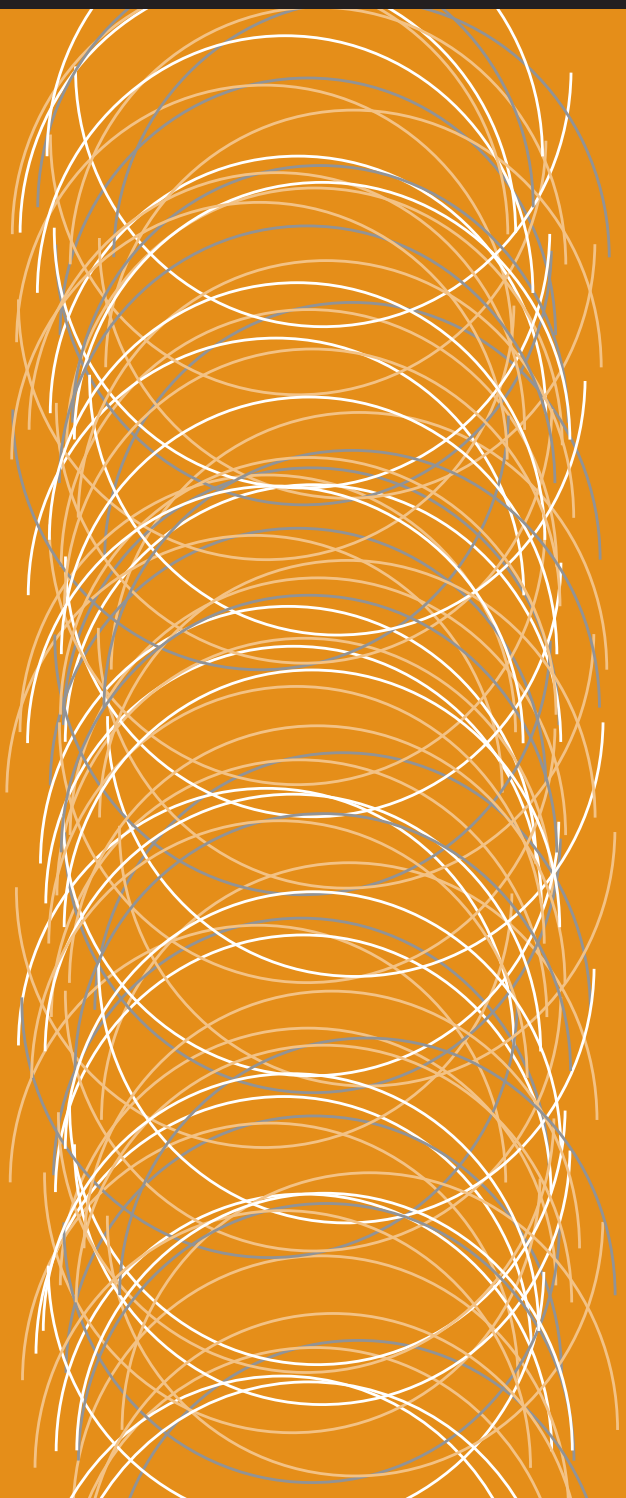
Australian Medical Council Limited

Accreditation of Melbourne Medical School Faculty of Medicine Dentistry and Health Sciences University of Melbourne

AMC



Medical School Accreditation Committee
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Executive summary and recommendations 2012

The document *Procedures for Assessment and Accreditation of Medical Schools by the Australian Medical Council (AMC) 2011* provides for schools to propose major changes to medical courses which require accreditation of the entire course.

In 2005, the University of Melbourne implemented the 'Melbourne Model' to reframe the academic degree structure and objectives of the University to deliver a small number of broad undergraduate programs from which students would progress to employment, research higher degrees or a suite of professional and other Masters programs.

The University submitted a major change notification to the AMC proposing Australia's first masters degree program being offered as the professional entry-level qualification for medicine. It is also the first medical program in Australia to award Doctor of Medicine (MD) - a common qualification internationally. The AMC recognises there are additional academic expectations of master degree level programs, and the University had structured its program to account for these expectations. The AMC notes that separate processes exist to audit and assess whether the University's academic programs are in line with national qualification framework.

The AMC visited the Melbourne Medical School, Faculty of Medicine, Dentistry and Health Sciences at the University of Melbourne in 2010 to assess the accreditation of the major changes proposed by the Faculty, which were to result in the award of Doctor of Medicine (MD). At its November 2010 meeting, the AMC Directors endorsed the accreditation report and resolved:

(i) That the major changes proposed to the Medical Program, Melbourne Medical School, Faculty of Medicine, Dentistry and Health Sciences, the University of Melbourne – including the change to a four-year master degree program – be approved.

(ii) That accreditation of the six-year MBBS undergraduate entry and four and one half year graduate entry medical program of the Melbourne Medical School, Faculty of Medicine, Dentistry and Health Sciences at the University of Melbourne be extended until 31 December 2013, subject to the submission of a satisfactory comprehensive report to the Medical School Accreditation Committee by 30 June 2011 on the teach-out phase of the course.

(iii) That the four-year master degree program of the Melbourne Medical School, Faculty of Medicine, Dentistry and Health Sciences at the University of Melbourne leading to the award of Doctor of Medicine (MD) **be granted accreditation for six years until 31 December 2016, subject to a follow-up assessment in 2012 to review the implementation of the first two years of the course and detailed plans for Years 3 and 4,** and the submission of satisfactory progress reports to the Medical School Accreditation Committee.

In June 2012, an AMC Assessment Team visited the Melbourne Medical School, Faculty of Medicine, Dentistry and Health Sciences at the University of Melbourne to review the implementation of the first two years of the new course and the detailed plans for Years 3 and 4. This report presents the findings of the 2012 and 2010 assessments against the approved standards, and the Executive Summary reflects the 2012 findings in the Key Findings Table.

It should be noted that the AMC Team did not review the current Melbourne Bachelor of Medicine Bachelor of Surgery (MBBS) program. The University is phasing out the six-year and four-and-a-half year program leading to the MBBS award. The MBBS program enrolled its last undergraduate students in 2008 and last graduate-entry students in 2009. Following the Faculty's submission of a comprehensive report in 2011, accreditation of this program was granted an extension of accreditation until the end of 2013.

Following the 2012 assessment, the AMC found that the School had successfully implemented the first two years of the program and that planning for Year 3 of the program was progressing satisfactorily. The School's necessary focus on Year 3 planning at present means it has yet to clarify details of the Year 4 curriculum. The AMC requests that future reporting to the AMC provide details regarding the implementation of Year 3 and detailed plans for the Year 4 curriculum to ensure that the Melbourne Medical School continues to meet the accreditation standards.

Decision on accreditation

Under the Health Practitioner Regulation National Law Act 2009, the AMC may grant accreditation if it is reasonably satisfied that a program of study, and the education provider that provides it, meet an approved accreditation standard. It may also grant accreditation if it is reasonably satisfied that the provider and the program of study substantially meet an approved accreditation standard, and the imposition of conditions on the approval will ensure the program meets the standard within a reasonable time. Having made a decision, the AMC reports its accreditation decision to the Medical Board of Australia to enable the Board to make a decision on the approval of the program of study as providing a qualification for the purposes of registration.

The October 2012 meeting of the AMC Directors endorsed the accreditation report and resolved:

(i) That the Doctor of Medicine program of the Faculty of Medicine, Dentistry and Health Sciences at the University of Melbourne **continues to meet the approved primary medical accreditation standards.**

(ii) That the accreditation of the Doctor of Medicine program of the University of Melbourne Faculty of Medicine, Dentistry and Health Sciences be confirmed until 31 December 2016, subject to the following conditions:

(a) by the end of 2013, evidence to address the conditions on accreditation detailed in the Key Findings Table (in the Executive Summary) at:

- Standard 5.3 – Assessment Rules and Progression
- Standard 5.4 - Assessment Quality

(b) satisfactory annual progress reports that continue to demonstrate that the standards are met, and that include the 'items for reporting in the 2013 progress report', as set out in the key findings table and accreditation report.

Overview of findings

The following Key Findings Table summarises the findings of the 2012 AMC assessment against the accreditation standards.

The left column of the Table includes a summary of the findings for each standard, including areas of commendation and areas for quality improvement. Areas for quality improvement are suggestions for the School and are not an AMC reporting requirement.

The right column of the Table notes any conditions of accreditation. If a standard is 'not met' or 'substantially met' the AMC imposes conditions to ensure that the medical education provider does meet the standard in a reasonable timeframe. The AMC requires medical education providers to provide evidence of actions taken to address the condition and meet the standard in the specified timeframe.

The right column also notes items that should be reported on in the next progress report to demonstrate that the medical education provider continues to meet the standard. The AMC will include these items for reporting in the next progress report request to the medical education provider.

Key Findings Table

1. Context (governance, autonomy, course management, educational expertise, budget, health sector, research context, staff)	Standard 1 remains MET.
<u>Areas of commendation:</u> • The depth and breadth of the educational expertise across all sites. • The appointments of the Chair of Clinical Education and Training Development, and the Associate Dean Indigenous Development. • The continued robust and mutually supportive relationship with the health sector. • The enthusiasm, energy and commitment of staff across all sites, particularly during the teach-out phase of the MBBS Program. <u>Areas for quality improvement:</u> • The strengthening of academic aspects of Aged Care by establishing a Chair.	No conditions. To continue to demonstrate that the Standard is met, in the 2013 progress report include: • Confirmation of sustainable funding for the CRESCENT Program beyond 2012 (1.5). • Confirmation of the specific resources at the Bendigo Regional Clinical School to support implementation of the MD Program (1.6, 1.8, 8.3). • Agreements with remaining health services (1.6).
2. Outcomes (mission, course outcomes)	Standard 2 remains MET.
<u>Areas of commendation:</u> • Clear enunciation of graduate attributes.	No conditions.

3. Curriculum (framework, structure, content, duration, integration, research, choices, continuum)	Standard 3 remains MET.
Areas of commendation: • The intersession weeks in Year 2 which afford an opportunity for reflection on clinical experience and consolidation. • The potential of the Scholarly Selectives 1 and 2 in Years 3 and 4 to provide students with outstanding exposure to the scientific method. • The year-long Empathic Practice/Ethical Practice program in Principles of Clinical Practice 2 • The School's innovative approach to interprofessional education, including the student-run interprofessional placement pilot at Northern Clinical School; the interprofessional REACH student-led collaborative clinic. • The School's vision in the development and implementation of the Curriculum Connect™ tool. Areas for quality improvement: • More definition for students regarding the depth of knowledge and level of skill required at each stage of the program. • Continued development of the pathology program. • Continued vertical integration of Indigenous health across clinical sites. The plan to take a values-based approach to Aboriginal health will likely require further resourcing. • It is recommended that additional funding be sought to expand successful interprofessional pilot programs.	No conditions. To continue to demonstrate that the Standard is met, in the 2013 progress report include: • Matching of graduate attributes to the Year 3 and 4 curricula (3.1). • How student development of the graduate attributes will be identified throughout the program (3.1). • Progress of efforts to improve clinical immersion in Year 2 (3.2.1). • Finalised rotation outlines and analysis of implementation of Principles of Clinical Practice 3 (3.2.1). • Year 4 curriculum plans and development (3.2.1, 3.6). • Details of the curricular content of Scholarly Selective 1 in Year 3, and the assessment component of Scholarly Selective 2 in Year 4 , and the opportunities for choice in both (3.4, 3.5).
4. Teaching and learning methods	Standard 4 remains MET.
Areas of commendation: • The continuity of student academic support and mentorship offered by the Clinical Skills Coaches and the Empathic Practice / Ethical Practice tutors via weekly tutorials in Year 2. • Clinical Colloquia, a series of 24 discussion sessions at clinical schools, that focus on cases that illustrate how health disciplines work together to improve patient quality of life. • The Primary Care Community Base placements at	No conditions. To continue to demonstrate that the Standard is met, in the 2013 progress report include: • Teaching and learning methods implemented in Years 3 and 4.

Northern and Western Hospitals in Years 2 and 3 for one-day a week. • The procedural skills sessions led by clinical nurse educators that begin early in the program. <u>Areas for quality improvement:</u> • Maintain training and calibration sessions for the Clinical Skills Coaches and Empathic Practice / Ethical Practice tutors. • Ensure students at all clinical schools have the same Clinical Skills Coach for the duration of Principles of Clinical Practice 2.	
5. Assessment (approach, methods, rules and progression, quality)	Overall, Standard 5 remains MET. 5.1 Met 5.2 Met 5.3 Substantially Met 5.4 Substantially Met
<u>Areas of commendation:</u> • The integrated approach to assessment, the appropriate balance of formative and summative assessment, and the weighting of clinical skills. • The incorporation of satisfactory professional behaviour as a hurdle requirement, and the role of the Fitness to Practice Committee. <u>Areas for quality improvement:</u> • Reconsideration of the balance of assessment of clinical skills and knowledge, to improve identification of weaker students. • Support the proposed Mini-CEX calibration exercise to improve consistency among assessors and across sites.	Conditions to be reported on by end of 2013: • Demonstrate improved understanding amongst staff and students of the 50% cut-off score in the weighted assessment components (5.3); • Reintroduce criterion-referenced standard-setting procedures for written examinations (5.4). • To continue to demonstrate that the Standard is met, in the 2013 progress report include: • Analysis of the assessment mix for Principles of Clinical Practice 3 over the next two to three years (5.1). • Details regarding Year 4 assessment (5.1).

6. Monitoring and evaluation (ongoing monitoring, evaluation, feedback and reporting, educational exchanges)	Standard 6 remains MET.
<u>Areas of commendation:</u> • Effective response to student and tutor feedback, as evidenced by changes made to the Year 1 Foundations of Biomedical Science curriculum. <u>Areas for quality improvement:</u> • Ensure that there is appropriate coordination of evaluation activities within Phases 2 and 3 across sites. • The separation of senior Assessment and Evaluation roles.	No conditions.
7. Students (intake, admission, support, representation)	Standard 7 remains MET.
<u>Areas of commendation:</u> • The long-term mentoring and support role of the Ethical Practice/Empathic Practice tutors and Clinical Skills Coaches for students.	No conditions.
8. Resources (physical, IT, clinical teaching)	Standard 8 remains MET.
<u>Areas of commendation:</u> • Impressive clinical educational facilities, including clinical skills centres, in most hospitals visited, and plans for future developments at Peter MacCallum Cancer Institute and the Northern Hospital. • Enthusiastic clinical skills centre staff. • Development of the Primary Care clinical placement capacity and infrastructure at Northern and Western. • Curriculum ConnectTM remains an impressive concept despite the problems experienced extending use to the wider student community.	No conditions. To continue to demonstrate that the Standard is met, in the 2013 progress report include: • Update on the implementation and evaluation of Curriculum ConnectTM , including roll-out as a web-based program.

