Medical Deans
AUSTRALIA AND NEW ZEALAND

# National Clinical Training Review

# Extension Report

Further review of areas of concern in relation to clinical training

June 2008

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## OVERVIEW

### *Introduction*

The recent National Clinical Training Review undertaken by Medical Deans highlighted the significant pressure on the current health system to accommodate the increasing number of medical students particularly in quality clinical training places for General Practice, Paediatrics, Emergency Medicine and Psychiatry.

The Review reported that:

> The challenge for medical schools in providing quality and sustainable clinical training for their students lies in overcoming barriers to expanding capacity of places including:
>
> - identification of appropriate settings for increased numbers in traditional as well as new settings
> - availability and engagement of suitably trained health care professionals to supervise clinical placements
> - provision of infrastructure to support medical education in clinical settings including physical teaching space, accommodation, IT, and support staff
> - a culture of service-delivery in some settings that does not value or include teaching in clinical practice

This brief report provides further information on the current constraints and identifies some opportunities to increase capacity for the future, while concurrently addressing the capability of sites to participate fully in medical student education.

In doing so, it is again noted that there is significant variation across medical programs; these variations impacting on the organization of clinical placements to different extent. Variations include:

- Undergraduate or Graduate Program
- Duration of Course
- Cohort Size
- Curriculum
- Structure of Program between pre-clinical and clinical aspects
- Structure of placements, including whether there is early experiential learning
- Whether the program is undertaken in a primarily metropolitan, regional/rural setting or a combination
- Location in relation to hospital and health services
- Focus of the program in regard to placements especially early in a program e.g. hospital directed or General Practice directed

Other factors that impact on the organization of placements include:

- The level of explicit commitment of jurisdictions through their Health and Human Services Departments to the integration of education/training and health service provision
- The support of hospital based administrators to support hospital staff being involved in teaching medical students
- The service delivery and workforce pressures in those health services (and this is likely to also vary across different specialty areas)
- The interest and capability of General Practitioners to provide teaching and learning opportunities to medical students
- The interest and capability of Private Hospitals and Private Practice settings to provide teaching and learning opportunities to medical students
- The interest and capability of Community based organizations to provide teaching and learning opportunities for medical students
- The number and cohort size of other medical schools (especially new schools) seeking to access the same health services for training
- The timing of semesters and the structure and duration of placements across multiple medical schools
- In locations where there are multiple medical schools operating, the relationship between them and the relevant health service administrators

*Demand for clinical experience*

The National Clinical Training Review reported that by 2012, there will be a national increase of 80% in final year placements required across Australia, with the percentage increase in final year placements needed from 2007-2012 by jurisdiction reproduced below:

| | |
|---|---|
| Western Australia | 125.4% |
| Queensland | 95.6% |
| New South Wales | 92.9% |
| Victoria | 81.1% |
| Tasmania | 43.8% |
| South Australia | 29.1% |
| Australian Capital Territory | 22.1% |

These statistics record placement needs in the final year of training, which would generally involve full immersion in a clinical setting. They therefore provide a snapshot of needs.

It is noted however that in addition to the full immersion placements, there is exposure to hospital settings and general practice settings in the early stages of many programs which will also increase the need for placement opportunities.

*Supply of clinical experience*

There are also complexities in the supply side of the equation. In its submission to the National Health and Hospitals Reform Commission, Medical Deans highlighted a

number of systemic issues that are impacting on future planning for clinical placements including:

- The traditional teaching hospital is no longer able to provide for all the training needs of medical and other health professional undergraduates and postgraduates.
- The models of medical care have changed and very much shifted back to the community and private sector.
- Existing resources are to a large extent locked up in the budgets of State-funded teaching hospitals, which will not be able to cater for increased numbers.[1]

The Australian Medical Council (AMC) Standards require that a School demonstrate that it has "sufficient clinical teaching facilities to provide a range of clinical experiences in all models of care (including primary care, general practice, private and public hospitals, rooms in rural, remote and metropolitan settings and Indigenous health settings."[2] Medical Schools commit to the delivery of programs that equip students with the knowledge, skills and experience to progress to practise as interns and to postgraduate training.

In some geographical regions, there are multiple medical schools. Rural Clinical Schools extend the geographical boundaries of operation, and there are Schools with Clinical Schools in multiple states and territories (e.g. Notre Dame Sydney has metropolitan clinical schools in Sydney and Melbourne, and a rural clinical school with sites in NSW and Victoria; the Northern Territory Clinical School is part of the School of Medicine at Flinders University and also teaches students from James Cook University).

In some cases separate clinical teaching opportunities may be identified, in other cases these might be shared or developed jointly. Medical Schools recognize their responsibility to support all clinical teachers and sites, but are especially cognizant of those in high demand from increased students, perhaps from multiple schools.

There is collaboration and co-operation by Medical Schools with respect to clinical placements, examples of which are listed below:

- Where two universities operate within the same hospital or health service entity, partnership meetings between the participating universities and health entity
- Formal bi-partisan memoranda of understanding between a health entity and separate universities
- Heads of Medical Schools meeting as a jurisdictional group
- Cross appointment of conjoint staff involved in teaching students from multiple universities
- Development of arrangements for shared support staff in clinical teaching locations
- Collaborating in the development of new clinical teaching opportunities

[1] Medical Deans Australia and New Zealand, Submission to the National Health and Hospital Reform Commission, May 2008

[2] http://www.amc.org.au/forms/Guide2007toCouncil.pdf (accessed 5 June 2008)

*Co-ordination of Program Delivery*

As medical programs have evolved to reflect the changing nature of health service delivery, there has been a significant increase in the complexity of managing what effectively becomes an individual program for each student. This is particularly the case in physically smaller facilities such as General Practices, Clinics in Paediatrics and Mental Health and Community based services which may only take one or two students at any one time and in some instances, for single day placements.

