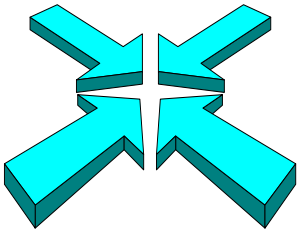
Confederation of Postgraduate Medical Education Councils



SUBMISSION TO THE DEST MEDICAL EDUCATION STUDY

The Confederation of Postgraduate Medical Education Councils (CPMEC) is the peak body in Australia for State and territory organisations with the key role of supporting and developing education and training requirements for interns and hospital medical officers in prevocational years. CPMEC is seeking to work more cohesively with its strategic partners, particularly the Australian Medical Council (AMC), the New Zealand Medical Council (NZMC), the Committee of Deans of Australian Medical Schools (CDAMS) and the Committee of Presidents of Medical Colleges (CPMC). In its submissions to the Productivity Commissions, the CPMEC has advocated for reforms that would better integrate the medical education continuum.

The Vision, Mission, Priority Objectives of CPMEC are contained in Attachment A. We believe that the CPMEC, together with its affiliated Postgraduate Medical Education Councils (PMCs), is strategically placed to both understand and influence changes in the health workforce, and is in a good position to facilitate change in the medical profession. The postgraduate medical education infrastructure provides a bridge between the medical schools and the medical colleges.

This submission by the CPMEC is in two parts; the first deals with some general issues that are pertinent to this study on medical education. In particular we will highlight the draft Australian Curriculum Framework for Junior Doctors that CPMEC has released for consultation and feedback. In the second part we respond to the specific questions identified by the study. An important caveat in a number of inputs provided by our constituent postgraduate medical education councils (PMCs) is that any recommendations made by the study should be based on robust evidence.

1. The context of the contemporary medical education

Effective medical education involves balancing several dimensions including community expectations, service needs, a suitably trained and competent workforce and the ability to provide multidisciplinary care in teams. These have to be carried out in a rapidly changing environment exhibiting the following trends:

a. An unprecedented and exponential growth of medical knowledge and the development of new areas in medical science such as genetics;
b. Increased consumer awareness and articulation of medical through the Internet and mass media coverage;
c. Advances in educational theory and technology, allowing for innovations in course design and delivery;
d. Changes in health delivery models with an ever increasing role for community, ambulatory and private hospital settings ;
e. Increases in the numbers and changes in the mix of medical students;

f. Change in the previous arrangements where a graduate from the medical school did an intern year and then went out to practice;
g. Current pressures in terms of prompt discharges from hospital which reduces the scope for a ward round to provide substantial teaching within a public hospital;
h. Many outpatient clinics doing very little teaching (which relates to an issue of cost shifting within the State/Commonwealth Medicare agreements);
i. Growing recognition that there has generally been very little training for clinical teachers and this remains a current deficiency; and
j. Workforce shortages which are creating stress on existing workforce and impacting on the time available for medical education and training.

Any reforms to the medical education system must take heed of these factors. In this connection, it is pertinent to note that in a survey of reports seeking changes in medical and clinical education in the USA, Christiakis[1] has identified eight objectives which, at times may not be necessarily complementary:

> *...serve changing public interest, address physician workforce needs, cope with burgeoning knowledge, foster generalism and decrease fragmentation, apply new educational methods, address the changing nature of illness, address the changing nature of practice, and improve the quality and standards of education.*

2. The CPMEC Australian Curriculum Framework for Junior Doctors.

The Confederation of Postgraduate Medical Education Councils (CPMEC) is currently overseeing the development of national core curriculum for prevocational doctors. The draft version of the Australian Curriculum Framework for Junior Doctors has been released for consultations and feedback from stakeholders and can be viewed through the CPMEC web-site at http://www.cpmec.org.au/curriculum.

It is pertinent to provide some background to the development of this framework. Over the past five years, most states and territories of Australia have developed curricula, learning guides, learning portfolios or other mechanisms aimed at defining the learning content of the intern and prevocational years of medical training. The Australian Curriculum Framework for Junior Doctors consolidates the work done by the Postgraduate Medical Council of NSW (now IMET) on a national core curriculum project that was funded by the Medical Training and Review Panel (MTRP).

Phase 1 of the NSW project included, *inter alia*, the circulation of a questionnaire to Junior Medical Officers (JMOs) throughout NSW to identify their learning needs. The development of a draft national core curriculum had been overseen by a National Project Steering Committee. Phase 2 of the project was intended to validate the draft curriculum on a national basis and develop strategies for its implementation. In order to move the project forward, a national meeting of key stakeholders was convened and CPMEC became actively involved in the development and implementation of a new curriculum framework.