Introduction: The AMC Accreditation Process

The AMC is an independent national standards body for medical education and training. Its principal functions include assessing primary education providers[1] and programs of study based predominantly in Australia and New Zealand leading to general medical registration of the graduates of those programs in Australia to determine whether they meet the approved accreditation standards.

The purpose of AMC accreditation is the recognition of medical programs that produce graduates competent to practise safely and effectively under supervision as interns in Australia and New Zealand, and with an appropriate foundation for lifelong learning and for further training in any branch of medicine.

AMC assessments are undertaken against the approved accreditation standards and follow the process described in the following documents:

- *Standards for Assessment and Accreditation of Medical Schools by the Australian Medical Council 2010.*
- *Procedures for Assessment and Accreditation of Medical Schools by the Australian Medical Council 2011.*

The AMC's Medical School Accreditation Committee oversees the AMC process of assessment and accreditation of medical schools, and reports to the AMC Directors. The Committee includes members nominated by: the Australian Medical Students' Association; the Confederation of Postgraduate Medical Education Councils; the Committee of Presidents of Medical Colleges; the Medical Council of New Zealand; the Medical Board of Australia, and the Medical Deans Australia and New Zealand. The Committee also includes members of the Australian Medical Council, and a member with background in and knowledge of health consumer issues.

On 1 July 2010, a new registration and accreditation scheme covering ten health professions (including medicine) came into effect across Australia. Under the *Health Practitioner Regulation National Law Act 2009* ten national boards regulate their respective health profession.

As the body appointed to conduct accreditation functions for the medical profession under the National Law the AMC has authority to decide on the accreditation process and procedures; accredit and refuse accreditation to programs of study; monitor accredited programs of study; and develop accreditation standards. The Medical Board of Australia makes decisions to approve or not approve accredited programs of study as providing a qualification for the purposes of registration in the medical profession and to approve or not approve accreditation standards.

An AMC assessment entails appointment of an AMC team which reviews the provider's documentation, undertakes a program of meetings and prepares a report. The report is considered by the Medical School Accreditation Committee who make a recommendation on

[1] The *National Health Practitioner Regulation Law Act 2009* uses the term ***education provider*** to cover organisations that may be accredited to provide education and training for a health profession. The term encompasses universities; tertiary education institutions, or other institutions or organisations that provide vocational training; or specialist medical colleges or other health profession colleges. For consistency, the AMC uses the terminology of the National Law in its standards and guidelines.

accreditation to the AMC Directors. Directors make a decision within the options described in the *Procedures for Assessment and Accreditation of Medical Schools by the Australian Medical Council.*

Having made a decision, the AMC then provides a report to the Medical Board of Australia regarding AMC accreditation. The Medical Board will then make a decision on the approval of the program of study for registration purposes.

Once it has accredited an education provider and its program of study, the AMC monitors the program and the education provider to ensure that they continue to meet the accreditation standards. The principal monitoring mechanisms are structured progress reports, comprehensive reports and the full accreditation assessment every ten years. In addition, the AMC expects that accredited education providers will report at any time on matters that may affect the accreditation status of their program.

The University, the Faculty and the School

Established in 1854, in 2011, the University of Melbourne had 7,627 staff and 36,843 students, including 10,159 international students.

In 2005, the University of Melbourne implemented the 'Melbourne Model' to re-frame the University's academic degree structure and objectives. This aims to deliver a small number of broad undergraduate programs from which students progress to employment, research higher degrees, or a suite of professional and other master degree programs.

The Faculty

The Faculty of Medicine, Dentistry and Health Sciences (FMDHS), which includes the Melbourne Medical School (MMS), is led by the Dean of the Faculty. The Dean delegates responsibility of the medical school to the Head of the MMS, who has responsibility for all graduate programs in the School, including the Melbourne Doctor of Medicine (MD) program.

The School

The MMS is one of five schools in the Faculty, the others being the Melbourne Dental School, the Melbourne School of Health Sciences, and the Melbourne School of Population Health and the newly created Melbourne School of Psychological Sciences. The Head of the MMS delegates the specific responsibility for the current MBBS and the MD to the Director of the Medical Education Unit.

The School is the oldest medical school in Australia, celebrating 150 years in 2012. It is the first to implement a graduate Doctor of Medicine degree in Australia.

The School's main campus is in Melbourne and it has affiliations with hospitals in the region and further afield, including Melbourne Health, Northern Health, Goulburn Valley Health, Western Health, Royal Women's Hospital, St Vincent's Hospital, Royal Children's Hospital, Austin Health, and Mercy Private Hospital.

The Melbourne MD development

In its progress report to the Medical School Accreditation Committee in 2006, the Faculty outlined the University's plans for the new 'Melbourne Model', which would re-frame the University's academic degree structure and objectives. In 2009, the Faculty provided a Stage 1 submission detailing the major change plans to its medical program. In August 2009, after considering the Faculty's submission, the AMC Directors resolved that the planned

curriculum was likely to comply with the AMC accreditation standards. The Faculty was invited to proceed to Stage 2, including a visit by an AMC assessment team. In this assessment, a university is required to present full course details, and financial, physical and staff resources available to design the course, implement all years and to support the course when fully established. The accreditation assessment, conducted against the AMC accreditation standards, required an AMC assessment team on-site.

The AMC Directors in 2010 granted accreditation to the award of Doctor of Medicine for six years until 31 December 2016, subject to a follow-up assessment in 2012 to review the implementation of the first two years of the course and detailed plans for Years 3 and 4, and the submission of satisfactory progress reports to the Medical School Accreditation Committee. An AMC assessment team conducted a follow-up assessment in June 2012.

This report

This report details the 2010 and 2012 assessment findings, addressing the major change to the existing six-year undergraduate/four-and-one-half-year graduate-entry medical programs offered by the MMS within FMDHS. Each report section begins with the relevant approved accreditation standards.

The standards were revised following the 2010 visit, and as a result, Standard 3 was amended. The 2012 findings are written to the revised standards.

Appreciation

The AMC thanks the University, the Faculty and School staff for the detailed planning and hard work that went in to both assessments. The AMC also acknowledges and thanks the staff, clinicians, students and others who met the AMC Teams for their hospitality, cooperation and assistance during the assessment process.

The members of the 2010 and 2012 AMC Teams are given at **Appendix One**.

The groups met by the AMC in 2010 and 2012 are given at **Appendix Two**.

1 The Context of the Medical School

1.1 Governance

The medical school's governance structures and functions are defined, including the school's relationships with its campuses and clinical schools and within the university.

The governance structures set out, for each committee, the composition, terms of reference, powers and reporting relationships, and ensure representation from all relevant groups in decision-making.

The school consults on key issues relating to its mission, the curriculum, graduate outcomes and governance with those groups that have a legitimate interest in the course.

2010 Team findings

The governance structures and functions of the Melbourne Medical School (MMS) are well defined, with the Dean of the Faculty of Medicine, Dentistry and Health Sciences having overall responsibility for the operation and strategy of the Faculty and the MMS. The Dean, in turn, has delegated responsibility for certain role components to senior staff within the Faculty.

A major change to the Faculty of Medicine, Dentistry and Health Sciences composition and governance came into effect on 1 January 2010. This included a new four-school structure, comprising the MMS, the Melbourne Dental School, the Melbourne School of Health Sciences (incorporating the previous Schools of Physiotherapy, and Nursing and Social Work) and the Melbourne School of Population Health. The MMS now incorporates the School of Behavioural Science as the Department of Psychological Sciences. The current Rural Clinical School and School of Rural Health have moved to the MMS to form the Rural Academic Centre.

The MMS now comprises six Academic Centres together with the MMS Executive and the Medical Education Unit (MEU). Each Academic Centre holds the relevant clinical school and respective academic departments represented at the same site. Decisions are made both centrally, at MMS Executive level, and peripherally within each Academic Centre and Academic Department. Processes for reciprocal feedback, decision and approval are appropriate. Each Academic Centre has a Centre Chair and a Director of Medical Education. In the case of the Rural Academic Centre, the Centre Chair and Director of Medical Education positions are currently held by the same person.

Some within the Team were concerned that although Clinical Schools and Academic Centres appeared to be working in effective partnerships, relationships between Clinical Schools and Academic Departments were not as close. Efforts are needed to enhance integration, especially as departmental staff drift into predominantly research-intensive environments.

Clear terms of reference are provided for all major committees, and all relevant groups appear well represented in decision making, including medical students on the Medical Course Committee and each of its sub-committees. Staff are still familiarising themselves with the new structure and governance of the MMS, and its ongoing performance and usefulness will need to be reviewed and modified as implementation occurs.

2012 Team findings

The governance arrangements described in 2010 have largely remained the same and continue to be well defined with clear terms of reference. Modifications to the governance structure are described below.

The department of Psychological Sciences, formally within the MMS, has formed a fifth School of the Faculty of Medicine, Dentistry and Health Sciences. The School of Psychological Sciences is an important contributor to the Foundations of Biomedical Science delivered in Year 1 of the Doctor of Medicine (MD) program. Continued communication and coordination between the Schools will be required to manage the delivery of the Foundations of Biomedical Science program in Year 1.

Further development of the Academic Centre structure within the MMS has occurred primarily in relation to the maturation of the Northern and Western Clinical Schools. The North-West Academic Centre was formed incorporating the Departments of Medicine and Surgery and Clinical Schools of the Western Hospital and Northern Hospital. An inaugural chair of the North-West Academic Centre and Associate Dean had been appointed.

The Academic Centre structure is now well developed to implement the MD curriculum supported by the Medical Courses Committee and Medical Education Unit. It is anticipated that the proposed performance based budget model will deliver appropriate resources to these centres to support implementation and delivery of the MD program.

The positions of Chair of the Rural Academic Centre and Director of Medical Student Education, previously held by one individual, were vacant at the time of the visit. The Centre was being well managed in the interim and the Team was pleased to learn that significant progress toward the appointments had occurred.

1.2 Leadership and autonomy

The medical school has sufficient autonomy to design and develop the medical course.

The responsibilities of the academic head of the medical school for the educational program are clearly stated.

2010 Team findings

The Faculty Dean has delegated responsibility for all graduate programs in the MMS (including the Melbourne MD) to the MMS Head. In turn, the MMS Head delegates specific responsibility for the current MBBS and future Melbourne MD to the MEU Director. The Head, together with the MMS Executive and the MEU Director, have had sufficient autonomy to design and develop the proposed Melbourne MD. The MEU Director responsibilities are clearly stated.

2012 Team findings

There had been no major changes to the leadership and autonomy of the medical program since 2010. The Director of the MEU remains responsible for the MD program development. The Team noted that the Director of the MEU had sufficient autonomy to design and develop the program and demonstrated strong and effective leadership carrying this responsibility across all sites.

The Director of the MEU had recently been appointed Deputy Dean of the Faculty of Medicine, Dentistry and Health Sciences at 0.2 FTE until the end of 2012. The Team was

assured that the strong support of his management team meant that these additional duties had no detrimental effect on the educational program.

1.3 Medical course management

The school has established a committee or similar entity with the responsibility, authority and capacity to plan, implement and review the curriculum to achieve the objectives of the medical course.

2010 Team findings

The committee structure governing the current MBBS program has been retained, and simultaneously considers and approves the new graduate curriculum design and implementation. The structure comprises the Medical Course Committee and each of its four sub-committees: the Biomedical Science Committee, the Health Practice Committee, the Clinical Science Committee, and the Advanced Medical Science Committee. The Medical Course Committee has a broad membership representing all major stakeholders and meets six times each year. It has well-defined responsibilities and decision-making authority for developing, implementing and monitoring all curriculum areas, including assessment, evaluation, student selection, and financial resources relevant to the delivery of the program.

2012 Team findings

There had been no significant changes to the medical program management other than the transition from MBBS specific committees to MD working groups and committees.

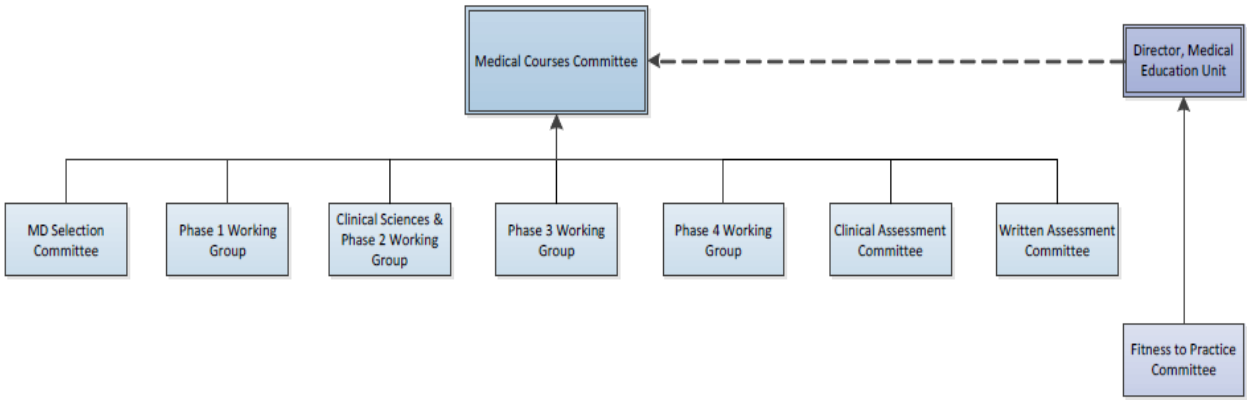
The Medical Course Committee has been renamed as the Medical Courses Committee to reflect the committee's responsibility as the governing structure for all education programs within the School, including the newly developed suite of Graduate Clinical Education programs. The Committee reports to the Faculty Academic Programs Committee.