These 'individual' programs have increased exponentially the administrative and coordination processes involved. In an environment where Schools are seeking to broaden clinical training opportunities, especially one in which there is increased competition for places, the number of sites with which relationships need to be developed is also growing dramatically.

It is a challenge requiring the commitment of academic and administrative resources to establish relationships, manage the ongoing placement of students, and facilitate communication between sites and students in regard to the details of each placement, in addition to teaching, evaluation and assessment support.

In some instances, these relationships too are supported by agreements in order to formally address critical issues, such as professional indemnity.

*Placement Development*

This overview has not attempted to further map the clinical teaching facilities and opportunities beyond the information included in the Clinical Training Review Report. In many of the newer medical schools the process of finalizing placements, particularly in the listed specialties which often occur in later years of training, is currently in train.

These processes include properly assessing the opportunities available within hospitals associated with clinical schools, nearby hospitals, outpatient and community based clinics, community organizations, and general practices. In other instances, it may also involve the negotiation, either directly between universities or in conjunction with jurisdictional health systems of the extent to which certain highly specialized, tertiary level services might be able to be accessed by students across multiple universities. Schools place particular focus on ensuring the quality of the placement, including ensuring there is appropriate supervision in place.

*Detailed Placement Mapping*

In the case of General Practice, the three Victorian Universities with Medical Schools (Deakin, Monash and Melbourne) commissioned a substantial mapping exercise for Victorian GP placements during the last year. The report of this study also assessed the barriers that need to be addressed to ensure that there will be sufficient places available for the increased number of students. With the barriers likely to be similar across all jurisdictions, the report will provide useful modelling for other jurisdiction's planning for the future.

The Medical Students Outcomes Database and Longitudinal Tracking Project, developed and managed by Medical Deans and supported by the Australian

Government has the capacity over time to provide more detailed data about the full extent and breadth of placements nationally.

*Workforce, Infrastructure and Funding*

In seeking to open up new and continually develop sites for training, Schools are focused on the availability of appropriate clinical supervision and environments for the delivery of quality placements. An issue that requires explicit consideration include the availability of suitably qualified and experienced clinical staff. In the fields of existing and projected workforce pressure, which include Emergency Medicine, General Practice and Psychiatry, there may be constraints on specialists to undertake teaching.

Teaching facilities need adequate physical teaching space, as well as IT and support staff in order to provide appropriate learning environments. Students may also require accommodation facilities in rural and regional areas and potentially in large urban centres.

While there is a mechanism to recognize, by time, the involvement of General Practitioners through the Practice Improvement Program, there is no similar mechanism for other medical practitioners or non-medical supervisors or sites outside a hospital setting.

The mechanisms for supporting this capital and recurrent expenditure are matters which require urgent deliberation by government, health settings and Schools. It will need to be addressed for future and current sites of clinical teaching. Medical Deans supports the recognition within current health service delivery models of the concurrent opportunities for training. It is noted that the GP Super Clinics will include core infrastructure including trainee consulting rooms, teaching rooms and training facilities; the model could be used for other health settings. [3]

***Conclusion***

The challenge of ensuring that all medical students experience a range of clinical training opportunities to prepare them for their next phase of training is a real one, and Medical Deans and Medical Schools will continue to work with the AMC to further develop criteria to assist all parties in defining quality clinical placements which is a critical concurrent activity.

Medical Schools can not address the challenges outlined in this review independently of one another, nor of the health settings in which medical students learn the skills and professional behaviours critical to their future roles.

Medical Deans will continue to work constructively with Governments and other key stakeholders to further this important shared endeavour and continue to be informed by the recommendations and findings of:

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[3] GP Super Clinics
http://www.health.gov.au/internet/main/publishing.nsf/Content/pacd-gpsuperclinic-about
(accessed 6 June 2008)

- National Clinical Training Review (Medical Deans)
- Medical Student Clinical Placements in Victorian General Practices (prepared for Deakin University, Monash University and the University of Melbourne)
- Clinical Placements in Undergraduate Medical Education: Applying AMC Standards to the Assessment of Clinical Training Placements.

## General Practice

### *Summary*

A simplistic calculation (general practitioners / medical students) would suggest that there ought to be sufficient sites across Australia to absorb the additional students coming through the medical school programs.

However, there are significant barriers that, unless addressed, have the potential to reduce the current number of practices involved in teaching of medical students. Increasingly too, medical programs involve exposure to general practice in early years in addition to a placement as part of the clinical years. This move to explicitly acknowledge the importance of primary care further increases the number of placements or sessions required. Medical Schools have recognised that General Practice (GP) support and development is critical to the delivery of their programs and is working to overcome these challenges.

To do this, there is a need to recognise and address key resources issues – infrastructure, time, educational support and administrative co-ordination.

