as it simply leaves different areas short-staffed. Other suggested solutions included:

- more specific education (eg some tasks require technical expertise rather than a broad education)
- a shorter route to specialisation for those wanting to specialise early (coupled with flexibility, so that people are not constrained later by early career decisions)
- admission policies tailored more strongly to workforce needs (eg policies and practice of tailoring to Indigenous needs)
- more flexible graduate programs, to encourage recruitment into areas of need and to make it easier for people to change careers.

Changes should be evidence-based — there is extensive literature available on what systems have worked (eg New Zealand has a successful program that takes students after a year in university). The issue of quality is also important; for example, adequate resources, backup support and infrastructure are essential for trainees sent to areas of need.

Safety and quality should be valued at a local as well as a national level. In looking at any potential changes to the system, consideration needs to be given to how educational principles are embedded, what outcomes are expected and how to ensure that the desired outcomes are achieved. Expertise in educational theory is required when designing these programs, and needs to be valued in our undergraduate and graduate training programs just as research skills currently are.

The ideal situation for career development and opportunities is to have ‘pluripotent’ doctors who can re-differentiate as required. Currently, there are many barriers to this situation (see Discussion Group 10 — Links between stages in medical education and training). A possible solution could be for a recent medical graduate to become a provisional member of a medical college, which would then determine the focus of the student’s first two postgraduate training years. Such an approach could ensure that the graduate receives the maximum benefit from training, with later recognition by the appropriate college. The colleges need to develop mutual recognition capabilities that allow for doctors to move efficiently from one clinical discipline area to another if they choose to, without compromising standards in any way. This can be achieved by all groups (undergraduate, early postgraduate and specialist groups) defining the outcomes required for each level of education and training, and identifying the core competencies doctors are expected to demonstrate irrespective of their stage or area of practice.

The AMC should lead a project to clearly articulate core features of medical practice. The results should be used to underpin successful reform of the continuum of medical education and health service delivery. A final draft could be prepared by mid-2006, in time for accreditation by 2008.

The core features defined by the AMC should be included in an overarching framework for a true continuum of medical education (from undergraduate to continuing professional development) that addresses individual appraisals, the culture of the learning environment at the organisational level and sentinel/adverse events.

A scoping study is necessary to provide directions for implementation, including a cost–benefit analysis that would encourage stakeholder commitment (eg by universities, PGMC, colleges, AMC and DHA). Implementation would involve piloting the appraisal process and integrating the accreditation process.