CPMEC convened a Writing Group to produce a draft document that would be subjected to a comprehensive review and consultative process involving a wide range of potential users and key stakeholders. Building on work already undertaken in

Australia and overseas, the Writing Group analysed existing prevocational curricula, in particular those developed or published by the Postgraduate Medical Councils of New South Wales, South Australia & Western Australia; the United Kingdom Foundation Programme and the Royal College of Physicians & Surgeons of Canada's CanMEDS initiative. Reference was also made to other relevant documents, in particular the National Patient Safety Education Framework and the CDAMS Indigenous Health Curriculum.

The Curriculum Framework structure that has emerged comprises three major **areas** (Clinical Management; Communication; and Professionalism). Each area is subdivided into **categories** (five categories under Clinical Management and three under each under Communication and Professionalism). Each category is further subdivided into four to seven **topics**. The entire framework comprises 63 topics. Eleven of these topics refer to a list of common problems and conditions with which prevocational trainees should become familiar. The five topics relating to skills and procedures are associated with a list of skills and procedures that should be mastered in the prevocational years. For every topic, a set of three **capabilities** has been defined which may describe knowledge elements, skills, behaviours or attitudes.

A period of extensive review and consultation is now under way. Feedback on the curriculum can be provided by registering on the website or via mail to the CPMEC. Letters have also been sent to key stakeholders seeking their feedback and endorsement. Responses to the framework to date have largely been very positive. Attachment B is copy of the draft framework.

It is our intention to launch the curriculum framework at the 11th National Prevocational Medical Education Forum in Adelaide on October 29th, 2006. We anticipate that consultations on the framework will be an ongoing process. Once there is broad consensus on the framework, it will be populated with links and resources on each of the capabilities outlined in the framework. There is ample scope for the framework to be tailored to the requirements of local area needs. We contend that the launch of the CPMEC Australian Framework for Junior Doctors provides an opportunity for PMCs to make a significant contribution to bridge the gap between undergraduate and vocational postgraduate training.

In developing the draft Curriculum framework and inviting feedback from stakeholders, a number of issues have emerged that have been highlighted in some of the previous submissions to the DEST study. Some of these advocate increased emphasis for their speciality. A number of other submissions highlight the need to include generic qualities such as communication skills, professionalism, and leadership. However, as noted elsewhere, *'it is always easy to put stuff in; but it is slightly harder to take stuff out, but unless stuff comes out, what goes in will not be treated properly'.*[2]

The CPMEC is convinced that lack of acceptance of this framework, with appropriate modifications, will certainly reduce likelihood of achieving competencies and retard preparation of trainees for postgraduate training.

3. Prevocational education and the role of PMCs

It is clear that the lack of cohesion across health and education sections, national and state jurisdictions, is counterproductive to effective national policies in medical education and training. Moreover, the lack of alignment between workforce planning and education and training needs of the workforce is problematic. There are significant shortages of hospital doctors and this puts considerable stress on education and training programs.

However, the CPMEC does not see that the encroachment of medical schools into the prevocational domain is appropriate. In this connection we concur with the views of a former Chair of the CPMEC who has commented as follows:

> *Our medical school graduates lack the skills and experience to enter directly into specialist training; medical schools lack the resources to oversee all postgraduate programs; and the current thrust in Australian medical education is to attempt to shorten the overall training period..*[3]

The CPMEC notes that some of the earlier submissions have questioned the effectiveness of training arrangements at the prevocational postgraduate level. We contend that postgraduate medical councils bring invaluable experience to postgraduate medical education through work done in the domains of accreditation, clinical teaching, international medical graduate assessment and support, curriculum development, junior doctor educational forums, and professional development of registrars to highlight just some of the achievements. We would also like to put on record that contrary to a previous submission to the DEST study[4], CPMEC now has formal links to the Australian Medical Council.

It is our contention that instead of trying to wither away the role of PMCs, the focus should be on the adequate resourcing of the existing training bodies responsible for the first two post graduate years and non-vocational trainees, irrespective of their actual format in different states. In this regard it is pertinent to note recent developments in NSW where an integrated organisation – the Institute of Medical Education and Training (IMET) has emerged to look after postgraduate medical accreditation, workforce and education and training issues.

Other developments, with new Hospital Networks in NSW and Hospital Consortia in Victoria, have seen State Departments of Health and postgraduate training organisations (IMET, Postgraduate Medical Council of Victoria - PMCV) work in collaboration to try to align workforce distribution and education requirements of physician trainees. CPMEC is strongly supportive of this alignment model. It has significant implications for future developments in placements of prevocational trainees and the trainees of other colleges. Further, it provides significant advantages in ensuring that meeting the needs of rural and outer metropolitan hospitals is a priority for the whole Network/Consortium. In addition, there is a great potential for organisation of education and training and the development of multidisciplinary education teams with critical mass. CPMEC and its PMCs have also supported the development, accreditation and evaluation of out-of-hospital prevocational training posts in Rural and General Practice settings. South Australia and Western Australia have taken a lead role in this regard.