### *Demand for Placements*

The National Clinical Training Review Report found an overall 80% increase in the number of final year placements required from 2007 to 2012.

To determine the needs of medical programs for GP placements in Victoria from a quantitative and qualitative perspective, Deakin, Monash and the University of Melbourne commissioned a mapping exercise to address clinical placement needs in Victoria. The exercise has quantified the challenges in that state. The box below reports the findings in regard to the demand for placements as well as the current limitations on supply of those placements. [4]

General Practice in Victoria

An increase of 125% in the total number of general practice placements is required by 2012, and an increase of 165 % by 2017.

Only 571 of the 1729 Victorian general practices have expressed an interest in hosting

The anecdotal advice is that the findings in the Victorian report are consistent with the experiences of other Medical Schools throughout Australia in regard to GP recruitment. The table below lists the current general practice placements highlighting too the needs for additional places in early training years.

[4] Medical Student Clinical Placements in Victorian General Practices – Prepared for Deakin University, Monash University and the University of Melbourne, February 2008, p.3

Overview of General Practice Placements drawn from the Clinical Training Review Report*

**GENERAL PRACTICE**

| School/Faculty | State | Period in Program |
|---|---|---|
| **ANU** | NSW/ACT | Integrated |
| **Newcastle** | NSW/ACT | Early in Program, and Year 5 |
| **Notre Dame Sydney** | NSW/ACT | Early in Program, and Year 3 |
| **Syd** | NSW/ACT | Year 4 |
| **UNSW** | NSW/ACT | Year 5 |
| **UWS** | NSW/ACT | Year 3 and Year 5 |
| **Wollongong** | NSW/ACT | Early in Program, mid - Year 3-4 |
| **Bond** | QLD | Early in Program, and Year 4 |
| **Griffith** | QLD | Early in Program, and Year 4 |
| **JCU** | QLD | Integrated |
| **QLD** | QLD | Year3` |
| **Adelaide** | SA | Integrated |
| **Flinders** | SA | Early in Program, Year 3 or Year 4 |
| **Tasmania** | TAS | Early in Program, and Year 5 |
| **Deakin** | VIC | Early in Program, and some Year 3, and Year 4 |
| **Melbourne** | VIC | Year 6 |
| **Monash** | VIC | Early in Program, and Year 4 |
| **Notre Dame WA** | WA | Early in Program, and Year 3 and Year 4 |
| **UWA** | WA | Year 1, Year 5, Year 6 |

*This reflects the data reported in the National Clinical Training Review Report and has been extrapolated from data collected to provide an overview of individual programs.

Full program details should be confirmed with individual Schools

It is also observed that rural and remote areas where Rural Clinics Schools are located are integral sites for GP learning. The John Flynn Scholarship program, supported by the Australian Government and administered by the Australian College of Rural and Remote Medicine has been recognised as valuable to encouraging students to gain experience in rural locations. It is noted that additional funding to extend this scheme was provided in the 2008/2009 Australian Government budget. This is a positive initiative, which recognises the need to support rural clinicians and communities in providing learning opportunities for medical students.

### *Key Considerations*

*Space and Infrastructure*

While students need to develop the skills of assessing patients, there is often no space for them to do so in the GP setting where patients anticipate meeting in private with their doctor or other health professional. Guides for the integration of students into a practice highlight the benefits of having a spare consulting room available, which does not impact on patient flow or restrict the types of learning activities students can undertake.[5]

Space becomes an increasing challenge for sites that also have general practice registrars, or students who are undertaking some of the postgraduate year experience in a general practice. This situation does provide opportunities across the continuum and support the vertical integration of education. However, as the structure of training in a GP setting is more apprenticeship based than within a hospital setting, the demands on each individual practitioner are even higher.

The issue of space has been specifically included in the plans for the GP Super Clinics and in proposals from various medical schools as well as regional programs such as the North Coast Medical Education Collaboration (NCMEC).

These models recognise that like hospital settings, long term infrastructure support and agreements are mutually advantageous and serve to provide the basis for a formal relationship to be developed for related activities such as teaching and research collaborations, especially in relation to national public health priorities, such as obesity and diabetes.

In addition to physical space, students in general practice sites will also need to access onsite computer facilities, such as patient records to enable them to prepare for patient clerking and to develop their competency in regard to software in the general practice setting.

Students will also need to access university based sites including online learning modules, libraries and online reference tools. Ideally, the availability of desk-based videoconferencing would assist students to continue to participate in tutorials conducted on university campuses and other activities when on a general practice rotation.

[5] Dawn E DeWitt, 'Incorporating medical students into your practice' *Australian Family Physician*, Vol 35, No. 1 & 2 January 2006

*Recognition and Reward*

GP career development is more individual, and does not have the same structure as exists for hospital based clinicians. In some hospital settings, involvement in teaching may be a key performance indicator. For General Practitioners, the involvement in teaching does not relate however to progression in salary or professional recognition in the same linear fashion. Indeed, involvement in teaching can be construed as a cost and thus the support from the Government for the Practice Improvement Payment recognises the impact of teaching vis a vis delivery of medical services.

As indicated in the National Clinical Training Review Report, it is considered timely to review the PIP scheme as it relates to teaching6, in respect of its level of payment and the mechanism of payment.