With the teaching-out of the MBBS, the Biomedical Science Committee, Health Practice and Advanced Medical Science Committees have been disbanded with staff moving to aligned roles in the Phase 1 and 3 Working Groups. The Clinical Science Committee (MBBS) and Phase 2 Working Group (MD), which share membership, were working closely on a variety of issues including the overlap between the two cohorts in 2012 and 2013.

The sub-committees of the Medical Courses Committee, as represented in Figure 1, include:

- MD Selection Committee;
- Phase 1 Working Group;
- Clinical Sciences & Phase 2 Working Group;
- Phase 3 Working Group;
- Phase 4 Working Group;
- Clinical Assessment Committee;
- Written Assessment Committee.

Figure 1



The sub-committees supported by the team structure in the MEU continue to provide support and advice to the Medical Courses Committee in relation to the development and implementation of the MD program.

The Phase Working Groups oversee sub-groups responsible for initial planning of discrete components of specific phases of the program. A Principles of Clinical Practice 3 working party, reporting to the Clinical Sciences and Phase 2 Working Group, was recently formed to guide planning for Principles of Clinical Practice 3 to be delivered to the inaugural MD cohort in 2013. The Phase 3 working group is developing plans for the implementation of Scholarly Selective 1 in 2013 and Scholarly Selective 2 in 2014.

The Fitness to Practice Committee is organised when required from a pool of appropriate persons, with a maximum of five members. It investigates students who receive an unsatisfactory grade on the end-of-year professional behaviour reports, or students whose professional misbehaviour is so serious that an immediate committee meeting is required. The Committee may refer the student for remediation or to an appropriate health professional, or may refer the student to the Unsatisfactory Progress Committee.

1.4 Educational expertise

The school ensures appropriate use of educational expertise, including the educational expertise of Indigenous people, in the development and management of the medical course.

2010 Team findings

The current head of the MEU brings enthusiasm and exceptional leadership to the role. He is widely respected for his efforts, having led an inclusive agenda in the design and ultimate implementation of the new graduate program. The MEUs activities include curriculum development and implementation, curriculum delivery, MBBS (MD) course coordination and governance, MBBS (MD) quality control, and project management. These activities are delivered by a series of overlapping teams:

1. Curriculum development;
2. Professional development;
3. Assessment and evaluation;
4. Clinical communication and learning development;
5. Educational technology;

6. Introduction to clinical medicine;
7. Urological teaching associate / clinical teaching associate;
8. Advanced medical science;
9. Medical education research;
10. Community Responsiveness and Engagement Through Streamed Clinical Education and Training (CRESCENT);
11. MBBS (MD).

Each team or group will need a strategy and operational plan for the next five years, as the MBBS to MD transition will affect activity in each area. Currently, professional development and medical education research need the greatest expansion of activity.

The MEU is appropriately staffed and resourced for the dual tasks of supervising the current MBBS run-out (without any compromise in quality), and overseeing the development and implementation of the new graduate course.

Indigenous education expertise is apparent with Indigenous academic and professional staff from Onemda VicHealth Koori Health Unit intimately involved in the curriculum development for the new graduate medical program. The Faculty is building further on this expertise with recruitment efforts under way for an Associate Dean of Indigenous Health.

2012 Team findings

The depth and breadth of the educational expertise across all sites involved in the development and management of the medical program continues to be a significant strength of the program.

The educational expertise of the School has been further supported by the appointment of the inaugural Chair of Clinical Education and Training Development. Since being appointed, this Chair has made significant progress in the development of a suite of Graduate Clinical Education programs, and has enhanced communication between the MEU and Clinical Schools, including the development of training to support the Clinical Skills Coaches.

Clinical Skills Coaches are paid tutors within the clinical school network tutoring Phase 2 students. Clinical Skills Coaches act to enhance knowledge of the MD program and its roll-out to colleagues in the Clinical Schools and provide linkage between the Clinical Schools and the central medical school. The Team was pleased to note that most of the Clinical Skills Coaches attended a two-day training program in February 2012 that focused on the use of effective, structured feedback to encourage students towards clinical excellence.

The Team welcomed the appointment of the an Associate Dean (Indigenous Development) and encourages the Faculty to consider increases in staffing levels with expertise in Indigenous health to further support the implementation of an effective curriculum in this important area.

1.5 Educational budget and resource allocation

The medical school has a clear line of responsibility and authority for the curriculum and its resourcing, including a dedicated educational budget.

There is sufficient autonomy to direct resources in order to achieve the mission of the school and the objectives of the medical course.

2010 Team findings

The Dean and the MMS Executive (through the Dean) were clearly responsible for resourcing the medical curriculum, according to a performance driven formula, from central University-provided funds. The School had sufficient autonomy to direct those resources to achieve the mission and objectives of the new graduate course.

The Faculty budget distribution model was in a state of transition as staff became familiar with the new Faculty governance model. Most clinical schools reported difficulties in delivering educational programs in the current budgetary environment. However, the Team was informed that Academic Departments have borne the brunt of recent budget restraints while income streams for Clinical Schools have been relatively preserved. From 2010, funds will be distributed directly to Academic Centres, and subsequent budgets for Clinical Schools and Academic Departments determined by consensus within each Centre. Initially, this may be predominantly based on historical budgets, but will increasingly move to a performance-based model.

The Team was made aware of several specific budgetary concerns. The first related to state and federal funding of the CRESCENT project for the Northern and Western hospitals. This project has been essential in accommodating expanded student numbers. These outer urban clinical training settings are considerably more expensive to run and current funding has limited duration. There appears to be no plan for sustainable, long-term funding. A second concern related to a foreshadowed central university charge on all space used by the Faculty. Charges will be determined by the perceived 'quality' of the space, with rates for laboratories at the highest level.

In a research-intensive Faculty (one which is generating nearly half of the total university income), this planned charge is seen as an unsustainable impost on the Faculty's operating budget. The Acting Vice-Chancellor reassured the Team that there was strong budgetary support for the transition costs and that any new funds to support clinical placements would be exempt from the usual central levies. He indicated the impact of current space use charges on Faculty budgets was also under careful review. It was also pointed out that the Faculty of Medicine, Dentistry and Health Sciences budget had a lower effective central levy than any other Faculty.

Sophisticated modelling is being done to determine the direct and indirect costs of delivering the course. The results will underpin future approaches to ensure a sustainable budget for all aspects of course delivery.

2012 Team findings

The overall budget for the MD program continues to be controlled by the Head of the MMS who is advised by the MMS Policy and Planning Committee and the MMS Cabinet. There have been no substantial changes to the MD budget model. The MMS budget, which is derived from the Faculty of Medicine, Dentistry and Health Sciences budget under the University's principles of Responsible Division Management was still moving from a historical to a transparent performance based budget in a model which included the Academic Centres. The School expected that budget adjustment mechanisms would remain in place for some time to buffer substantial change.

The Department of Education, Employment and Workplace Relations' Diversity and Structural Reform Fund has extended funding of the CRESCENT project until the end of 2012. This had provided sufficient resources for the further development of the Northern and

Western Clinical Schools. The School advised that funding would be ensured after 2012 by the roll-out of the revenue-based funding model.

The Team noted that space charges at hospital outgoing charges and capital investment at the clinical academic centres were funded centrally by the Faculty. The MMS Executive team indicated that there were future redevelopment plans for campus and clinical site buildings. Costs of the new building at the North West Academic Centre had been funded centrally as the Academic Centre's budget could not cover this cost. The School funding model allows allocation of teaching funds for academic coordination and development by discipline areas, including curriculum delivery, academic coordination, curriculum development and quality assurance.

The Team encourages the MMS to ensure that the new performance-based budget model provides sufficient resources for operation of the important and more resource intensive clinical training environments in the outer urban Clinical Schools and the Rural Clinical School.

Implementation of the new MD program at the Bendigo Regional Clinical School requires provision of specific resources. This site is shared with Monash University MBBS students and the Monash University staff support the Melbourne MD students. This is discussed further at Standards 1.8 and 8.3.

1.6 Interaction with health sector

The medical school has constructive partnerships with relevant health departments and government, non-government and community health agencies to promote mutual interests in the education and training of medical graduates skilled in clinical care and professional practice.

The medical school recognises the unique challenges faced by the Indigenous health sector and has effective partnerships with relevant local communities, organisations and individuals.

The medical school works with its partners to ensure university staff in affiliated institutions are integrated into the service and administrative activities of the institution. In the same way, the university works with its partners to ensure that staff employed by the affiliated institutions can meet their teaching obligations and that peer review and professional development are a regular part of this interaction.

2010 Team findings

The Team visited each site and met the chief executive officers of the following health services: Melbourne Health, Northern Health, Goulburn Valley Health, Western Health, Royal Women's Hospital, St Vincent's Hospital, Royal Children's Hospital, Austin Health and Mercy Private Hospital. The MMS was uniformly highly regarded, and health services held enthusiasm and strong support for the pending transition to a graduate medical school. Relationships with every sector were robust and mutually supportive. The CEOs communicate regularly with local Chairs of the Academic Centres and Clinical Deans (Directors of Medical Education). In addition, at several sites, regular high-level meetings with the Dean are held throughout the year. Formal relationship agreements between the MMS and each health service are either in place or being finalised.

University representation on hospital and health service boards was unusual. The Team saw this as an opportunity to further strengthen relationships between the University and health sector, especially in strategic planning for teaching, and research infrastructure and resources.

Public and private hospitals demonstrated consistent commitment to creating welcoming and well-resourced teaching and training environments, which were highly regarded by students. University clinical staff were well integrated into governance structures and clinical service, and many had positions as directors or other leading roles in hospital departments. Several sites were keen to see a greater academic presence from the MMS, and negotiations were in progress to create more posts, where feasible and indicated.

Staff from Onemda VicHealth Koori Health Unit, made it clear that the MMS fully appreciated the unique challenges faced by the Indigenous health sector. Effective partnerships with local communities, organisations and individuals were evident on Team visits to rural sites. The Rural Academic Centre at Shepparton, with its Aboriginal Health Unit in close association with Onemda, provides the Indigenous Cultural Safety Education Program to all medical students and Rural Clinical School (RCS) staff. The unit also assists with strategies to embed an appropriate Indigenous health curriculum within the course.

2012 Team findings

The Team met with executive staff at each of the following hospitals: Austin Hospital, Warringal Private Hospital, Northern Hospital, Sunshine Hospital, Ballarat Hospital, Royal Children's Hospital, Royal Melbourne Hospital, Royal Women's Hospital, St Vincent's Hospital, Peter MacCallum Cancer Centre and the Western Hospital. As was the case in 2010, the School continues to maintain robust and mutually supportive relationships with its health sector partners.

A small number of the agreements with health services are not yet signed. Nevertheless, the Team was impressed with the commitment of these health services to education and training and was confident that the remaining agreements would be formalised in the near future. This is an area for future reporting.

1.7 The research context of the school

The medical course is set in the context of an active research program within the school.

2010 Team findings

The MMS has an impressive research culture with a very strong research performance. Melbourne University is currently the top research income earner of all National Health and Medical Research Council funded organisations and, on this basis, has been the major centre of biomedical research in Australia for the past five years. In 2008, the external research grants received by the MMS totalled $113 million.

2012 Team findings

The MMS continues to be a national and international leader in medical research. Embedding the Scholarly Selective 1 and 2 into the MD program and the implementation of the Student Conferences will increase exposure of medical students to clinical research.

1.8 Staff resources

The medical school has a detailed staff plan that outlines the type, responsibilities and balance of academic staff required to deliver the curriculum adequately, including the balance between medical and non-medical academic staff, and between full-time and part-time staff.

The medical school has an appropriate profile of administrative and technical staff to support the implementation of the school's educational program and other activities, and to manage and deploy its resources.

Staff recruitment includes active recruitment by Australian schools of Aboriginal and Torres Strait Islander people and by New Zealand schools of Māori, together with appropriate training and support.

The school has defined the responsibilities of hospital and community practitioners who contribute to the delivery of the medical course and the responsibilities of the school to these practitioners.

The medical school communicates its goals and objectives for basic medical education to these practitioners and facilitates training for them in their teaching and assessing roles.

The medical school routinely evaluates clinical teacher effectiveness using feedback from students and other sources. It offers these teachers guidance in their professional development in their teaching and assessing roles.

2010 Team findings

The MMS is comprehensively staffed to deliver its current MBBS and future graduate medical school programs. Staff have been further augmented by recent significant professorial appointments in pathology, and obstetrics and gynaecology, and there are a large number of committed honorary staff within the Academic Centres. Surprisingly, the important discipline of geriatric medicine has no chair or academic department.

The School is developing a workforce plan to handle the transition from the MBBS to the MD, with significant staff pressures predicted during the so-called 'hump' in 2012 when MBBS Year 5 will be delivered simultaneously with Phase 2 of the proposed MD (Year 2). This is clearly important, but other staffing and resource issues still need to be resolved, particularly in areas such as the Rural Academic Centre.

The administrative, professional and technical staff make major contributions to the MMS educational program. Especially impressive was the current and planned support, for both the MBBS and the future MD, through the managed learning environment, developed by the MEU educational technology team.

Not yet in place but being considered are opportunities for professional development and appropriate training in modern medical education and assessment principles for hospital and community practitioners who help deliver the medical course. This should be a high priority given the anticipated changes in curriculum content, outcomes and pedagogy for the new graduate course. Many of the staff the Team interviewed believed that the new course would be 'business as usual' and their only understanding of the new MD appeared to be that they would be teaching more mature students with greater focus and commitment.

2012 Team findings

The MMS continues to be comprehensively staffed. The Team was impressed with the enthusiasm, energy and dedication of the staff. The effort required by all staff to manage the last years of the MBBS program while concurrently implementing the MD program has been significant and the Team commends the staff for their commitment.

The School has recognised the need to continue recruitment of new academic staff and is developing succession plans to maintain delivery of the MD program.

As noted at Standard 1.4, the Team welcomed the appointment of the Associate Dean (Indigenous Development).