Another priority area for CPMEC has been to strengthen linkages with Medical Colleges. We are exploring ways of supporting portable and modular training through effective links with the Colleges. The links between CPMEC (with its State and Territory PMCs) and the Colleges are not well developed. CPMEC is seeking to address this through its efforts to deliver a better characterised trainee 'product' to Colleges. To this end CPMEC has supported a number of projects: training portfolios; development of a national curriculum; analysis of prevocational trainees' learning needs; and 'teaching on the run'.

In turn Colleges need to interact more effectively with CPMEC and its PMCs. A current MTRP-funded national project, supported by the CPMEC, is an example of a project with good collaborative potential. This is aimed at developing generic modules for professional development of registrars who have a major influence on the education and training of junior doctors. Further opportunities for collaboration include accreditation processes, co-development and evaluation of training modules; professional development of medical educators; development and evaluation of assessment tools. The issue of compression of training time is frequently raised. Impinging on this duration are the efficiency of the medical training processes, recognition of prior learning and the development of competencies.

Cognisance must be given to the role of the Medical Review Training Panel (MTRP) which has played a vital facilitative role in promoting interaction between various PMCs in developing and promoting national standards by funding innovative projects and research to enhance the education and training of junior doctors. Amongst the achievements was the promulgation of National Training and Assessment Guidelines for Junior Medical Officers (JMO) in 2003[5].

STRAND 1: PREPARATION FOR INTERNSHIP

What competencies do medical graduates need to be successful as interns, both at the outset and later in the intern year? (knowledge, skills, and professional, including cultural attitudes).

CPMEC has sought to articulate these in the draft CPMEC Australian Curriculum Framework for Junior Doctors as a guide to the competencies required at the end of the first two postgraduate years. As noted in a recent UK conference on medical education:

> *The goal of the undergraduate curriculum ...is to assure that students are indeed prepared to assume their routine patient care responsibilities under supervision. We are not in the business, in terms of the undergraduate curriculum, to prepare students for independent practice and to be experts in the field, but simply to ensure that they are ready for the next stage of medical education, which is the postgraduate period.*[6]

With regard to core knowledge that needs to be developed through the undergraduate years and then supplemented in the early postgraduate years and in vocational training, there is a need to regularly decide on what core principles are applied in clinical management. An example may be the understanding of ECG patterns. This underpinned by core knowledge of electrophysiology and anatomy and the impact that various pathological changes cause on the electrophysiology of the

conducting system. These core principles should then allow a student or a prevocational trainee to work out ECG patterns and to be able to do this without necessarily specialising in cardiology. Therefore the ability for the core principles to be revisited in the medical course and in the prevocational training as well as vocational training periods is essential. In this regard, one of the challenges that might be given to each of the colleges or specialties is to identify the core knowledge which underpins core principles for their area, to then enable this to be revisited throughout the undergraduate and prevocational training periods.

In generic terms, graduates need to have the competencies that allow them to practise safely as interns and to proceed to specialty training (including general practice). The problem faced by curriculum designers is to decide what material is essential and it is important to recognize that many specialty groups advocate inclusion of a level of detail about their own specialty which cannot be replicated in all specialties in the time available in a medical course.

It also needs to be recognised that the intern year is not a homogeneous experience. Interns in metropolitan centres have little access to general medical and surgical patients. Hence the anxiety of junior doctors to be exposed to Emergency terms where they see a broad patient base. They also have ready access to registrar supervisors. An increasing proportion of the increasing graduate numbers will go to provincial centres, where access to generalist patients is available but, conversely, supervising registrars are not.

CPMEC is also supportive of broadening the curriculum to include elements of professionalism, communication and leadership and related attributes that contribute to effectiveness as a doctor.

What are the implications of those requirements for undergraduate medical education?

It is expected the prevocational curriculum will link with undergraduate medical education, as well as lead into specialist college education to ensure a seamless transition of training necessary for the medical trainee at each level.