The funding of the time teaching medical students where it draws from other aspects of a clinician's work (and of deriving income) is not limited to general practice and are a broader challenge as more training takes place in the private sector. It is noted that in all aspects of medical practice, the involvement of clinicians goes beyond the reimbursed time in curriculum development, examination preparation and marking, and student and course evaluation as a demonstration of their personal commitment to the professional ethic of teaching within medicine.

Mechanisms for funding community based training which might not involve the direct involvement of a medical practitioner are also needed.

An area that spans across both support and recognition is the availability of accessible teaching support and development. It has been consistently identified[7] that GPs do not feel adequately supported in their teaching and assessment roles. Schools are developing different models of training and support to GPs such as that discussed below in southern Queensland.

*Co-ordination*

The distributed nature of general practices creates a greater challenge in respect of co-ordination with more students as well as more sites and supervisors involved. There is significant variance in the ways in which individual practices are connected, the role of Divisions of General Practice across Australia as co-ordinating bodies, and the role of General Practice Education and Training which oversees training for postgraduate medical practitioners in general practice.

The development of the Rural Clinical Schools across Australia though has developed expertise of Medical Schools in placing students in a more dispersed manner. This model recognises that administrative support needs to be available to

[6] Medical Deans, National Clinical Training Review Report to the Medical Training Review Panel Clinical Training Sub-Committee, February 2008 , p.14

[7] e.g. Australian Medical Council, Clinical Placement in Undergraduate Medical Education: Applying the AMC Standards to the Assessment of Clinical Teaching Placements, November 2007; J.Thistlewaite, M.Kidd & J N Hudson, 'Moving more of the medical school curriculum into the community' *The Clinical Teacher'*, 2007, Vol 4, p.232-237; Burgell Consulting, *Medical Student Placements in Victorian General Practices,* February 2008.

support both participating practices as well as students often award from the School base, and could be considered for general practice placement co-ordination.

***Examples and Opportunities for Collaboration***

Below are examples of collaboration. The first two relate to clinical placements across a full curriculum, the second two relate to collaboration in the General Practice setting.

*North Coast Medical Education Collaboration (NCMEC)*

NCMEC is a development between the University of Sydney, Wollongong and Western Sydney. With Wollongong's program focusing especially on the general practice setting and the timing of the placements for the University of Sydney and University of Western Sydney incorporating significant GP attachments, the availability of GP placements is critical to the capacity to the conduct of the consortium.

One of the core aspects of collaboration has been in the agreement for medical students of a similar stage in their training to be located in the Northern Rivers to assist the integration process. There will also be consistent assessment tools and broad curriculum outcomes to assist a seamless experience for medical practitioners who may be teaching and supervising students from different universities.

*Rural Clinical School of Western Australia*

The Rural Clinical School in Western Australia was initially established by the University of Western Australia in 2002, with students from the University of Notre Dame Australia (WA) commencing in 2007.

Students spend a full academic year in a rural town - Derby, Broome, Port Headland, Karratha, Geraldton, Bunbry, Narrogin, Albany, Esperance and Kalgoorlie., and undertake the same curriculum content as students based in metropolitan areas. Approximately 2/3 of the students are from UWA and 1/3 from Notre Dame.

In 2007, the Rural Clinical School was recognised with a Carrick Award primarily for curriculum innovation through the approach of Clinical Learning Embedded in Rural Communities (CLERC)..[8]

*Bond University and Griffith University*

In a metropolitan setting, there is a co-ordinated approach in place between Bond University and Griffith University in conjunction with the Gold Coast Division of General Practice. This initiative, which relates to the provision of both administrative co-ordination and of teaching support and development, recognises the shared geographic space in which the two Universities operate and the desire to provide an opportunity to streamline the process for GPs engaging in teaching. A key component of the collaboration is the employment by the Division of General Practice

[8] http://www.news.uwa.edu.au/oct-2007/rural-clinical-school-wins-national-award (accessed 8 June 2008)

of an administrative co-ordinator whose role is jointly funded by the Universities, and whose position description was developed by the three parties jointly.

This model provides a single point of contact for GPs in the Gold Coast region who are able to take medical students, who is able to provide information about any variation in requirements, and to balance teaching commitments. It is explicitly noted however that one of the reasons that this process has been able to be effectively implemented is because of the different structures of the programs, as Bond operates on a three (3) semester per year structure and Griffith two (2).

In addition to the recruitment of general practices, which is enhanced because the co-ordinator is an employee and has access to the full listing of members' practices, teaching workshops which draw on the staff of both universities are also coordinated through this contact. This 'brokerage' style model is interesting because it sees both universities as equal partners in the venture.

*Vertical Integration*

Vertical Integration (the involvement of multiple levels of teachers and learners) is a key site of collaboration within General Practice, and has been especially evident in rural and regional locations. There is a significant research base in different approaches undertaken through Australia with some recent research reporting on the development of an educationally embedded framework guiding a pilot project assessing the feasibility of GP registrars' involvement in teaching medical students in Queensland. [9]

[9] Dick M-L B, King D B, Mitchell G K, Kelly G D, Buckley J F, Garside S J; 'Vertical Integration in Teaching and Learning (VITAL): an approach to medical education in general practice' *Medical Journal of Australia* (2007) ; 187: 133-135

**Paediatrics**

***Summary***

Clinical placements for Paediatrics and Children Health are diverse. They range across specialised children's hospital, other tertiary hospitals with major paediatric units and placements in other hospital based specialties, general practice and community settings.