The Team was pleased with the professional development and training in modern education and assessment principles provided to hospital and community teachers, led by the Chair of Clinical Education and Training Development, and encourages the School to continue this. The two-day training program for the Clinical Skills Coaches held in early 2012 was well regarded. The intention to adapt the University's Graduate Certificate in University Teaching to a more clinically-oriented program is a particularly worthwhile initiative.

Since the 2010 visit the implementation of the MD has progressed from a more central MEU-led program to a dispersed clinical school-led program. Each of the Directors of Medical Student Education and their staff have implemented communication strategies within their clinical schools. The Clinical Skills Coaches and the Clinical Nurse Educators from clinical teaching sites have joined to improve linkages and awareness of the MD by other clinicians and allied health practitioners.

Pressure on staff was noted in the Rural Clinical School. As noted at Standard 1.5, increased resources at the Bendigo Regional Clinical School would support the implementation of the MD program. At Bendigo, the majority of students were from Monash and it was noted that MD Phase 2 students were predominantly supervised by Monash staff using the Monash MBBS curriculum. The Team was pleased to learn of the significant progress made towards the appointment of a Director of Medical Student Education at the Rural Clinical School.

The Team noted that the School has not yet strengthened academic aspects of Aged Care/Geriatric Medicine by establishment of a Chair and associated departmental structure.

1.9 Staff appointment, promotion and development

The university and the medical school have appointment and promotion policies for academic staff that address a balance of capacity for teaching, research and service functions, and recognise meritorious academic activities with appropriate emphasis on research and teaching.

The medical school has processes for development and appraisal of administrative, technical and academic staff, including clinical title holders and those who hold joint appointments between the university and other bodies.

The medical school's employment practices are gender-balanced and culturally inclusive.

2010 Team findings

The MMS has a performance development framework that mandates formal performance appraisal of all staff members annually. Data on the actual uptake and implementation of this performance development and appraisal process were not presented.

The University's website outlines clear guidelines for promotion. Although promotion may be possible on the grounds of one or more contributions to teaching and learning, research, knowledge transfer, and leadership and service, some staff were concerned that contributions to teaching and learning are relatively undervalued in what is a research-intensive academic environment. Promotions to Levels D and E appear to require a combination of scholarly contributions in both teaching and research, with no evident teaching-only pathway.

Clear equity and diversity guidelines have been established within the University to ensure that, wherever possible, the MMS has employment practices that are gender-balanced and culturally inclusive.

2012 Team findings

The staff appointment, professional development opportunities and promotion policies remain the same as those described in 2010.

1.10 Staff indemnification

The university has arrangements for indemnification of teaching staff, with regard to their involvement in clinical research and the delivery of the teaching program.

2010 Team findings

MMS staff are indemnified by the general University of Melbourne insurance while the Victorian Managed Insurance Authority covers staff employed by metropolitan and regional hospitals. The student placement agreements with each of the healthcare providers include an undertaking to indemnify students for all their activities required for the course.

2012 Team findings

No additional comment.

2 The Outcomes of the Medical Course

2.1 Mission

The medical school has defined its mission, which includes teaching, research and social and community responsibilities.

The school's mission addresses Indigenous peoples and their health.

The school's mission has been defined in consultation with academic staff and students, the university, government agencies, the medical profession, health service providers, relevant Indigenous organisations, bodies involved with postgraduate medical training, health consumer organisations and the community.

2010 Team findings

The Melbourne Medical School (MMS) has consulted widely to redefine its vision and strategy. This has resulted in a clearly articulated vision that meets, and even exceeds, the AMC standards. The MMS is clearly committed to producing graduates who are equipped for modern medical practice and who will lead in developing solutions for local, national, and international health challenges. The graduates from the new medical course are envisaged as work-ready, globally competitive, research literate, socially responsible, adaptable to a rapidly changing medical environment, and leaders for change. The MMS has outlined a series of strategic processes to achieve these outcomes.

2012 Team findings

The Vision and Mission of the Faculty of Medicine, Dentistry and Health Sciences and MMS has not changed since the last AMC assessment.

2.2 Medical course outcomes

The medical school has defined graduate outcomes and has related them to its mission.

The outcomes are consistent with the AMC's goal for medical education, to develop junior doctors who possess attributes that will ensure that they are competent to practise safely and effectively under supervision as interns in Australia or New Zealand, and that they have an appropriate foundation for lifelong learning and for further training in any branch of medicine.

The outcomes are consistent with development of the specific attributes incorporating knowledge, skills and professional attitudes of medical graduates endorsed by the Australian Medical Council.

2010 Team findings

The MMS has carefully developed a comprehensive set of graduate attributes through a detailed process of concept mapping, refinement, and ongoing consultation. These graduate attributes are consistent with the School's stated vision and those endorsed by the AMC.

There are sixty-seven graduate attribute statements, collated into six domains: self, knowledge, patient, medical profession, systems of health care and society. Each attribute is clearly articulated. The MMS acknowledges that several attributes are aspirational in nature, and indeed currently are unable to be assessed. For several attributes, it is not clear exactly where in the course they will be developed. While having such a comprehensive range of

graduate attributes is commendable, mapping each to appropriate teaching and assessment processes will be challenging.

During the site visits, the Team found that clinical and academic staff were generally unaware of the new graduate attributes. Some staff felt that, due to research experience being reduced from one year to six months, the new graduates would be less research literate than current graduates. For the MMS's vision to be translated into practice, it will be important to ensure that staff at the local level understand and share the MMS's intended outcomes.

All of the students interviewed did, however, strongly feel that the new course was an improvement on the current course and it would better prepare graduates for clinical practice, predominantly because of Phase 4.

2012 Team findings

The Team noted that the graduate attributes had been clearly enunciated for students, staff and stakeholders.

The development and implementation of the MD curriculum required a complex iterative process involving a bottom-up and top-down approach. The Team encourages the School to continue to map the developing learning program back to the identified graduate attributes and to continue dissemination of the outcomes framework for the MD curriculum to curriculum developers and implementers in the Clinical Schools. Continued development of Curriculum Connect™ and its move to a web-based platform should increase the utility of the mapping applications embedded in this IT platform.

3 The Medical Curriculum

3.1 Curriculum framework

The medical school has a framework for the curriculum organised according to the overall outcomes which have, in turn, been broken down into more specific outcomes or objectives for each year or phase of the course.

2010 Team findings

As previously mentioned, the framework for the Melbourne MD curriculum is based on graduate attributes that have been organised into six distinct domains: self, knowledge, patient, medical profession, systems of health care, and society. These domains provide a relevant and conceptual framework in which individual curriculum elements have been placed. How individual elements map directly to each domain is less clear, and the Melbourne Medical School (MMS) is encouraged to specify which curriculum learning activities link to each of the graduate attributes so that this link is more explicit for students. The MMS may also consider how students can demonstrate they have developed these graduate attributes, particularly where these are not subject to summative assessment.

2012 Team findings

The Team was pleased that graduate attributes had been linked to curriculum activities in the resources materials provided to students and tutors for the Year 1 and Year 2 course elements.

The School advised that the graduate attributes were matched at a high level early in the design and planning of Principles of Clinical Practice 2. Once the curriculum was designed a further matching process was used to identify gaps. A similar process would be used for the Year 3 and 4 curricula. This is an area for future reporting.

The School was still progressing work on ways in which students can demonstrate that they have developed the graduate attributes, and the Team recommends that this should also be an area for reporting in the future.

3.2 Curriculum structure, composition and duration

2010 Team findings

The Team was provided with a strong explanation of the framework elements of the new Melbourne MD. This four-year program has four phases, of unequal duration, which follow a model of acquiring basic science, integrated with sequential development of basic clinical skills and knowledge.

Phase 1 develops the foundations of bioscience knowledge and early clinical skills. It consists of two subjects: Foundations of Biomedical Science and Fundamental Principles of Clinical Practice 1. Phase 2 extends over two years, and builds on the bioscience knowledge and early clinical skills acquired in Phase 1 to develop core clinical knowledge and skills in a variety of settings. Phase 3 occurs predominantly in the first semester of the third year, and provides each student with the opportunity for an in-depth scholarly selective. Phase 4 is a 'capstone' subject that consolidates prior bioscience and clinical knowledge with a program to prepare students for their pre-registration year. It consists of one subject: Transition to Practice.

Teaching and learning in the biomedical sciences is based on prerequisite knowledge in anatomy, physiology and biochemistry at a second year undergraduate level. This allows for

teaching of relevant materials in all the basic preclinical disciplines within the first year (Phase 1). The material appears to cover all these disciplines to a level sufficient to underpin clinical studies. The Team noted that a significant amount of the content delivered in Foundations of Biomedical Science was in the prerequisite disciplines, raising the potential challenge of disengaged students. However, the course integrates teaching across disciplines, with material linked to predetermined clinical contexts over a two-week period. Moreover, students will be asked to apply the material in a modified and innovative small-group learning format (case-supported learning). Thus, the clinical application and relevance of the biomedical science will be made explicit.

Along with learning communication, medical history taking and physical examination skills in Fundamental Principles of Clinical Practice 1, Phase 1 lays the foundation for the clinical placements in Phase 2. The Team noted that much of the Foundations of Biomedical Science content is delivered in lectures, with relatively few practical classes. It was recognised that there is a plan to deliver 'interactive' lectures wherever possible, to engage students more effectively in these important content areas.

The Team remained unclear about how and when teaching of basic and para-clinical disciplines (particularly pathology, microbiology and pharmacology) will be integrated into later phases of the program, but the MMS recognises this is important and needs to be achieved. The Curriculum Connect™ software suite promises to link the student with their prior and current learning activities. This strategy's full implementation awaits further development of the software platform.

Teaching clinical skills relevant to adults and children is well encompassed in the Fundamental Principles of Clinical Practice 1, 2 and 3 subjects, which extend across the first three years of the program, and which take place in relevant clinical locations. Fundamental Principles of Clinical Practice 2, which extends through Year 2, contains a number of distinctive and innovative elements: it will be delivered in four terms of nine weeks, with the final week of the second, third and final terms being an intersession. The increase of the individual blocks to eight weeks offers possibilities of greater continuity in clinical care, regardless of context. The potential for more continuous contact between student and the clinical supervisor was valued by both students and teachers.

The Clinical Foundations term, the first of Phase 2 (Year 2), runs for nine weeks and aims to introduce new skills in women's health, children's and adolescent health, mental health, aged care, primary care and some key procedural skills. The Team agreed this is a novel and effective way to prepare students for the diverse range of clinical situations they will encounter in the ensuing terms and courses. Finally, the use of the Intersession weeks offers considerable potential to allow students to reflect on and consolidate their own learning, and to integrate more effectively the diverse learning experiences across the student cohort.

Several important aspects of Fundamental Principles of Clinical Practice 2 remain to be clarified. Firstly, the nature of the Ambulatory Care term in Year 2 awaits greater definition, including the clinical settings that may fall under this heading (outpatients, day surgery, general practice, community health care, etc.). At the time of the visit, staff held different opinions on this matter, and a timely resolution is important, including considering the practicality of using emergency departments as a base for this term. The fact that one-third of students will undertake this term as their first ever 'real' clinical exposure highlights the need to carefully consider the nature of teaching provided, and the MMS well understands this. Moreover, defining the nature and scope of clinical activities in the Ambulatory Care term must occur before some other terms can be developed. The General Practice term in Fundamental Principles of Clinical Practice 3 and the possible emergency medicine elements

of Medicine and Surgery terms, in particular, can only be done once the nature and scope of clinical activities in the Ambulatory Care term are defined. For these reasons, the Team urges the MMS to provide details of the Ambulatory Care term as soon as possible.

Clinical exposure to 'undifferentiated' cases within emergency departments is a core learning experience for students, and maintaining this will be important whatever framework is decided on within Fundamental Principles of Clinical Practice 2. Also important will be clarifying how this will be achieved. Where possible, it may also be helpful to compare and contrast the emergency department and general practice perspectives on managing patients presenting with a first episode of illness.

On the Medicine and Surgery terms, student and clinical teachers indicated that the current large number of tutorials and structured teaching sessions can detract from students' ability to be part of the team on clinical placements. To minimise disruption to clinical experience, structured teaching sessions need improved timetabling. The Team was impressed by the high degree of enthusiasm among clinical teachers, and with the well-developed 'immersion' training environments that have already been developed, most notably within the existing General Practice and Women's Health terms.

While having five clinical schools will inevitably produce some variation in student experience, it is important for the Medical Education Unit (MEU) to give clear guidance about curriculum to ensure consistency in core teaching across all sites. This will involve some reorganisation of existing teaching structures, and it will be important to provide clear reasons for these, and to emphasise the importance of distinctive elements such as the Intersession periods. This will be the case for current teaching terms in women's and children's health, which will require some minor adjustments to the currently successful model so they fit within the proposed Phase 2 (Year 3) model (including the new Intersession periods, as well as the proposed one day per week GP placement within the Community Responsiveness and Engagement Through Streamed Clinical Education and Training (CRESCENT) grouping). The Team noted the overall high standard of the women's health educational experience, but also noted the different experiences of students (particularly with regard to experience to normal births) at different sites.

The process for developing clinical communication skills throughout the program is commendable and well defined, and a program for managing students with identified difficulties in this area is established. The accessibility of the latter program appears greater in metropolitan regions, and the Team suggest the MMS seek ways to enhance program delivery at peripheral and rural sites. The program appears to place less emphasis on developing written communication skills, both in formative and summative settings, which is surprising for a masters level professional degree. While these opportunities will occur in the HPA project, the student conference and the research selective, it may be advisable to embed more assignment/project writing tasks within course elements, and to develop the necessary skills of assignment marking and feedback in teaching staff. This will maximise the learning value of these activities.

One of the potential strengths of the MD program is providing students with experience in community medical practice. The innovative CRESCENT program offers exciting opportunities for integrating medical training across a range of hospital and community settings. CRESCENT is currently well supported in the Northern and Western sites, and a successful outcome may lead to new approaches in community-based medical education. Fully development of this model at the current sites, before more general implementation, will be important. Sustainability of the program will require continued funding.

Indigenous health issues were generally well addressed in the curriculum, and were supported by relevant specialist expertise and advice. As previously mentioned, the Team was particularly impressed with the training in cultural awareness provided to students at the rural campus.