Some of our PMCs feel that further work is required on the undergraduate curriculum and assessment with respect to work readiness. Consideration needs to be given to improving the pre-internship term to prepare graduates for work as a junior doctor. This term could be modified to ensure the medical student is placed into, and seen to be part of, the medical team rather than an observer. In this way the student would be more actively involvement in clinical procedures (under appropriate supervision) and would be able to be assessed within the hospital environment for clinical and non-clinical skills

There are a range of other issues which need to be developed including some skills acquisition. In the current situation, this is probably best done in simulation laboratories before being put into practice on patients. Given the increased student numbers and also the prevocational training positions, this is going to become a greater imperative. There is a greater need to be developing team skills at an undergraduate and postgraduate level. There needs to be consideration of a new class of teaching. Service delivery must focus on training as well. A change in practice in how ward rounds are conducted will make an impact on both undergraduate and prevocational

training. Further, given the reduction in outpatients there is a need to rethink service delivery and perhaps have teaching & training outpatients and consider the development of a new class of consultant involved in teaching & training.

How well prepared are medical graduates for internship

We have noted from previous submissions that there are significant differences in perceptions about preparedness of graduates for internship. Some note that the present cohorts are better prepared than the past and that "very few students are unfit for internship."[7] Others note 'a variable and sometimes disappointing ability…when they commence work'[8], or that 'knowledge base is typically adequate but work fitness marginal.'[9] Still others note as 'a key concern… the preparedness of medical graduates to undertake post-graduate training and fulfil the service delivery requirements of health services'[10]. Getting clarity on this questions is further exacerbated by the availability of few, if any, objective measures. Usually the views are based on anecdotal evidence.

Responses from our PMCs confirm this diversity of views. Some note that graduates are generally well prepared but could always be better, especially in some skills and understanding of the health system. Others note that many graduates lack skills in dealing with undifferentiated patients, which may reflect emergency medicine being a late-comer in academia and often under-represented in the teaching program. It is suggested that "on call" teaching could assist in this domain.

In NSW, it has been noted that feedback from Directors of Clinical Training (DCTs), Term Supervisors and JMO Managers indicates that the "work readiness" of new interns is variable. In developing the NSW JMO curriculum it became clear that the in-hospital supervisors' expectations of JMO performance were not being met. In particular, emphasis was placed on the JMO's level of competence regarding certain common clinical procedures. Consequently, the NSW JMO curriculum identified the following eight skills graduates needed prior to commencing work as an intern:

- Elicit, record and present a patient's medical history and relevant findings after conducting a physical and mental state examination
- Formulate and communicate a working diagnosis and plan of investigation and treatment
- Complete a "surgical scrub" and use aseptic technique for procedures
- Venepuncture
- IV cannulation
- Identification of conditions requiring urgent referral
- Prescribe safely
- Recognition of an abnormal ECG tracing.

Which areas of study and methods of learning have been more/less successful in preparing students for internship, and what are their relative strengths and weaknesses?

A number of our member PMCs have cautioned against advocating particular methods with limited data or evidence base. However, the rapid expansion of medical knowledge and the increasing availability of IT based information sources mean that it is essential for students to be well trained in information gathering techniques to

bolster their clinical skills. There is some evidence to support the view that material memorized in didactic teaching environments is soon forgotten. Anecdotal comparisons with international medical educational systems with less clinical education than Australian medical courses would suggest that this is an important method of learning.

The transition to internship could be improved by a better developed and assessed pre-intern term. The practical exposure and experience working clinically needs strengthening. It is perceived that this relates to inadequate structure and assessment of the pre-intern term. The term may need to involve medical students being appointed to one or more hospitals and being involved directly in the medical team, possibly as a clinical assistant. This would provide the opportunity to develop the skills to perform as an effective intern. Brief, intensive trainee-internship programs have proved beneficial in Queensland but are logistically difficult, when removed in time from the start of internship. An extended pre-intern orientation of at least one week in paid time is being evaluated as a substitute there.

Could the transition to internship be improved and, if so, how?
The significant but largely unplanned expansion of medical student numbers has raised questions about the capacity of the health system to provide training for its students in terms of placements, skills development, educational supervision and mentoring support. This is at a time when there are higher workloads for clinical teachers in hospital settings which impacts upon time available for teaching. The more widespread use of skills labs does help to ameliorate the situation to a degree, but again access to skills labs is limited and strategic planning has not occurred at a national level, despite some excellent reports and state initiatives.

It has also been suggested that the competencies themselves are well defined by Medical Schools and the AMC but the problems relate to implementation because of financial constraints, lack of trained educators, reducing opportunity for exposure, and lack of access to appropriate clinical skills laboratories.

There is also concern that the level of exposure to some medical specialities in undergraduate courses appears limited and there is a belief that this does influence choice of specialty training.