While a number of capital cities have specialised Children's (or Women's and Children's) Hospitals, these are not sites for which all medical students will have access. However, this is not necessarily an impediment to ensuring that all students have appropriate paediatric experience in their medical programs. Rural Clinical experiences such as the Flinders' Parallel Rural Curriculum demonstrate the feasibility of students undertaking paediatric clinical placements working through GP, local hospitals and community settings. A number of examples of community based paediatrics and child health learning are discussed below.

The specialised environments of Children's Hospitals have, by definition, a larger specialist and vertical workforce which can enable a strong teaching culture.[10] These are also significant sites in regard to the conduct of research and clinical trials. These sites while perhaps not experienced by all medical students are critical to the development of paediatric curriculum and the future paediatric workforce.

***Demand for Placements***

In respect of demand, drawing from the data in the National Clinical Training Review, it is noted that on the basis of existing programs[11], approximately 134 weeks of placement per final year group across Australia is required, with an average of 8.5 weeks spent in Paediatrics.

Using the data in Appendix VI on Projected Final Year Placement Requirements[12]

In 2007 it was reported that 1908 places (i.e. numbers of students) would be required.
This would equate to: 16 218 weeks of placements.

In 2012 it was reported that 3427 places would be required.
This would equate to: 29, 130 weeks of placements.

[10] E.g. Gough, J and Beckett, D, 'Young doctors as teachers: understanding their motivations and needs' , *The Clinical Teacher,* March 2006, Vol 3, No, 1, 49-52.
[11] Not including those with integrated programs
[12] It is noted that not all Paediatrics placements occur in the final year, but these figures are used for consistency.

The table below draws from the Clinical Training Review shows the range of Paediatrics and Child Health placements within hospitals which Medical Schools currently have in place.

This data does not generally include the wide variety of community based placements which are undertaken by students.

It also does not reflect the attendance of students from, non-affiliated universities, on an elective basis, which is discussed later in this section.

| State | University | Site | No. of Clinical Rotation places |
|---|---|---|---|
| **NSW** | Sydney | Children's Hospital Westmead | 62 per rotation |
| | | Dubbo | 21 |
| | | Orange | 26 |
| | UNSW | Sydney Children's Hospital | 48 |
| | Newcastle | John Hunter | 68 |
| | | Tamworth | 16 |
| | | Gosford | 24 |
| | ND Sydney | Not Available | |
| | UWS | Not Available | |
| | Wollongong | Not Available | |
| | | | |
| **VIC** | Melbourne | Austin/Northern Clinical School | 26 |
| | | Royal Melbourne Hospital and Western Health Clinical School | 26 |
| | | St Vincents/Geelong Clinical School | 36 |
| | | Shepparton Clinical School | 10 |
| | | Ballarat Clinical School | 10 |
| | Monash | Monash Medical Centre | 25 |
| | | Box Hill | 5 |
| | | Frankston | 5 |
| | | Angliss | 5 |
| | | Damdenong | 5 |
| | | Bairnsdale | 7 |
| | | Bendigo | 4 |
| | | Casey | 15 |
| | | Orbost | 2 |
| | | West Gippsland | 3 |
| | | Traralgon | 7 |
| | | | 2 |
| | Deakin | Not Available | |

| | | | |
|---|---|---|---|
| **QLD** | UQ | Royal Brisbane | 21 |
| | | Redcliffe | 3 |
| | | Mater | 20 |
| | | Nambour | 3 |
| | | Redlands | 3 |
| | | Ipswich | 4 |
| | | Caboolture | 3 |
| | JCU | Townsville | Multi-Disclipinary – Integrated |
| | | Mater Townsville | |
| | | Cairns | |
| | | Mackay | |
| | | Darwin | |
| | Griffith | Gold Coast | 43 |
| | | Logan | 24 |
| | | Tweed | 12 |
| | Bond | Not listed | |
| **SA** | Adelaide | Women and Children's | Year 4 – 5<br>Year 5 – 141 |
| | | Lyell McEwin | Year 6 – 1 |
| | Flinders | Flinders Medical Centre | 70 |
| | | Royal Darwin | 10 |
| | | Alice Springs | 2 |
| | | Katherine | 4 |
| **WA** | UWA | Princess Margaret | 135 |
| | | Rural Clinical School | 41 |
| | Notre Dame WA | Fremantle | 3 (Just 2007 – Year 2) |
| | | Princess Margaret | 3 |
| | | | |
| **TAS** | Tasmania | Royal Hobart | 31 – Year 5<br>34 – Year 6 |
| | | Launceston | 36 – Year 5<br>31 – Year 6 |
| | | Burnie | 15 – Year 5<br>6 - Year 6 |
| | | | |
| **ACT** | ANU | Child and Adolescent Services | 39 – Year 3* |
| | | Paediatricians private rooms | 39 – Year 3*<br>Integrated Child and Community Health |

*This reflects the data reported in the National Clinical Training Review Report and has been extrapolated from data collected to provide an overview of individual programs.

Full program details should be confirmed with individual Schools

***Key Considerations***

*Opportunities for community placements*

Paediatrics and Children's Health activities take place in General Practice and Community Health settings, and there are many instances of broadening out in the types of placements which students undertake.