Legal and ethical issues appear well addressed within the program, though it will be important to ensure teaching and learning opportunities are distributed throughout the entire course, and are delivered in ways that draw on student clinical experiences. The Team noted the intent to develop a program strand dealing with 'fitness to practice' including behavioural and attitudinal elements. This is important in a professional course of this level and is encouraged.

The 'capstone' Transition to Practice course (Phase 4) has great potential to prepare students effectively for internship, and to bring together essential aspects of modern clinical care. The trainee intern term, over a five-week period, offers sound opportunities for developing skills and procedures relevant to practise at intern level, and will draw on well-established elements from the current program. The other two elements in this course, the vocational selective term and the improving patient outcomes term, both await further clarification of their scope and focus. The vocational selective term should provide opportunities for students to explore potential vocational interests. The improving patient outcomes term is proposed to address issues in quality assurance in health care, including systems management and best practice guidelines.

3.2.1 Structure and duration

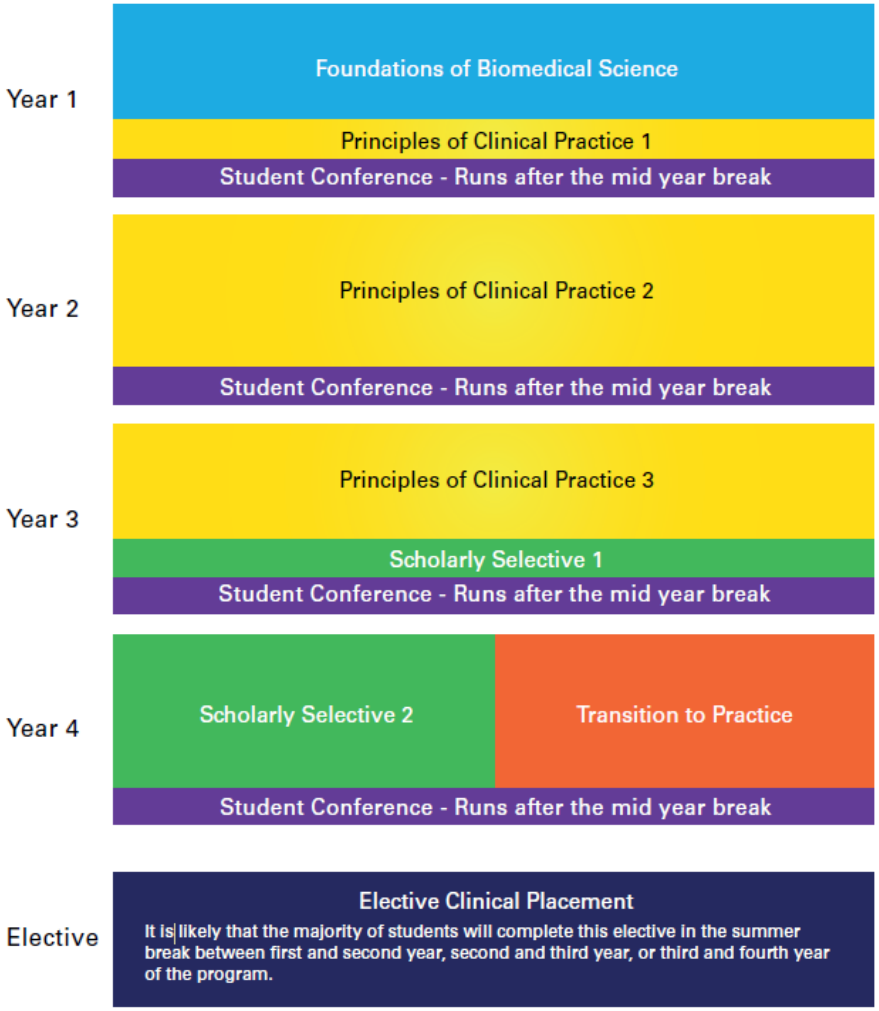
The medical school has developed descriptions of the content, extent and sequencing of the curriculum that guide staff and students on the level of knowledge and understanding, skills and attitudes expected at each stage of the course.

2012 Team findings

The overall structure of the MD program across the four years is unchanged (Figure 2).

Since the 2010 AMC assessment the names of three subjects, Fundamental Principles of Clinical Practice 1, 2 and 3 have been shortened to Principles of Clinical Practice 1, 2 and 3 respectively.

Figure 2



Year 1

The Year 1 subjects Foundations of Biomedical Science, Principles of Clinical Practice 1 and Student Conference 1 have been fully developed and implemented as planned. The Foundations of Biomedical Science program was well received but was generally agreed by staff and students to be content-heavy. The MEU has used student feedback to streamline the subject, in part by removing redundant content and better aligning lectures. The pathology component of Foundations of Biomedical Science has also being reviewed following student and School concerns, with changes made to its delivery.

The School noted in its submission that student evaluation results for Principles of Clinical Practice 1 were good. The Phase 1 Committee advised the Team that the yearlong small group format had developed strong tutor-student relationships.

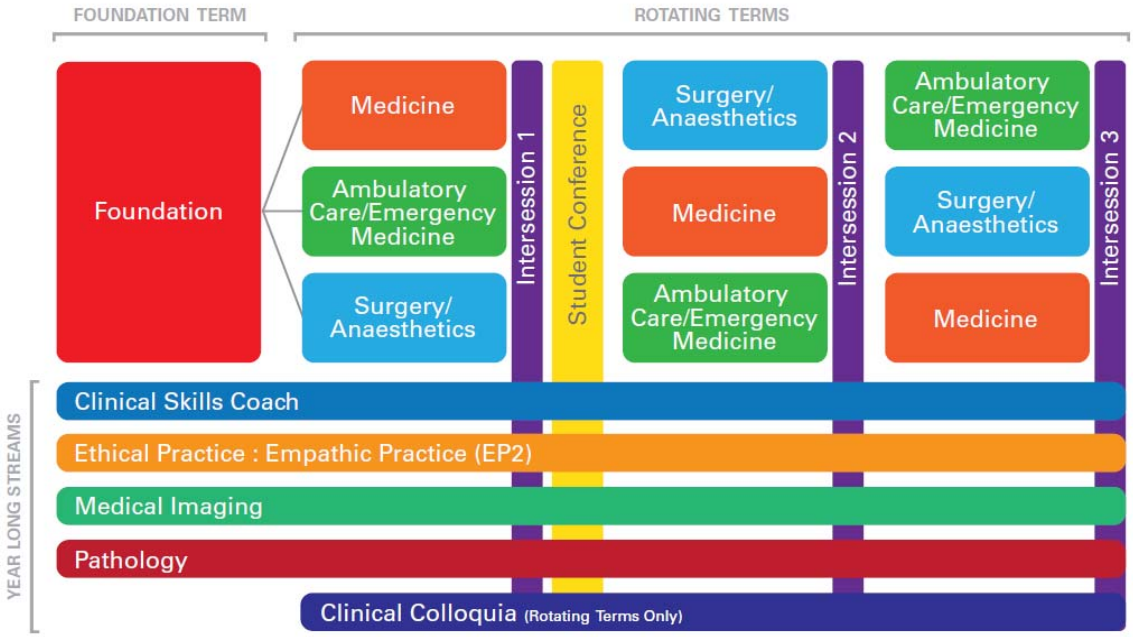
The first Student Conference was held in the last week of June 2011. Themes included leadership, research, medical history, ethics, clinical communication and Indigenous health. The student evaluation of the first conference was positive but the School was considering some improvements to ensure that the vision of the program is realised. The Team recognises that the conference will evolve as more students participate.

Year 2

The School has developed and is satisfactorily implementing the Year 2 subject Principles of Clinical Practice 2 (Figure 3). The first nine-week foundation term was widely thought to contain less clinical experience than expected with variation across clinical schools. The effect of remaining MBBS students occupying clinical placements may have contributed to this. Clinical experience will be increased in the future.

The aim of attaching students to medical, surgical and emergency teams in the three clinical terms was being achieved but the high number of structured teaching sessions limited sustained clinical immersion. Most students reported around three, three-hour clinical sessions per week. Restricting formal teaching to one or two days a week may promote increased clinical immersion. As commented on by the Team in 2010, structured teaching sessions need improved timetabling to minimise disruption to clinical experience. The AMC should monitor the progress of efforts to ensure adequate clinical immersion for students in future reports.

Figure 3: Principles of Clinical Practice 2 subject diagram



The School has clarified the details of the ambulatory term of Principles of Clinical Practice 2. The aim is to allow all students to experience patients and their illnesses away from hospital wards. Management of patients with chronic disease, many of whom will never be admitted to a hospital, as well as those attending the emergency department with acute or acute on chronic presentations of illness will be encouraged. Creation of sufficient structure for students to learn without compromising access to patients with the appropriate illnesses had been a challenge. The School has responded to the concerns of the 2010 assessment by linking students to home units based in emergency departments. Students will all complete shifts in the emergency department at their clinical school and in general practice placements.

The second student conference was held in July 2012, with a significant proportion of the planning done by students. New themes included student mental health, healthcare systems, dealing with death, career development, inter-professional practice, social determinants of health, and 150 years of the MMS.

The Team considered that opportunities for reflection on clinical experience and consolidation afforded by the Intersession weeks as a strength of the program. These weeks have also allowed additional scheduled learning opportunities specific to clinical schools.

Year 3

Year 3 subjects will include Principles of Clinical Practice 3, Scholarly Selective 1 and Student Conference 3.

Development of the curriculum for Principles of Clinical Practice 3 is, coordinated by the Phase 2 working group. The subject will be delivered in two terms of nine weeks and three terms of six weeks covering Women's Health, Children's and Adolescent Health, General Practice, Aged Care and Mental Health.

The Principles of Clinical Practice 3 working party includes the heads of each term. The planning process has followed a similar model to Principles of Clinical Practice 2. The MEU has developed a term-based template for planning to ensure consistency between terms and across clinical schools. Each specialty group is tasked to determine the aims of their term and the topics are then blueprinted. Terms may differ in their mode of delivery, for example dispersed terms may have more online resources for students to complete. At the time of visit, the Team considered that planning was well underway for all rotations. Future reporting should include finalised rotation outlines and analysis of implementation.

The School recognised that maintaining the continuity that students had come to expect in Year 2 would be more challenging in Principles of Clinical Practice 3 because of the wide distribution of training sites. The School aims to use the same Empathic Practice / Ethical Practice (EP2) coach across Principles of Clinical Practice 3 to provide continuity, though recognised that this may be ambitious. Each Principles of Clinical Practice 3 term will have a set Clinical Skills Coach and the School will map EP2 content across the year for terms. The 2013 teaching year will be fifty weeks long for staff, to manage the MD and MBBS terms, as Principles of Clinical Practice 3 cannot accommodate two cohorts of students in a term at one time.

A Phase 3 Working Group chaired by the Head of School had commenced work on the Scholarly Selective 1 and 2 subjects. Scholarly Selective 1 will begin in 2013, and the School plans that this year-long subject will prepare students for Scholarly Selective 2. Students will select a topic and a supervisor, develop a research plan and complete an ethics application if needed.

The School is confident that it has ample resources for all students to complete their projects. The outcome will be a written paper, a literature review and a peer-reviewed poster for the student conference. The School is recruiting supervisors and had found that the research institutes were keen to develop relationships with students for future PhD studies.

Year 4

The Year 4 subjects will include Scholarly Selective 2, Transition to Practice and Student Conference 4.

The semester-long subject, Scholarly Selective 2, plans to provide each student the opportunity to consolidate research skills by the completion of the research project planned during Scholarly Selective 1. The School envisions that this project will be completed under the supervision of an active researcher and result in a written research report and oral presentation.

In the Transition to Practice subject, the School plans that students will build on their prior knowledge and skills to develop the skills required for internship. The subject will commence with a trainee intern term, where students will join a medical or surgical unit team as a super-numerary member and undertake the roles and responsibilities of an intern under the supervision of the unit registrar. In the vocational selective term students will work in a discipline area of their choice. In the Preparation for Practice term, core skills of safe and effective patient management will be consolidated prior to commencing internship.

Student Conference 4 objectives will be the same as the previous conferences. Students will be expected to develop the conference program and participate actively in presentations and discussion. Students will be able to present their research projects and actively critique each other's presentations and conclusions.

The School's necessary focus on Year 3 planning at present means it has yet to clarify details of the Year 4 curriculum.

Overall, the Team considered that the structure and function of the course and learning objectives were well outlined in the Foundation of Biomedical Science and Principles of Clinical Practice 1 Tutor Subject Guides, and the Principles of Clinical Practice 2 Foundation Term Subject Guide and Rotating Terms Curriculum Guide. Expectations about attitudes and behaviours were provided in the Professional Behaviour Policy.

The School is encouraged to give more guidance to students about the depth of knowledge and level of skills expected at each stage of the program.

The School should continue to report on the development and implementation of Years 3 and 4. The Team recognised that the 2013 delivery of the MD program would differ slightly in future years due to the teaching out of the MBBS.

3.2.2 Scientific method

The curriculum is based upon principles of scientific method and evidence-based practice, and inculcates analytical and critical thinking.

2012 Team findings

The curriculum is based upon principles of scientific method and evidence based practice. The case-based learning format and self-directed nature of the program are designed to inculcate analytical and critical thinking and to minimise rote learning. Student feedback had led to integration of evidence-based medicine techniques into the Foundations of Biomedical Science.

The Team considered a Foundations of Biomedical Science research project, in which students participated in studies of their own blood pressure study, to be an excellent example of integration of scientific method into the course. Students are given one of two cardiovascular drugs and required to perform tests such as cardiovascular measures, cheek swabs, 24 hour urine tests and genetic testing. Thus ethics, pharmacology, postural blood pressure, genetics and clinical practice are all considered.

The Team was impressed with the developments in and the potential of the Scholarly Selectives 1 and 2 in Years 3 and 4 to provide students with an outstanding exposure to the scientific method.

3.2.3 Biomedical sciences

The curriculum includes those contributions from the biomedical sciences that enable understanding of the scientific knowledge, concepts and methods of clinical science.

2012 Team findings

The Foundations of Biomedical Science subject develops the foundations of bioscience knowledge building on prerequisite knowledge of anatomy, physiology and biochemistry. The School intends that biomedical sciences will be consolidated in clinically focused subjects of Principles of Clinical Practice 1-3 and in the research subjects.