Some specific suggestions to improve this transitional process have included:

- Greater emphasis on history taking, physical and mental examination, development of a working diagnosis, investigation and treatment plan, presentation of the patient, fluid charting, prescribing and identification of the unwell patient.
- Acknowledgement of the total costs of undergraduate training on the state health system. Medical students are placed into the hospital system for training with minimal dedicated funding and infrastructure. This restricts the learning that can be accomplished as the needs of the student compete with service delivery and training requirements of doctors already in the health system. Funding doctors assistant positions as a cost of an undergraduate program could contribute to better preparedness for internship as it will

improve clinical exposure and provide increased "hands on" clinical experience.

- Realignment of the outcomes of the medical courses so it meets the prerequisites for internship and significantly contributes to the successful completion of internship. This would require greater involvement of the States in discussions about what the curriculum should entail and the outcomes they require.
- Measurement of graduates across universities to ensure that the outcomes of the undergraduate curriculum are achieved. This could take the form of a comprehensive assessment process that incorporates the assessment of the skills and knowledge required for progression to postgraduate training and employment as an intern.

STRAND 2: PREPARATION FOR POSTGRADUATE TRAINING

What competencies do medical graduates need for postgraduate training? (knowledge, skills, and professional, including cultural attitudes).

Whilst it would be difficult to prescribe a universal set of competencies, our draft curriculum framework describes the competencies that a well-rounded prevocational training program can provide at the end of the first two postgraduate years. Clearly, some requirements for postgraduate training will differ according to the area of specialty and it may not be appropriate to adopt the same approach for all graduates, particularly in their PGY2 year when some graduates are beginning to specialize. However, there are some generic skills that are germane to all training programs. Medical graduates who undertake specialist training require detailed knowledge of one or more basic sciences including anatomy, physiology and pharmacology. They also require an understanding of the importance of professional skills in areas such as leadership, reflective practice, time management, and teaching skills.

During the first one to three years after graduation the emphasis should be on general clinical competence, which includes the communication and procedural skills and the attitudes which are common to most specialty training programs. Generalist capabilities should be the key to entry into vocational training and to alternative pathways of professional development. Modules of accredited training could be credited by all colleges.

It should also be mandatory for all trainees to have at least one rural and one community based term. Furthermore, the CPMEC would be supportive of measures to expose all trainees to indigenous health[11] issues in Australia as contained in the CDAMS initiative.

How well prepared are medical graduates for postgraduate training?

Once again there is very little assessable evidence to answer this question. Anecdotal reports would suggest that Australian trainees are at least as well prepared as their peers anywhere in the world. Unfortunately much of the debate on this rather controversial topic is informed by opinion rather than evidence of efficacy. It will be very interesting to analyse the outcome of more formal prevocational curricula such as the UK Foundation Years Program and the Australian Curriculum Framework for Junior Doctors. Resources for educational support for prevocational trainees in

Australia are extremely limited in comparison with those provided in other developed countries, particularly the UK.
CPMEC is of the view that trainees completing the Australian prevocational programs are at least as competent as their peers anywhere in the world. The value of prevocational training is reinforced by a submission from one of the Colleges to the DEST study which notes:

> *It has been suggested that by the time a medical practitioner has been selected into anaesthesia training in PGY3, it is difficult to distinguish from which medical school training program they have come.*[12]

The popularity of Australian graduates in other countries and the ease with which they find employment in these countries is cited as further proof of the prevocational training. General clinical competence is the most important component of preparation for postgraduate training, particularly in specialized areas where the trainee is unlikely to be exposed to a broad range of medicine during or after the training program. There is a need for an increased emphasis on leadership, management and teaching skills for registrars. This should begin in the prevocational years. There is also a need for a more comprehensive and rigorous approach to critical care training, before registrars take on primary responsibility for critically ill patients.

Which areas of study and methods of learning have been more/less successful in preparing students for postgraduate training, and what are their relative strengths and weaknesses?
Certain key competencies can be acquired in group activities, in the setting of actor patients and simulated clinical scenarios. This is more efficient than one-to-one interactions and can be equally effective. In the absence of University Medical Centres and Hospital there is little merit in Medical Schools running these activities. The supervisors and teachers are usually hospital, not academic staff.

Inputs from member PMCs, based on anecdotal feedback from clinicians involved in teaching and supervising postgraduate trainees indicates that there are knowledge deficiencies with respect to the basic medical and clinical sciences among graduates of the newer problem-based learning curricula. However, there are no available data to confirm these findings. However, if significant gaps in the knowledge base of medical graduates do exist, there are implications for the progression of doctors undertaking postgraduate training. Time and resources are diverted into covering basic concepts in medical science rather than focussing on the specific knowledge and skills required for the speciality. The possible effects of this include increased stress for trainees and lengthening of the training process. However, it is very difficult if not impossible to cover an ever-expanding knowledge base medical science and practice at medical school. Hence the shift towards teaching students how to think critically and continue to develop their medical knowledge throughout their professional lives (the so-called life long learning paradigm). The merits of problem-based learning (PBL) approach compared with the traditional discipline-based teaching approach is a complex area, and the solutions are not straightforward.