One recent article describes the experience of students from the University of Newcastle at the regional centre of Tamworth who undertook a community attachment in a school for children with disabilities. This was taken as part of an placement supervised by a specialist Paediatrician, and in a hospital with a 16 bed children's ward and 7 neonatal beds. Under a previous curriculum, students had been hosted at the school for a tour, but this had been replaced by a structured program which enabled students to develop an awareness of motor skill activities of the children, and to develop and understanding of the role of educational environments. [13]

This initiative highlights a model where an existing relationship has been enhanced and the learning experience and outcomes extended. In this instance, students were able to explore the challenges of mobility in undertaking tasks of daily life, but also the role of educational institutions in supporting the development of these children.

*Challenges in community placements*

It is noted that there are challenges for medical schools in working collaboratively with community organizations, including the impact of the students on the service delivery imperatives of community agencies. These are well described in an article reporting on the experience in South Australia by academics from both the University of Adelaide and Flinders University, whose students were integrated in recognition of the limited resources in community child health.[14]

The issue of co-ordination of placements is described in the overview section of this report.

The proliferation of physical sites where students undertake learning activities also increases the resourcing needed to conduct pre-placement site visits to assess OH&S, to provide briefings to staff about where the placement fits within the curriculum as well as any relevant assessment or evaluation issues. These are critical to supporting the development of a quality placement.

*Access to Tertiary Services*

While not a requirement across all Medical Schools, it is appreciated that some students will have special interests in particular areas, and most courses provide the opportunity for electives to be chosen, and for these to be undertaken interstate and overseas. This has particular relevance to the AMC requirement for graduates to be able to progress to training in any branch of medicine.

[13] Jones P and Donald M, 'Teaching medical students about children with disabilities in a rural setting in a school' *BMC Medical Education*, 2007: 7: 12

[14] O'Keefe, M and White, D, 'Continuing effectiveness of a community child health programme for medical students' *Medical Teacher*; 2006: 28:8; 683-689

Most tertiary paediatric sites offer elective placements for students outside of the University/Universities which they affiliated with.

These placements are limited, and would not enable all medical students in Australia to obtain experience in a dedicated Children's Hospital.

The following information from the websites of Medical Schools gives a summary of the potential access of medical students to a number of tertiary sites for an elective placement.

QLD

Royal Children's Hospital (affiliated with the University of Queensland)

Medical students in Qld are able to apply direct to the Royal Children's Hospital for clinical electives positions. Interstate students however must arrange clinical electives through the University of Queensland.

NSW

The Children's Hospital at Westmead (affiliated with the University of Sydney)

Expressions of Interest for Electives are able to be made by local and international students.

The Sydney Children's Hospital (Affiliated with the University of New South Wales)

Clerkships are available.

WA

Princess Margaret Hospital for Women (affiliated with the University of Western Australia_

Paediatric electives are available.

VIC

Royal Children's Hospital (Affiliated with the University of Melbourne)

Students must have completed the paediatric component of their medical degree.

SA

Adelaide Women and Children's Hospital (affiliated with the University of Adelaide)
Students must have completed the basic paediatric component of their medical degree.

## Emergency Medicine

### *Summary*

It is recognised that Emergency Departments are a site of significant stress within the health system. There are reported concerns about the capacity of the system to provide sufficient intern training places to the extent that there has been consideration of alternatives, including 'emergency-type' rotations in rural general practices. [15] The data collected for the report 'Researching a flexible training model of education and training for PGY1 doctors', which was funded by the Medical Training Review Panel indicated a tension between the educational/experiential preference to mandate emergency experience and the sufficiency of sites and clinical supervisors to enable this to occur. This situation is mirrored in medical student training.

Placements in emergency settings are viewed as pivotal to the development of core procedural skills that are important for students as they progress into their postgraduate training. It is also considered especially valuable to skills as they relate to; patient assessment and management, and diversity of patients and the range of other health care team members from whom students can learn.

In order to expand capacity in the number of placements available, Medical Schools are exploring a range of different initiatives to support the emergency experiences of their students being valuable, including the scheduling of students on overnight shifts to increase the number of placement opportunities available.

Clinical Skills Laboratories and simulation centres are also increasingly being used to support student competency and confidence in core procedural skills in a controlled learning environment, which may add value to their experience within an emergency department. These sites, also being developed for nurse education, are also an opportunity for inter-professional learning.

Not unlike the situation of tertiary level paediatric centres, there is a limited number of full trauma centres throughout Australia, and experience of that setting can not be seen as a universal one.

### *Demand for Placements*

Some schools have specified Emergency placements; others are part of associated specialties including Critical/Acute Care and Anaesthetics.

In respect of demand, drawing from the data in the National Clinical Training Review, it is noted that on the basis of existing programs, approximately 97 weeks of placement per final year group across Australia is required, with an average of 6 weeks spent in Emergency.