The Phase 1 subject Foundations of Biomedical Science had been fully developed and implemented at the time of the visit. Student evaluation data suggested that the subject was well-received, and areas for review were identified. The School's efforts to respond quickly to students and tutor feedback by reviewing and streamlining the Foundations of Biomedical Sciences lecture program are to be commended.

The Team in 2010 had noted that there was some overlap in prerequisite subjects which might lead to disengaged students. In 2012, the Team was pleased to learn that varying levels of knowledge in anatomy had been overcome with a 'knowledgeable peer' mentor program in which students with advanced knowledge of anatomy were paired with students with less experience. The students felt comfortable asking questions of their peers and the peers found it challenged them. The program had spread to microbiology and immunology, and there were also student-led surgical peer groups forming in hospitals.

There were continuing challenges in engaging students at an appropriate level in Pathology teaching and as noted at Standard 3.2.1 the Team recognised that efforts were being made to address this.

Biomedical sciences are incorporated into later stages of the program, through the use of an MEU learning event template. For example, seminars for Principles of Clinical Practice 2 were developed using learning events from Year 1 subjects, to inform Year 2 students and tutors of prior learning. This process is discussed in more detail at Standard 3.3.

3.2.4 Clinical sciences and skills

The course provides a comprehensive coverage of:

- *clinical sciences relevant to the care of adults and children;*
- *clinical skills (medical history construction, physical and mental state examination, diagnostic reasoning skills, problem formulation and construction of patient management plans); and*
- *management of common conditions, including pharmacological, physical, nutritional and psychological therapies.*

2012 Team findings

The MD program provides comprehensive coverage of clinical sciences and skills. The objectives and curriculum that relate to the relevant attributes will be predominantly delivered in Principles of Clinical Practice 1-3 and Transition to Practice subjects.

Principles of Clinical Practice 1 is a year-long early clinical skills program derived from the Australian Teaching and Learning Council award winning MBBS program Introduction to Clinical Medicine.

The year-long Clinical Skills Coaches in Year 2 assist in the development of student's clinical, communication and professional skills with patients.

To build procedural skills, students also have hands-on simulation sessions run by clinical nurse educators throughout the year.

Principles of Clinical Practice 3 is planned to incorporate clinical sciences and skills by rotation through terms in women's health, child and adolescent health, aged care, general practice and mental health. These terms are being developed, as outlined at Standard 3.2.1.

3.2.5 Population health

The course provides a comprehensive coverage of population, social and community health.

2012 Team findings

Population, social and community health are embedded in the program and built on the three streams of epidemiology and evidence-based medicine, global and public health and health ethics included in the Foundations of Biomedical Science in Year 1.

3.2.6 Behavioural and social sciences and medical law and ethics

The course provides:

- *an appreciation of Australian or New Zealand society and their cultural diversity;*
- *development of appropriate skills and attitudes for medical practice in a culturally diverse society;*
- *development of communication skills;*
- *an understanding of personal and professional development issues as they relate to medicine; and*
- *an understanding of medical law and ethics.*

2012 Team findings

The objectives and curriculum related to these areas include particular examples in the Student Conferences, Principles of Clinical Practice 1 and CSL tutorials, Principles of Clinical Practice 2 (especially in Empathic Practice/Ethical Practice (EP2) and the intersessions), Principles of Clinical Practice 3 in relation to Aged Care, Women's and Children's Health, Psychiatry, and in Transition to Practice.

The introduction of the Empathic Practice/Ethical Practice program in Principles of Clinical Practice 2 is to be commended. These weekly small group tutorials, led by senior clinical mentors, focus on the issues of professionalism and ethics, and involve both reflection on clinical experiences as well as specific sessions dealing with key issues in this area. The continuity of an EP2 tutor working with a group of eight students across the whole of Year 2 gives students ample opportunity to explore personal and professional development issues and medical law and ethics issues in depth.

Cultural diversity and awareness is embedded in the program.

3.2.7 Indigenous health

The course provides curriculum coverage of Indigenous health (studies of the history, culture and health of the Indigenous peoples of Australia or New Zealand).

2012 Team findings

The development and implementation of the Indigenous health curriculum has been guided by the CDAMS Indigenous Health Curriculum Framework and by the results of a workshop held in Shepparton in 2009. The MEU works closely with Onemda in the School of Population Health and the Associate Dean (Indigenous Development) in the development of the Indigenous health program.

The School indicated in its submission that a core strategy of the CRESCENT Project was to appoint an Indigenous project officer to increase opportunities for clinical placements in Indigenous health settings, and to improve the quality and cultural safety of existing placements. The School is encouraged to continue its vertical integration of Indigenous health across clinical sites.

The appointment of an Associate Dean Indigenous Development since the 2010 visit was welcomed. The plan to take a values-based approach to Aboriginal health issues was noted and it is likely that further resourcing will be required to bring this to fruition.

3.2.8 Quality and safety

The curriculum addresses patient safety, risk assessment and quality assurance of medical care.

2012 Team findings

As advised in the School's submission to the AMC, the requirement for knowledge and skills in patient safety and quality of health care is described by graduate attributes within the Patient and Systems of Health Care Domains. The objectives and curriculum related to these graduate attributes will be delivered in all subjects but with a specific focus in the Transition to Practice term.

The Transition to Practice term in Year 4 has not yet been developed. The Phase 4 Working Group will be established to develop and implement Transition to Practice.

3.2.9 Interprofessional education

The course includes curriculum coverage and practical experience of interprofessional education.

2012 Team findings

A new Chair of Clinical Education and Training Development has specific responsibility for enhancing interprofessional education. The incumbent also chairs the Faculty's Interprofessional Education and Practice Committee which has worked on projects including an interprofessional day at the 2012 Student Conference, focusing on the healthcare needs of a person with a disability; development of interprofessional clinical teacher training materials and activities; and support of the Realising Education and Access in Collaborative Health (REACH) clinic, reportedly Australia's first truly student-run, collaborative healthcare clinic. Collaborative practice in healthcare with a focus on better outcomes for the patient had been a topic for Clinical Colloquia in Principles of Clinical Practice 2, and remains a planned major theme of the Transition to Practice subject.

The REACH clinic impressed the Team as an innovative interprofessional activity. Also noteworthy was the student-run interprofessional placement ward at the Northern Clinical

School where teams of students from several disciplines, under the supervision of a registrar, become the treating team for two patients.

The Team noted the value of interprofessional education centres at some clinical schools. One example was the Austin Hospital where the students' interprofessional education centre is led by a nurse educator, and the students had also formed an interprofessional committee.

The Team commends the School's innovative, hands-on approach to interprofessional education and recommends that additional funding be sought to expand successful pilot programs.

3.3 Curriculum integration

The different components of the curriculum are appropriately integrated.

2010 Team findings

The different components of the curriculum appear to be well integrated. There is a clear underlying principle for progression through each of the phases. The Team noted the opportunities for consolidation, iteration and reflection, most notably in the Intersession weeks planned in Phase 2. Ensuring integrity of these sessions and the availability of all students will be important if these weeks are to work in the way described. The Clinical Foundations course at the start of Phase 2 is an important integrative element.

The Curriculum Connect™ software has the potential to link elements of the curriculum but this awaits further development.

While the designers well understand the details of the proposed new curriculum, and the way individual elements are integrated, clearly this understanding is not widely shared by teachers at peripheral sites at present. It will be important to provide simple information about key aspects of the new program to current and future teachers, through presentation, publication and possibly by academic detailing. Without this, it will be difficult for clinicians to provide appropriate teaching and supervision.

2012 Team findings

There remains good integration of curricular elements, aided by appropriate technology. The MD Curriculum database is a repository of curriculum resources relating to Year, Body System Blocks, Weekly Themes and Learning Activities. All curriculum developers have access to the database, enabling them to view the entire curriculum structure, along with core topics, weekly themes, learning events and associated resources for each year. Potential gaps in integration horizontally across one year, or vertically over the four years of the course, can be identified and addressed. The database also permits mapping of graduate attributes against all learning events, and searching by graduate attributes.

Phase working group members referred to the mapping exercise and the templates in use to assist with development of learning activities. For example, the Year 1 curriculum had been reviewed by the Phase 1 Working Group Committee to ensure integration between disciplines, and between biomedical science and clinical practice.

Curriculum Connect™ had experienced some implementation challenges but the potential for enhancement of integration of learning in the MD program was clear. It provides a high level of integration between bioscience and clinical resources, and aims to create an accessible and relevant learning environment for students. Once the planned transition to an on-line platform was complete, functionality will be much improved. The Team commends the School for its vision in the development and implementation of this curriculum tool.

The development of the Ambulatory (Outpatient) /Emergency term to broaden the range of clinical settings available to students is working well and gives the opportunity for students to follow patients on their journey through the healthcare system.

The Intersession weeks present an additional opportunity for integration between the different terms and appear to have worked well in this regard in Year 2. Likewise, the Student Conferences integrate themes and research across the program.

3.4 Research in the curriculum

The medical course emphasises the importance of research in advancing knowledge of health and illness and encourages, prepares and supports student engagement in medical research.

2010 Team findings

The MMS has the capacity and expertise to provide high-quality research opportunities in all aspects of biomedical, clinical and health services research. The proposed Scholarly Selective 2 in Phase 3 will be an excellent opportunity for students to develop skills in the scientific method and evaluation of evidence, and will underpin this program being designated as a master-level graduate medical course. This Phase does, however, raise some challenges, particularly the successful completion of a significant research project within a limited time. Beginning preparation for Phase 3 in Year 3 (Scholarly Selective 1) is an excellent strategy. The Team noted the considerable enthusiasm of staff, as well as the great experience the MMS has gained running the two-semester Advanced Medical Science course in the six-year medical program.

The proposed timing of the Scholarly Selective, after two years exposure to clinical medicine, and student focus on imminent graduation, is likely to result in more students undertaking clinically-focussed research projects, and greater willingness to do research in rural settings. Clearly, the entire student cohort successfully executing Phase 3 will demand careful monitoring and support, as well as satisfactory development of the Scholarly Selective 1 course.

The proposed Student Conference will allow excellent opportunities for students to develop presentation skills in a research environment, and to be exposed to the research work and critical appraisal of their peers.

2012 Team findings

There was wide enthusiasm for the Scholarly Selective with staff at all clinical schools visited already planning to provide a wide range of research projects for MD students. Details of the curricular content of Scholarly Selective 1 were yet to be finalised, as was the assessment component of Scholarly Selective 2. This is an area for future reporting.

The Team considered that the Student Conferences, which embed the importance of research in each year of the program, were a valuable initiative.

3.5 Opportunities for students to pursue choices

There are opportunities in the course for students to pursue studies of choice, consistent with course outcomes.

2010 Team findings

Students may pursue studies of choice in a number of areas, but some possible areas are yet to be fully defined.

Students have the opportunity to choose which clinical cluster they join at the beginning of the program. Providing students (and potential students) with enough information to make informed judgments will be important. In this regard, the innovative proposal to assign a student simultaneously to both a home practice and a home hospital within the CRESCENT cluster is of great potential benefit. If successful, this will provide exceptional opportunities for students to gain exposure to a wide spectrum of community-based medicine, and to closely experience issues arising at the community/hospital interface. Clearly explaining this opportunity to students at entry time will be important.

The concept of special interest streams is an interesting one, but requires further development. How these groups would be formed, staffed or otherwise resourced is not clear.

The scholarly selective subjects provide an excellent opportunity for students to pursue their individual research interests, as discussed above. The vocational selective also has the potential for considerable choice, though the detailed implementation of this term awaits further definition.

2012 Team findings

The CRESCENT proposal discussed in 2010 has provided opportunities for Year 2 students to be assigned to general practices at Northern Clinical School in conjunction with the Department of General Practice. The Team understands that this was working well at Northern, and that extension to other sites is possible providing that there are appropriate general practice placement opportunities.

The student conference program provided evidence of students being able to choose from a range of symposiums depending on their areas of interest.

Details regarding the opportunities for choice in the Scholarly Selective subjects should be an area for future reporting.

3.6 The continuum of learning

There is articulation between the medical course and subsequent stages of training.

2010 Team findings

The Transition to Practice subject in Phase 4 provides sound articulation with subsequent clinical training as an intern. The majority of the student cohort will undertake the Trainee Intern or Improving Patient Outcomes terms immediately at the conclusion of their Scholarly Selective. Therefore, to quickly refresh these students' clinical knowledge and skills, it may be necessary to modify the first instance of these terms within Phase 4.

2012 Team findings

The School's submission indicated that Phase 4 of the MD would prepare each student for internship and their future vocational choice. An additional term is planned to provide a capstone experience for students in the broad context of improving patient outcomes in a quality and safety framework. Details regarding the development and implementation of Phase 4 should be an area for future reporting.

4 The Curriculum – Teaching and Learning

4.1 Teaching and learning methods

The teaching and learning methods are appropriate for the content and outcomes of the course. They include those that are inquiry-orientated, encourage students to take responsibility for their learning process and prepare them for lifelong learning.

2010 Team findings

An important feature of the planned MD program is the use of interactive, inquiry-oriented learning and teaching methods. The submission shows that the MD curriculum planning has paid careful attention to medical education literature and emphasised promoting learning wherever possible to achieve a deeper understanding of concepts. There are also plans to foster reflective thinking development over the four years of the course.

Phase 1 is the Foundations of Biomedical Science course. There are four main teaching methods planned:

Small group learning activities

Small group learning has been core to the Melbourne MBBS course in the problem based learning (PBL) program. In the new MD program, case-supported learning (CSL) tutorials will be used in place of PBL. This method combines the efficiency of large group information sharing—where the index case is presented in the first tutorial of the two-week cycle and summarised at the end—with the more intellectually challenging environment of tutor–student and student–student interaction, delving deeply into the complexities of each case in small groups where each student actively participates.

Medium group learning activities

Practical sessions in anatomy and pathology will be conducted in medium-sized groups, which are adequate for this material.