CPMEC is generally supportive of moves to expand the curriculum and use innovative teaching methods to provide a relevant knowledge base for doctors. Whilst maintaining a critical attitude towards new methods of delivery is important, at the

same time it is important not to get mired in an antagonistic outlook towards proven methods of learning from domains outside of medicine. In discussing the merits of traditional learning models with innovations such as the problem-based learning (PBL), one also should not be oblivious to the shortcomings of traditional curricula and approaches. With the growing numbers of medical students, it is also clear that senior clinicians will need to be innovative in thinking about training delivery. The influence of the aviation industry in emergency medicine training is a case in point of identifying possible synergies. It also has to be noted that the choice of particular training methods is also contingent upon resource availability and the time that can be devoted to training and education.

Could the transition to postgraduate training be improved and, if so, how?
Better integration of the national prevocational curriculum with postgraduate training curricula by allowing credits for prevocational training could shorten the total duration of postgraduate (i.e. pre-vocational and vocational training). There is also a need to provide similar resources for prevocational education programs as are provided in like countries such as the UK.

The development of IMET in NSW and the initiatives in NSW and Victoria to develop a better structure for medical workforce distribution across sectors (networks/consortia) has at least brought to light the parallel requirement of health departments to acknowledge the training needs of all medical trainees (prevocational and vocational). CPMEC would welcome a broader role for PMCs in each state and territory that encompassed an oversight role for accreditation, workforce planning, education and training of college trainees as well as prevocational trainees. It is only then that a more seamless education and training program could be enacted.

Mostly postgraduate medical teaching in hospitals is performed by visiting medical staff in an honorary 'pro bono' capacity and, as pointed out by the Productivity Commission, this is unlikely to be sustainable. The CPMEC is concerned that the medical training system is under considerable pressure as a result of the projected and imminent large increases in graduates as a result of new medical schools. Whilst recognising that this is in keeping with the first principle of the National Health Workforce Strategic Framework for national self sufficiency in health workforce supply, this is occurring at the same time as hospitals having to cope with the training needs of large numbers of IMGs. There is no well-structured system to accommodate these training needs.

The efficiency of postgraduate training could be enhanced if Colleges would agree to a range of generic competencies across disciplines. This would allow for portability of training and recognition of prior learning and avoid unnecessary duplication. There is also a need to have a more systematic process for the documentation of experience, skills and competence acquired by end of PGY2.

Other suggestions in relation to this question include:

- Reconsideration of the way in which basic medical sciences are incorporated into medical school curricula.

- Improving the level of exposure to some medical specialities in undergraduate courses so that students can make more informed career choices.
- Greater emphasis on developing team work skills – increasingly health care is delivered by multi-disciplinary teams. Some universities already have multi-disciplinary teaching programs that incorporate students from a range of health professions.

STRAND 3: CLINICAL EDUCATION

What type and level of clinical exposure do undergraduate medical students need to prepare them for internship and postgraduate training?

Supervised interaction with generalist patients with a large element of self learning and reflection is critical. This can leave substantial gaps in experience and a clinical log or portfolio approach may be needed against a curriculum framework. Undergraduate education should be case based and include an increased focus on skills development and knowledge of the health systems.

Undergraduates need a broad mix of inpatient and ambulatory exposure to prepare for internship. This is becoming increasingly difficult as a result of changes to hospital practice (reduced length of stay, increased day procedures and day of admission surgery, increased acuity and age of inpatients, policies to prevent admissions (Hospital in the Home etc), privatisation and elimination of hospital outpatient clinics) and the relative inaccessibility of patients cared for in ambulatory settings and in the private sector. For obvious reasons patients are increasingly reluctant to allow medical students and junior doctors to learn or practise procedural skills on them. Further opportunities need to be offered in simulation centres. The centres should cover basic skills and scenarios.

How well is undergraduate clinical education currently preparing students for internship and postgraduate training?

CPMEC is of the view that whilst Australian clinical education is generally good, students' preparation is being compromised by the increasing difficulty they experience in obtaining appropriate clinical experience. This situation is likely to be become more acute with increased numbers of medical students due to the expansion in the numbers of medical schools.

What are the challenges facing undergraduate clinical education and how could they be addressed?