[15] The Postgraduate Medical Education Council of Queensland. Researching a flexible training model of education and training for PGY 1 doctors – final project report. 2006 http://www.webls.net/weblease/clientimages/pmcq/Final%20Report.pdf (accessed 6 June 2008)

Using the data in Appendix VI on Projected Final Year Placement Requirements[16]

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| In 2007 it was reported that 1908 places (i.e. number of students) would be required.<br>This would equate to: 11, 448 weeks of placements.<br><br>In 2012 it was reported that 3427 places would be required.<br>This would equate to: 20, 562 weeks of placements. |

***Key Considerations***

*Workforce challenges*

A key factor affecting the quality of a clinical experience is whether appropriate supervision is in place. Research undertaken by the Workplace Research Centre at the University of Sydney of medical and nursing staff in NSW reports that 62.4 % of all medical and nursing staff surveyed had seriously considered leaving the public hospital system. The media report noted that emergency departments in particular were "straining under serious inadequacies in resources"[17] Reports on incidents across Australian in emergency departments have included concern the junior level of doctors on site. [18] This environment has the capacity to directly impinge on the supervision and active teaching available for medical students.

The impact on student training of time constraints on emergency specialists is also demonstrated in some recently reported research funded by the Medical Training Review Panel. The study showed that many prevocational doctors did not feel adequately prepared for the management of emergencies; and identified a number of the factors needed to obtain support and feedback from more senior medical practitioners, including supervisors. [19]

*Breadth of Learning Opportunities*

The teaching and learning opportunities of an emergency department placement extend beyond the development of key procedural skills which the community generally expects doctors to be able to perform. There is also an opportunity to undertake core general activities including history taking, physical examination, clinical reasoning as well as of health system management. A recent article has for

[16] It is noted that not all Emergency placements occur in the final year, but these figures are used for consistency.
[17] 'Most medicos have thought of quitting public hospitals' *The Sydney Morning Herald,* March 29, 2008 http://www.smh.com.au/news/national/most-medicos-have-thought-of-quitting-public-hospitals/2008/03/29/1206207427600.html (accessed 6 June 2008)
[18] E.g. Chaos rules hospital: doctor http://www.theage.com.au/news/national/chaos-rules-hospitals/2007/09/22/1189881836970.html?page=fullpage#contentSwap1
'Calls for under-staffed emergency depts. To be closed' http://abc.com.au/news/stories/2006/01/07/1543282.htm,
[19] Duns, G, Weiland, T, Crotty, B, Jolly B, Cuddihy & Dent A, 'Self-rated preparedness of Australian prevocational doctors for emergencies' *Emergency Medicine Australasia,* (2008) 20, 144-148

instance reported on the establishment of a formal bedside teaching program within an Australian emergency department, albeit for specialist trainees. [20]

The value of the emergency experience has been explicitly recognised by medical students at the University of Western Australia who were reported as having presented an "unprecedented student petition …..to request an increase in curriculum time for Emergency Medicine." [21]

Anecdotally, there is active competition within medical school cohorts to be rostered onto a night shift during their emergency medicine placements because it is perceived to reflect the expectations of intern experience and because the case mix is felt to be more varied.

*Clinical Skills – Simulation*

Simulation is a process that can provide vertically integrated medical education and training, as well as inter-professional learning and teamwork activities. The use of these new technologies, whether for the teaching of medical students or in credentialing of experienced clinicians, requires adequate teaching and support staff.

Medical students are gaining exposure to clinical settings early in their training and clinical schools are often equipped with Clinical Skills Laboratories to support the progressive learning and reinforcement of relevant skills. This may include core skills such as resuscitation, venepuncture and cannulation, using simulation manikins.

The type of facility described above predominately prepares students for initial training. Higher level facilities would need to be accessed to supplement emergency department placement experience.

Fully equipped centres (High-end fidelity systems in which there is fully integrated audio-visual, computer simulations, and in some instances linkages with hospital pathology and radiology records) in the teaching and learning context, allow student to practice often rather invasive procedures in a standard and safe environment before progressing to developing further experience in a clinical setting is valuable and promotes patient safety and highlights to medical students the issue of competency.

The capital investment and recurrent funding required to support high-end centres are significant. Recently, the University of Sydney, Royal Prince Alfred Hospital and the NSW Institute of Medical Education and Training jointly funded a newly purchased mannequin for installation at the Emergency Medicine Simulation Centre, costing $60,000.

[20] Celenza A, Rogers I R, ' Qualitative evaluation of a formal bedside clinical teaching programme in an emergency department' *Journal of Emergency Medicine*, (2006) 23: 769-773

[21] Celenza, A, 'Evolution of emergency medicine teaching for medical students' *Emergency Medicine Australasia*, (2006) 18, 219-220

## Psychiatry

### *Summary*

Mental Health is an identified National Health Priority Area and there are significant workforce development activities underway which take a 'whole of workforce' approach, and include medical students and psychiatry registrars.

In 2006, the Council of Australian Governments signed the National Action Plan on Mental Health, 2006 to 2011, The Plan includes a series of measures, such as funding to increase the mental health content in tertiary curricula, including opportunities for clinical training in multi-disciplinary teams that include allied health, medical and nursing students, and increasing the numbers of training for all members of the workforce. There were also measures designed to extend the capacity of the public health system, e.g. 300 additional acute and non-acute mental health beds in NSW, Mental Health teams within Emergency Departments and support for Community services.

Placements for Psychiatry, are also described by some schools and faculties using varying terminology including; Mental Health, Psychological Medicine and some including Addiction Medicine.

### *Demand for Placements*

In a clinical specialty in which the service models are being extended, the supply side of placement opportunities for students are not static and are complex to determine. There are however anecdotal reports of a tightness due to a reduction of in-patient beds at a time when demand is increasing.