Large group learning activities

Lectures will be conducted with the whole cohort. As around 75% of Phase 1 time is spent in lectures, lecturers will be encouraged to use techniques and strategies to make the learning in lectures more active. There is a 'growing opportunity for innovation in this learning activity' through new technology, such as electronic keypads, which can be used to involve the audience during the lecture; lecturer training in giving more engaging lectures; and with new infrastructure for large groups. Online modules to support the lecture program are being prepared. These will offer students the opportunity to revise and consolidate the material in their own time. Continued staff development and ongoing lecture monitoring will be needed to ensure continued interaction. The Team encourages the MEU to continue exploring innovative ways to actively engage students in learning material that is traditionally presented didactically.

Individual learning activities

Many of the individual learning activities in Phase 1 will be closely connected with the CSL tutorials. Students will be required to work on their own and within their small group on tasks the group defines, albeit with tutor assistance. The aim is to begin building independent learning from the beginning of the course. Written reflective exercises are also planned for

this phase to familiarise students with written work, and this is directly related to the graduate outcome of clear written communication.

Fundamental principles of Clinical Practice 1

This subject consists of about 30 tutorials taught in two-hour, weekly, small group sessions with a clinician tutor. Small group methods will be used exclusively to teach clinical skills of communication, medical history taking and physical examination. The course is adapted from the award-winning early clinical skills course in the current MBBS and involves role-play and simulated patients. The clinical skills course is highly structured and supported by student workbooks and audiovisual material, which students can study independently. Group sizes will be 10 to 12, which is large for active teaching of skills where each student needs practice. Although there is continuity of clinical tutors, larger group sizes may challenge early recognition of students in difficulty, who may need additional assistance.

Phase 2 covers Fundamental Principles of Clinical Practice 2 and 3, and runs over Years 2 and 3. Subjects will be delivered entirely in clinical settings. The vast majority of learning opportunities for students will be in individual and small group activities. Students will be expected to practise their clinical skills independently. The clinical immersion will be supported by structured teaching activities, and this is commended. Some of the clinical placements will be similar to the existing MBBS program while others, such as the ambulatory care term, offer new settings for clinical teaching.

The Team visited a number of clinical sites, and discussed the course with a number of clinical tutors. The clinicians exhibited great enthusiasm but little actual knowledge of the course. In discussions, some clinicians expressed that groups of four or five students were too large to include in many medical and surgical units, and expressed a preference for groups of two or three. This issue will need to be kept under review for optimal clinical teaching. It will be important when implementing the new course to inform the clinical tutors and support them in interactive methods.

Individual learning activities

Patient interactions are at the heart of these subjects. Students will be encouraged and assisted to seek every opportunity to interact with patients, and to practise medical interviewing and physical examination skills independently. This will build on and extend the skills acquired in Fundamental Principles of Clinical Practice 1. The foundations term will provide a bridge between the more structured clinical learning of Phase 1 and the more unstructured environment of hospitals and ambulatory settings. A learning portfolio will include a record of students' patient interactions, and this will form an important part of each student's electronic learning record (through Curriculum Connect™).

Curriculum Connect™, the IT platform developed for the MD program, offers students a wealth of resources to support their individual and group learning. Students can document patients they have seen in a medium that links the data from those cases with learning resources. Through Curriculum Connect™, students can share cases with other students, promoting learning in a virtual environment based on real world experience. Developing Curriculum Connect™ continues; features such as timetabling, SMS messaging and curriculum integration are expected soon. This resource will be valuable not only in giving students instant access to their individual programs and resources, but also in developing the sophisticated information technology skills required of a 21st century doctor.

While there are other health professional students at the clinical sites, there appears to be little opportunity or planning for interprofessional learning. At several clinical sites, the student facilities were shared, creating the possibility of informal interaction between students of different health professions. Each clinical school is equipped to teach procedural skills such as venepuncture, cannula insertion and suturing. These will be taught in medium to small groups by skilled staff throughout Phase 2.

Intersession weeks in Phase 2

Five intersession weeks are proposed in the two-year Phase 2 of the MD program. The planned teaching and learning methods are not described in the submission. These weeks are designed as opportunities for reflection, planning assessment and feedback. The ability to reflect (to take time to look at the 'big picture') is a key skill for all professionals. To develop such skills in Melbourne MD graduates, effective structuring of these interspersed intersession weeks will be important.

Phase 3 includes Scholarly Selective 1 and 2. Skills in working independently are developed in this phase, with students planning and implementing research in an area of choice under expert supervision. Writing up the thesis is a major activity. In many cases, this will be as a member of a research team, thus giving the opportunity to practise team skills. There is also the potential to present work at the yearly student conference. During the scholarly selectives, formal sessions will be held in relevant topics such as statistics, literature reviews and writing ethics applications.

Phase 4 is Transition to Practice. The final semester of the program is geared to producing an internship-ready medical graduate. The majority of learning and teaching in this phase is patient centred. In five-week blocks, either as a trainee intern or in vocational selective, students will be almost exclusively working as members of a clinical team. Here role modelling will be a key learning and teaching modality. This is also the time in the MD program when medical students are most likely to have the opportunity to work and learn with other health professional students, and this opportunity should be developed.

Student conference

The proposed student conference at the end of each year is highly innovative. It is planned to give each cohort of students increasing responsibility for organising and running the event as they move through the program. There will be opportunity for both individual and group work, and for a range of contributions, from making a scholarly presentation to organising the catering. This may challenge assessing each student's participation, especially as student numbers increase. The Team considers that this event has the potential to become a major annual event in the School's calendar, bringing not only students but also the entire teaching faculty together.

2012 Team findings

The enthusiasm of clinical tutors and supervisors for implementing the MD program remains high at the Medical School and at Clinical Schools.

The Team regarded the continuity of contact offered by the Clinical Skills Coaches and the Empathic Practice / Ethical Practice (EP2) tutors as a great strength of the program. Both Clinical Skills Coaching and EP2 sessions are held weekly in Year 2 allowing for continuity of student academic support and mentorship.

The EP2 tutorials, as discussed in Standard 3.2.6, concentrate on the personal and professional development of students. The small-group sessions use source material to encourage discussion and reflection about the practice of medicine.

The Clinical Skills Coaches assist in the development of clinical, communication and professional skills. They play an important part in learning and professional development in Principles of Clinical Practice 2.

The Team noted that these sessions were popular across the Clinical Schools. Students valued the interaction with their Clinical Skills Coach and EP2 tutor, and the coaches and tutors whom the Team met were enthusiastic and understood their role. The Team encourages the School to maintain training and calibration sessions for the coaches and tutors. Given the importance of continuity, the School is encouraged to ensure that students at all clinical schools in Principles of Clinical Practice 2 have the same Clinical Skills Coach for the whole year.

The Intersession weeks in Year 2 have developed further. Although the first Intersession week was somewhat compromised by MBBS exams, the Team appreciated from discussion with tutors and students the opportunities these weeks offer for revision, reflection and preparation between terms. At Royal Melbourne for example, the last intersession included a student-led 'rolling handover' of their term to incoming students, a communication skills seminar, and a simulation exercise.

Clinical Colloquia had commenced at each clinical school and were found to be well-received at all sites visited. This series of twenty-four discussion sessions focuses on cases that illustrate how health disciplines work together to improve the patient's quality of life. The student is engaged in diagnostic and therapeutic reasoning from the points of view of the disciplines involved in clinical management.

The Team was impressed with the procedural skills sessions led throughout the year by clinical nurse educators. These sessions begin early in the program so that students can practise their skills with their patients under supervision.

The Team noted that in Year 1, anatomy learning included a DVD about body donation, and attendance at a memorial service where families of donors meet patients, staff and students.

The Patient-Partner Program in Principles of Clinical Practice 2 is another good learning initiative. Each student, with appropriate consent, identifies and follows two patient partners with chronic diseases over a prolonged period (ideally three terms). In the final term of Principles of Clinical Practice 2, students present one of their patient partners to their EP2 group.

The Primary Care Community Base at Western and Northern Clinical Schools focuses on experiencing continuity of care and learning about management and prevention of chronic disease in the community. Students attend a Primary Care Community Base one day per week during the second and third years of the program. The Team was impressed with this initiative.

Successful initiatives from the MBBS program will be continued in the Principles of Clinical Practice 3 term. These include the Hands on HEADSS session where medical students teach high school students, and the Teddy Bear Hospital, which is a student-led fundraising activity where 'sick' teddy bears brought in by children are treated for a gold coin donation. The sessions allow students to experience well children and adolescents. The transition of innovative learning activities from the MBBS program to appropriate points in the MD program is encouraged.

The School envisages that learning methods used in Principles of Clinical Practice 2 will extend into Year 3 and the Transition to Practice subject in Year 4. A research supervision model will be applied in the Scholarly Selective sequence of subjects in Years 3 and 4.

As noted at Standard 3, the Team encourages the School to consider reducing interruptions to clinical placements by appropriate timetabling of structured teaching sessions, which currently occur on most days of the week and thus reduce the opportunity for clinical immersion.

5 The Curriculum – Assessment of Student Learning

5.1 Assessment approach

The school has a defined and documented assessment policy which guides student learning towards attainment of the content and outcomes of the course.

2010 Team findings

The Melbourne Medical School (MMS) has clearly articulated educational principles underpinning the assessment program. The principles state that assessment will be mapped to the curriculum, be fair and transparent, provide feedback to students that will guide their learning, use a variety of methods and be continually monitored. The MMS aims to match the assessments with the subject content, teaching and learning methods, and with graduate outcomes. Some examples of blueprinting were provided but, as stated earlier in the report, it is unclear how some attributes will be developed or assessed.

An appropriate balance of formative, summative, and continuous assessments occur throughout the course. The MMS will ensure students are familiar with all assessment types before they are used for summative purposes, and has deliberately brought forward some summative assessment tasks earlier in the subject to give students feedback on their progress and to discourage 'cramming' at the end of the subject. All students interviewed welcomed this move. However, some teachers at peripheral sites expressed concern at introducing assessment tasks earlier in the subject, mainly due to resource and capacity issues.

2012 Team findings

The MMS has maintained its clear approach to assessment, as described above.

Year 2 will be assessed as an integrated single course (Principles of Clinical Practice 2), with a good balance of formative and summative components. The MMS had decided to utilise a fully compensatory, additive approach to the graded components of the summative assessment, with the following weightings:

- Written integrated examinations (end of year): 30%
- OSCE examination at end of Foundation term: 10%
- OSCE examination at end of year: 30%
- Clinical skills tutor assessment: 10%
- Mini-CEX assessments x 4 (best 4 marks from unlimited attempts) 20%.

Students completing the hurdle requirements of the course (professional behaviour, attendance, presentation of three long cases, sign-off of designated procedures, ethical practice tutorial performance, ePortfolio of case notes) and achieving a total of 50% or better of the sum of the weighted components will pass the year.

The Team commends the School on its integrated approach to assessment, and the prominent weighting of clinical skills. The School considers that the new structure achieves better integration than the previous split method. The Clinical Assessment Committee is involved early in the program because of early clinical exposure. Mapping of assessment occurs throughout the program.

The Team did however have some concerns about aspects of this approach. As students can repeat Mini-Clinical Evaluation Exercise (Mini-CEX) assessments until they have achieved a very high mark, and Clinical Skills Coach assessments may well tend to be favourable, many

students could accumulate 25% of the total marks from these two components. Only a further 25% from the remaining components (which account for 75% of the marks) is then required to pass. This would allow students achieving only 33% in the written exams and OSCEs to pass. Assessment of clinical skills appeared to be over-weighted in comparison to knowledge and the School may wish to reconsider aspects of this approach to improve identification of weaker students.

A similar situation pertains to the proposed assessment of Year 3 (Principles of Clinical Practice 3), to commence in 2013, and similar reconsideration would be appropriate.

The provisional Principles of Clinical Practice 3 assessment template includes mid-year and end-of-year integrated written exams comprising multiple choice and short answer questions and an integrated ten station OSCE. The written exam will include basic science embedded as a 25% approximate component including investigations, slides and diagnostics. Each OSCE station will have a communication aspect with some stations based more on information giving and others more on information gathering, and will likely include a fitness to practice component. Additionally, term assessments include a written task, and Mini-CEXs which may be repeated as often as the student wishes. There will be separate sign-off for procedural skills performed by nurse educators, and these may also be re-sat until competent.

The Team heard that some disciplines preferred discipline-specific exams to the Year 3 integrated exam. The Team expects that deriving the correct assessment mix for Principles of Clinical Practice 3 will take two to three years, and this will be an area for future reporting.

Details regarding Year 4 assessment remain an area for future reporting.

5.2 Assessment methods

The school uses a range of assessment formats that are appropriately aligned to the components of the medical course.

2010 Team findings

The MMS will use a variety of assessment instruments. The Team was provided with details of assessment methods used at each stage of the course. These are appropriately aligned to the relevant course components. Assessment of integrated knowledge rather than isolated, subject or block-specific knowledge is increasingly emphasised, which is commended. Later stages of the course will incorporate assessment tools such as the Mini-CEX and 360-degree appraisal, which more accurately measure clinical performance and work-readiness, while also aligning with similar assessment tools used in prevocational and vocational practice.

Teachers and supervisors the Team interviewed felt that, for most subjects, introducing the newer forms of assessment would not pose a great challenge as most supervisors were already familiar with them in their role as vocational supervisors. There was a lack of understanding amongst most, however, of exactly how tools such as the Mini-CEX would be used for summative assessment. There was also concern about the increasing assessment burden on clinical supervisors because of the introduction of workplace-based assessment for doctors in training and international medical graduates. Staff at the clinical sites will require appropriate training and support in using these newer tools.

The Team strongly supports assessing written communication skills. These will be assessed to some extent in Phase 3, but this assessment should be supplemented by additional assessment tasks in the other phases. The reflective writing tasks may provide this opportunity, but it is not yet clear is who will provide this assessment, nor the standards against which they will be assessed. Several clinical teachers suggested some of the work-

readiness assessments could take the form of referral letters, discharge summaries and other instruments.

The MMS plans to introduce formal assessment of professionalism and fitness to practice, and this is to be commended.

All students interviewed welcomed the changes to the assessment processes, particularly the balance of formative and summative assessment, and the decision to use the long case purely as a formative assessment.