The most critical issue relates to the rising student numbers and a lack of experienced teachers. The major challenges include access to clinical experience, providing adequate supervision, time demands for service as against protecting time for learning and teaching activities. Possible solutions include recruiting retired and part-time doctors. Training registrars and other junior doctors to teach also helps but this needs to be done in a systematic manner.

The major challenge is providing adequate clinical experience in the face of the barriers mentioned above. These are likely to increase as a result of the poorly planned expansion of medical school places over the last few years. There are a number of possible solutions, most of which require increased cooperation between levels of government and a national planning approach to clinical education to meet workforce needs that is based on educational capacity. Some possible initiatives deal with challenges might include:

- allocation of medical training places according to capacity and need rather than political advantage;
- allocation of resources to increase teaching in ambulatory settings - especially specialists' rooms;
- allocation of resources to increase teaching in the private sector;
- increased support for and use of clinical skills laboratories;
- more academic teaching positions to cope with the increased number of students;
- increased use of nursing and allied health staff to teach medical students;
- increased support for clinical teachers working in hospitals and ambulatory settings;
- removal of incentives for cost shifting between levels of government; and.
- medical students undertaking a role as a doctor assistant as part of their degree. This would facilitate delivery of service and also provide greater clinical exposure and opportunities to explore various medical specialities.

CPMEC would like to single out the major impact on prevocational education and training programs across the country as a result of the deployment of medical education officers. This commenced in Queensland as a pilot project but has now evolved to be a key part of postgraduate medical education and training in all states and territories. This is a good model for undergraduate medical education.

How effective/efficient are current and alternative models for implementing and supporting undergraduate clinical education (including the use of clinical teachers?)

In purely economic terms, it could be argued that current models are very cost effective as a significant proportion of undergraduate clinical teaching is provided at no or low cost. However, the problems mentioned above have significant impact on the overall efficiency of current models which have the potential to impact on training standards as the number of medical school graduates increases. We believe that clinical teachers are critical to the quality of clinical education and that their effectiveness is greatest when they are actively practising clinicians.

4. OTHER ISSUES

Selection of students - internship

Selection is a very complex issue. While the current trend towards graduate medical courses is supported by the better adjustment, communication and learning skills of more mature students, it could be argued that the overall cost to the community may actually be greater because of prolonged training time, reduced working life, exacerbation of workforce shortages in other health professions when their best graduates elect to study medicine after completing their first qualification, and the

possible reluctance of older graduates with family commitments to take on demanding and unsociable shift work in the first few years after graduation.

It is not clear what the effect of the trend towards increased numbers of fee paying students will have on the Australian medical workforce. There is a danger that students graduating with a large debt will not be able to work in specialties which are less well remunerated (e.g. general practice, aged care, rehabilitation) or in economically depressed areas where most patients rely on bulk billing. Similar considerations apply to students from families wealthy enough to pay their fees, whose background makes it unlikely that they will work in economically depressed areas. Conversely, there is still a great need to increase the number of students from underrepresented groups, particularly indigenous Australians.

Selection of students – postgraduate training

If the expansion of medical school places is to achieve its goal of alleviating the national workforce shortage, there will need to be a significant increase in the number of postgraduate training places, initially at the pre-vocational level and then at the registrar level. At least some of this increase will need to take place in ambulatory settings. This outcome will only be achieved by cooperation between all levels of government and with providers of specialty training programs and the clinicians who deliver them.

Teaching

Learning has been improved with the introduction of medical educators, trainer training (with initiatives such as Teaching on the Run), and curriculum at all points in the medical education continuum. Accreditation of individual posts is essential.

There is also a perception that teaching does not enjoy as high a profile as research and consequently, there are little incentives to excel in medical teaching. This would suggest the need to raise the profile of postgraduate teaching through better resource support, acknowledgement of contributions and rewards and incentives.

Assessment

There is currently an absence of a national approach for the assessment of undergraduates and PGY1. This is despite the increased mobility of medical graduates. Indeed, assessment and feedback processes to support curricula across the whole medical continuum are one area that could provide the opportunity for a range of stakeholders in medical education to pool their resources and expertise.

International Medical Graduates (IMGs) assessment and training

One of the concerns of CPMEC is that the current focus on expansion of medical schools will displace concerns for the support of international medical graduates as a priority. The AMC pathway is highly regarded but there are a number of alternative routes to registration and employment for IMGs in Australia and no uniformity about the minimum standards of assessment for entry point to clinical practice. This is of major concern to CPMEC and its State and Territory PMCs as the majority of IMGs are working in Australian hospitals and IMGs are a mobile workforce.