In respect of demand, drawing from the data in the National Clinical Training Review, it is noted that on the basis of existing programs[22], approximately 111 weeks of placement per final year student group across Australia is required, with an average of 7 weeks spent in Psychiatry.

Using the data in Appendix VI on Projected Final Year Placement Requirements[23]

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| In 2007 it was reported that 1908 places (i.e. number of students ) would be required.<br>This would equate to: 13, 356 weeks of placements.<br><br>In 2012 it was reported that 3427 places would be required.<br>This would equate to: 23, 989 weeks of placements. |

[22] Not including those with integrated programs
[23] It is noted that not all Psychiatry placements occur in the final year, but these figures are used for consistency.

***Key Considerations***

*Range of activities/experience in the training program*

Medical Schools are addressing the challenge of ensuring an appropriate and diverse range of clinical experiences for students in Psychiatry, including in some instances, the blending of clinical experiences across general practice, emergency and community type placements.

A paper published in December 2007, reported on the responses of senior medical students as to why, on the basis of their clinical experience, they thought doctors may be less likely to train in psychiatry. While a small sample (n=55) it found that the primary exposure of students had been to acute patients and that service delivery pressure impacted on their clinical experience as medical students and the perception of the specialty training environment. [24]

*Infrastructure support and payment mechanisms*

In considering the further extension into private practices, similar challenges exist for Psychiatrists in private practice (on premises beyond private psychiatric hospitals) as exist for General Practitioners in terms of the importance of the availability of space for students to meet with patients and undertake independent study associated with their psychiatry placement. With this activity occurring outside of the public hospital setting, PIP type payments ought to be available.

Consideration of similar issues also needs to be undertaken in regard to private psychiatric hospitals, and of the opportunities for student exposure to both inpatients and outpatients.

*Existing Workforce, including distribution*

In a February 2008 paper prepared by the Mental Health Workforce Advisory Committee, current and future workforce imbalance is noted.

The issue for current and future medical students is whether there are sufficient specialists and trainees to provide properly supervised and supported learning experiences across the spectrum of practice with the time and support to teach. The report also notes that:

> "Locally trained psychiatrists are poorly distributed between private practice and the public sector. The public system has difficulty in recruiting local graduates, and has an increasing reliance on overseas graduates, particularly in rural areas. "[25]

International Medical Graduates may require additional support from Medical Schools in their teaching roles, where their training has been undertaken in a system in which medical education is conducted differently.

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[24] Wigney T & Parker G, 'Medical student observations on a career in psychiatry' *Australian and New Zealand Journal of Psychiatry,* 41:9, 726-731

[25] http://www.nhwt.gov.au/documents/Mental%20Health%20Workforce%20Activities/MHWAC%20Supply%20of%20psychiatrists.pdf Accessed 4 June 2008 (page 2)

***Opportunities for Collaboration***

As noted above, the workforce supporting Australians with mental illness is in a phase of significant development and expansion.

The Better Access to Psychiatrists, Psychologists and General Practitioners through the Medicare Benefits Schedule (MBS) program which became available from November 2006, formally recognizes the role of general practitioners, and highlights the range of allied health practitioners - psychologists, social workers and occupational therapists who may be involved in supporting a patient to address mental health issues. Awareness of the roles of each of these practitioners would be contribute to a student understanding of patient treatment and support pathways.

It is noted that these issues are being canvassed in the current Senate Community Affairs Committee Inquiry into Mental Health Services in Australia.

## CONCLUSION

As recognised in the Report of the National Clinical Training Review, the increase in the number of medical student places and the establishment of new medical schools has added a level of complexity in ensuring that the quality and quantity of placements available is adequate.

This overview has provided additional consideration as to the situation in four specialty areas – General Practice, Paediatrics, Emergency Medicine and Psychiatry.

Medical Programs are designed to ensure that students are well equipped to progress to the next level of their medical education. The clinical education component is critical to the development of knowledge, skills and professional behaviours which medical students need to acquire in order to actively contribute to the provision of health services to the community.

Health service delivery is in a state of change and medical programs are reflecting these changes. This has included an increase in the amount of training which is conducted beyond the walls of public teaching hospitals. This is also a reaction to the need to expand the number of placements available overall.

In providing additional advice to Medical Schools about the application of its standards to the assessment of clinical teaching places, the Australian Medical Council states that:

> "As far as practicable, the AMC will expect arrangements for all clinical placements to be equivalent, in terms of clinical supervision and administrative support, to those that exist in public hospital settings."[26]

This overview has examined factors related to capacity and well as capability. Without adequate support, even existing placements may not be able to be maintained. This was particularly highlighted in the case of General Practice, where detailed assessment has been made of both capacity and capability in Victoria through a project jointly undertaken by Deakin, Monash and Melbourne Universities in an active demonstration of collaboration.

It has also highlighted that as new and an increasing number of placement opportunities are identified, the complexity of managing individual student programs increases, as does the management of the relationship with health care and community settings where medical students are placed.

Support for private health care providers, whether private hospitals, General Practitioners, other practitioners in private practice as well as community clinics and facilities needs to be addressed in regard to payment mechanisms as well developing core infrastructure including teaching space, IT facilities, clinical skills laboratories, consulting space in some settings, and student accommodation in non-urban areas.

[26] AMC, Clinical Placements in Undergraduate Medical Education: Applying AMC Standards to the Assessment of Clinical Teaching Placements, p. 14