A CPMEC reference group completed a scoping study on information and resources relating to education and training available to IMGs in Australia[13].From this study 6

key areas identified for improvement were: international perspective; information access; orientation; communication; assessment; education and training support to ensure 'readiness for work'. A common theme identified by stakeholders in this study was the complexity and lack of coordination of these processes in Australia. IMGs in the hospital sector are meeting a significant workforce shortage but their integration into the Australian health care workforce requires careful management and support.
There is an acute need for a coordinated program of assessment and clinical training for international medical graduates who have not passed the AMC exam and are working in hospitals and ambulatory settings in Australia. The current approach is complex, inconsistent and ineffective.

Education and training support needs of IMGs has been identified by all stakeholders, and a review of what programs exist in other like countries has identified ways in which to approach this issue. An important target group that needs to be supported is the group of medical educators and co-educationalists in the postgraduate sphere.

Engagement of Hospital and Departments
One outcome of the traditional self-regulation and control of medical education by clinicians has been the very limited engagement of hospital administrators in medical education issues. As noted by Dowton *et al*:

> *There is lack of explicit accountability of healthcare service managers for education and training, even though they employ most of the teaching clinicians and the trainee medical workforce and their health services bear the accompanying risk. The leaders of hospitals and healthcare services must become more engaged in the education and training issues of their organisations*.[14]

Concluding Remarks
The CPMEC submission highlights the diversity of experiences and views relating to medical education at both undergraduate and postgraduate levels within the postgraduate medical education councils. It is clear is that the system is in need of some adjustments in light of the changing landscape of medical education. There needs to be broad discussion on what a medical student needs to acquire and the level of knowledge and skills to prepare for internship and subsequent postgraduate training. We reiterate the need to consider evidence before proposing major policy changes. In this regard, a national planning body to undertake research and development and serve as an advocate for education in medicine may be timely.

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ATTACHMENT A

Strategic intent of CPMEC

This section summarises the proposed direction for the CPMEC and its proposed core activities. It builds on the work done during the 2005 Strategic Planning workshop.

- ***CPMEC Vision***

  To contribute to safe and quality healthcare for all Australians as a national body of state and territory postgraduate medical councils, providing leadership, advocacy, research, and standards in clinical training, assessment, professional development, and performance of postgraduate doctors.

- ***CPMEC Mission***
  - Support the wellbeing, clinical training and professional development of medical prevocational trainees including international medical graduates (IMGs) and career medical officers (CMOs).
  - Supporting the wellbeing and training of medical educationalists and supervisors responsible for delivering postgraduate medical education and training.
  - Develop a national accreditation framework
  - Monitor state and territory PMCs' accreditation of prevocational training and provide a forum for sharing and reflecting on experiences.
  - Provide thought leadership in postgraduate medical education and training.
  - Develop and monitor national standards for clinical training and assessment.
  - Become the linking pin amongst stakeholders in postgraduate medical education and training (PMET) and focus on coordination and/or steering as appropriate.
  - Identify and develop strategies to deal with issues affecting the prevocational medical workforce.
  - Foster research opportunities in, and evaluation of postgraduate medical education and training.

CPMEC Priority Objectives

The following have been identified as the priorities for CPMEC:

- Provide leadership on assessment standards and processes for postgraduate training positions with particular emphasis on junior medical officers.
- Implementation and assessment of outcomes of national projects with a particular focus on national accreditation processes; implementing a Core Curriculum for PGY1 and PGY2; Professional Development of Registrars; and Education in Medical Error for Junior Medical Officers.
- Develop more effective linkages with Colleges to support portability and modular training.
- Develop better linkages with CDAMS including cross-representation on relevant Committees, Project teams and task forces, university medical faculties, and rural clinical schools to effect greater vertical integration.
- Seek resourcing of prevocational training at both national and state/ territory levels.
- Develop nationally applicable strategies for IMG assessment, training and 'on-the-job' training support.
- Contribute proactively to policy debates in PMET areas such as accreditation systems, national curriculum for junior medical officers, training outside teaching hospitals, competition in medical training provisions, IMG assessment and training, training of career medical officers, and other areas determined by the CPMEC Council.
- Develop an evaluation plan to accompany new strategies and approved projects.
- Develop evidence base for training and assessment with an appropriate research strategy for the advancement of PMET at national and state or territory levels.
- Develop communication strategy for advocacy and information dissemination about CPMEC and individual PMC achievements and plans
- Develop partnerships with organisations and individuals where potential synergies exist or can be developed including with patient health & safety councils.
- Developing awareness of the contribution of better training processes to safety and quality in healthcare.
- Develop a policy on the issue of community placements for medical graduates as a strategy and to cope with increased numbers of medical graduates.
- Develop a strategy to address knowledge sharing issues arising from work undertaken by PMCs and the CPMEC.