2012 Team findings

As planned, the MMS had implemented the use of multiple forms of assessment (listed above) and the Team supports this approach. The Team noted that the Mini-CEX instrument, was designed as a formative tool and summative use of this tool is not common. The School will evaluate its approach fully.

The Team noted that in Principles of Clinical Practice 2 there was a 100% attendance requirement for all clinical work. This is monitored by the Clinical Skills Coach and EP2 tutors, not ward supervisors, and the Team was concerned that poor attendance may not be detected if ward supervisors are not required to report. Methods to ensure attendance included monitoring by clinical Deans and sub Deans, and use of the Professional Behaviour Checklist, which can be completed by any tutor, professional or clinical staff as well as by the EP2 tutor. The School advised that the process was working, and noted a student with numerous adverse professional behaviour reports from various sources, who had been required to appear before the Fitness to Practice Committee.

The Fitness to Practice Committee reviews students whose behaviour is assessed as unsatisfactory, and its function has been reported at Standard 1.3. Incorporating satisfactory professional behaviour as a hurdle requirement was considered a strength by the Team.

5.3 Assessment rules and progression

The school has a clear statement of assessment and progression rules.

The school has clear and transparent mechanisms for informing students of assessment and progression requirements and rules.

2010 Team findings

The MMS uses the University of Melbourne statutes for assessment rules and progression. In the new course, the procedures used for enacting the progression rules will remain the same as those currently used.

The MMS will need to consider specific areas such as Phase 3 and the Student Conference. In the current course, students who fail the research year may be required to repeat the year. The research component of the new course (Phase 3) is six months in duration, and no clear policies have been developed to address the student who fails this component of the course. Within the new course's structure, no opportunity appears to repeat the six-month phase immediately, and it is difficult to see where this component could be re-assessed. Similarly, there is a hurdle requirement for attending the Student Conferences, but no clear policy on progression should a student fail this assessment.

The MMS provides clear policies on procedures for supplementary examinations, and these are easily accessible by the students. The procedures for communicating to students on supplementary assessments appear satisfactory.

2012 Team findings

As described under 5.1, the School plans to assess Years 2 and 3 as an integrated course using a fully compensatory additive approach and a cut-off score of 50%. There did not appear to be wide understanding by students and staff of the 50% cut-off score in the weighted assessment components. This information is not explicitly included in the students' handbooks, tutors' guides or other documentation, and the Team encourages the School to make it more widely available. The cut-off score of 50% appears to be arbitrary and is not currently based on objective standard-setting processes. This is discussed further under 5.4.

5.4 Assessment quality

The reliability and validity of assessment methods are evaluated and new assessment methods are developed where required.

The school has processes for ensuring that the educational impact and utility of assessment items are regularly reviewed.

The school ensures that the scope of the assessment, and assessment standards and processes are consistent across its teaching sites.

2010 Team findings

The relevant phase committees will be responsible for assessment quality. Two groups will develop the assessments under the educational leadership of the MEU: the Written Assessment Committee and the Clinical Assessment Committee. These groups will coordinate the development, implementation and evaluation of different assessment types used throughout the course.

The MMS already has appropriate standard-setting procedures and a robust system to monitor and analyse assessment methods. Clear procedures for ensuring consistency in assessment across clinical sites (particularly the newer assessment methods) are being developed.

2012 Team findings

The Team was pleased to note that the Written and Clinical Assessment Committees were now functioning. The OSCE examinations are appropriately standard-set (using the borderline regression method) and the scores adjusted so that the pass mark becomes 50%, before being added to the other components of the total score. Written examinations undergo appropriate post hoc analysis, and questions with inappropriate discrimination indices or degrees of difficulty are discarded.

There has been no modification to Principles of Clinical Practice 1 assessment in Year 1 and only minor changes to the Foundations of Biomedical Science assessment. These changes included, following recommendation from the expert writers, a shortening of the three hour multiple-choice question paper to two hours, and an increase in the short answer question paper from two to three hours.

However, the Team noted with concern that the current proposal was to incorporate the scores of written examinations into the total score without first submitting them to criterion-referenced standard-setting procedures. Given the fully compensatory nature of the assessment approach, the Team would encourage the School to re-introduce formal standard-setting, in order to maximise the discrimination power of the overall assessment. In addition, students and staff expressed concern about variable standards among assessors in relation to the Mini-CEX, and it is suggested that the School consider a calibration exercise to improve consistency.

6 The Curriculum – Monitoring and Evaluation

6.1 Monitoring

The school has ongoing monitoring procedures that review the curriculum content, quality of teaching, assessment and student progress, and identify and address concerns.

Teacher and student feedback is systematically sought, analysed and used as part of the monitoring process.

Teachers and students are actively involved in monitoring and in using the results for course development.

2010 Team findings

A comprehensive plan has been developed to monitor and evaluate the program. The Medical Course Committee will implement the plan, led by the Head of School. Based on the previous evaluation process, the plan will be introduced at the beginning of the program. Such processes are crucial for maintaining and enhancing the quality of the educational experiences and student learning. Melbourne Medical School (MMS) staff are responsible for ensuring successful program implementation, both in supporting student learning and ensuring program goals are met.

Approaches to evaluate the new program include mapping the graduate attributes to course outcomes. The mapping process will identify both successful strategies and problems, and will provide evidence to support implementing the needed changes. Specific aims of the mapping process include evaluation data reporting and analysis, and subsequent curriculum change implementation based on collected and reviewed evidence.

Assessment results are one obvious information source about student progress and the effectiveness of curriculum delivery at different sites. Written and clinical assessments involving the whole group will provide comparative data on the performance of cohorts in different clinical settings. If students are to be ranked in any way, maintaining the fairness and consistency of clinical work assessments in the diverse clinical settings will require specific staff training and support.

Other student progression information sources are internal local information from teachers and students. Students can report on specifics; for example, the effectiveness of teaching in different settings, pressures (both academic and personal), strengths and weaknesses in teaching, organisation and support. The data collected will be reviewed and an external report completed every four years. Ultimately, a longitudinal study is planned to track future vocational pathways through internship and beyond. This will be of considerable interest and will be used to modify aspects of admission and educational processes.

The Indigenous Health Curriculum Framework has been incorporated across the curriculum. This will be monitored as part of the continuous evaluation of teaching and subjects, and scrutinised by the Aboriginal health expert staff of Onemda VicHealth Koori Health Unit. The curriculum implementation will also be evaluated against the medical deans' Indigenous Health Curriculum Framework and similar curricula at other universities. After two years of implementation, Onemda will review the framework within the MD. The Team also encourages sharing this evaluation with other medical schools so that successful educational and support initiatives could be identified and introduced elsewhere.

2012 Team findings

The School had successfully implemented the evaluation plan as described, and had already made changes to the Year 1 program based on feedback from students and staff regarding the Year 1 experience in 2011.

Clinical Schools were also pursuing their own evaluations of Principles of Clinical Practice 2. There is a risk that students will be over-burdened with evaluation requests. The School is encouraged to ensure that there is appropriate coordination of evaluation activities within Phases 2 and 3.

The MEU staff member primarily responsible for Assessment is also primarily responsible for Evaluation, without a supervising Evaluation Committee. While there is a clear overlap of expertise with these two roles, there is also a potential for a perception of conflict of interest with this arrangement and the Team encourages the School to reconsider whether this is appropriate to continue.

6.2 Outcome evaluation

The performance of student cohorts is analysed in relation to the curriculum and the outcomes of the medical course.

Performance is analysed in relation to student background and entrance qualifications, and is used to provide feedback to the committees responsible for student selection, curriculum planning and student counselling.

The school evaluates the outcomes of the course in terms of postgraduate performance, career choice and career satisfaction.

Measures of, and information about, attributes of the graduates are used as feedback to course development.

2010 Team findings

Reviewing student progress in the program as well as the program outcomes is critical. Data will be collected early but, inevitably, a lag will exist between the initial implementation of the new curriculum and the production of a detailed analysis.

The cohort study is an excellent initiative that has the capacity to link data at selection with program performance. Of course, this will also be subject to a time lag. Some iterations of the initial program may be required before major changes are appropriate. Of particular interest is the possibility of continuing to track students into postgraduate training, identifying common and less common pathways in practice, or in other aspects of medicine. The outcomes for students in the rural schools (including postgraduate career choices and practice locations) will be of particular interest. Making (de-identified) data available as soon as possible is clearly important to encourage staff to modify problem areas as necessary.

2012 Team findings

No additional comments.

6.3 Feedback and reporting

The results of outcome evaluation are reported through the governance and administration of the medical school and to academic staff and students.

The medical school provides access to evaluation results to the full range of groups with an interest in graduate outcomes. The school considers the views of these groups on the relevance and development of the curriculum.

2010 Team findings

A clear plan has been outlined, focusing on issues of content, teaching and learning processes, assessment and student progression. This data will not only enhance the curriculum but also offer information on the progress of different subgroups within the program. In addition, various methods will be used to evaluate the program, including formal feedback from students, relevant university staff and clinical teachers.

There are sources of formal and informal information, including student members of Faculty committees and the student society. Student feedback is vital but, if over-used, fatigue can set in and the data may become unreliable. Staff are generally aware of this risk, but seeking information outside of the framework can be tempting. Clearly, the process needs to be managed from the centre. Diverse sources can provide information about teaching quality across the MMS, but ensuring fairness and equity of access is essential, as is avoiding excessive demands on students.

Other planned information sources include targeted reviews, focus groups and input from students who join Faculty committees. Individual staff members can often pass on information relevant to student experiences. Students not only comment on their experiences in the program but can also offer insights and novel ideas. The Clinical Allocation Tracking System initiative to track and monitor individual student experiences in hospitals and other placements should provide a rich source of information. This initiative has the potential to provide information about strengths and weaknesses, potentially helping to identify problems or difficulties arising during the program.

2012 Team findings

No additional comments.

6.4 Educational exchanges

The medical school collaborates with other educational institutions and compares its curriculum with other programs.

2010 Team findings

Students benefit greatly from exchanges and opportunities to study in other parts of Australia or overseas. Melbourne University has a clear range of linkages across the world. Some students report experiences outside the MMS can broaden horizons and may provide new ideas and strategies that could be implemented locally. It will be necessary, however, to have a contingency plan for situations where supervision is inadequate, anticipated resources are not made available or other impediments arise, including illness.

Reducing the research opportunity duration to six months will create some difficulties for students. Selecting supervisors and determining projects will need to occur well in advance, at a time when the students will be immersed in their clinical work. Particular difficulties will inevitably arise for some seeking an offshore placement. Issues of access and securing necessary permissions can result in significant delays to starting a project, a particular concern for students seeking an international placement.

2012 Team findings

The School continues to develop appropriate opportunities for benchmarking its students' performance against other medical schools. It participates in the Australian Medical Schools Assessment Collaboration project which compares performance in basic science knowledge by sharing of Multiple Choice Questions and is investigating possible participation in the International Foundations of Medicine project being coordinated by the United States Boards of Medical Examiners.

7 Implementing the Curriculum - Students

7.1 Student intake

The size of the student intake, including the number of fee-paying students, has been defined and relates to the capacity of the medical school to adequately resource the course at all stages.

The school has clearly defined the nature of the student cohort, and quotas for students from under-represented groups, including Indigenous students and rural origin students.

The school has defined appropriate infrastructure and support to complement targeted access schemes for under-represented groups.

2010 Team findings

The current MBBS program has enrolled 330 students per year. However, the Melbourne Medical School (MMS) advised that with the considerable changes in the clinical teaching environment, this cohort size will increase. The MMS envisages to initially accommodate 350 students per year by expanding and developing the Western and Northern hospitals as new academic centres, and increasing use of the private sector, and primary care and community teaching settings (as well as potentially expanding the Rural Academic Centre). In 2011, the student intake will include 250 Commonwealth supported places, 30 international and 30 domestic fee-paying students. Depending on the adequacy of clinical placements, the MMS will have a steady state of approximately 400 students per year.

The Melbourne MD selection process interrogates academic performance, aptitude for medicine, and personal qualities to determine a rank list of potential applicants. The University of Melbourne continues to support 20% of disadvantaged applicants entering the medical course via Graduate Access Melbourne. This includes socioeconomically disadvantaged students, rural and remote students, and Indigenous students. The 20% quota represents an aspirational target that will require consistent support and evaluation of approaches to reach. To help grow the currently relatively small Indigenous medical student numbers (N=6), the MMS is considering enabling both scholarship support during the undergraduate and graduate years and the option to complete the Bachelor of Biomedical Science over four years, rather than three. Further consideration could be given to special access for mature age students with prior learning experience (e.g. as Aboriginal health workers), perhaps through an initial graduate diploma and then entry to the graduate medical program.

International students do not have access to Graduate Access Melbourne, do not receive federal government support for their courses and are therefore selected in a separate pool. Those students who might apply for a domestic fee-paying place therefore have an additional factor determine their selection - ability to pay. To some extent, this undermines the equity of the selection process.

2012 Team findings

Student intake in 2012 had been somewhat less than the initially envisaged 350. The 2011 intake included 255 Commonwealth supported places (CSP) and 76 fee-paying students. In 2012, 254 CSP and 75 fee-paying students were enrolled. Some fee-paying students were facing financial pressures and there were anecdotal reports of students being absent from educational and clinical sessions because of a need to engage in paid work. The School was aware of this and is working with individual students to help resolve these issues.

7.2 Admission policy and selection

The medical school has a clearly defined selection policy and processes that can be implemented and sustained in practice, that are consistently applied and that are intended to minimise discrimination and bias, other than explicit affirmative action in favour of nominated under-represented groups.

The school publishes details of the process, including the mechanism for appeals.

The school has specific admission and recruitment policies for Australian Aboriginal and Torres Strait Islander or New Zealand Māori students.

The intended relationship between selection criteria, the objectives of the medical course and graduate outcomes is stated.

2010 Team findings

A clearly-defined selection policy for the proposed MD is in place. The policy and procedures are based on those used to select graduates in the current MBBS course. In alignment with the principles of the Melbourne Model, the Melbourne MD will be a 'true' graduate course at a master level, building on a prior three-year undergraduate degree. A final selection rank list will be derived by equally weighting rank lists from grade point average, Graduate Australian Medical Schools Admission Test (GAMSAT) or Medical College Admissions Test, and multiple mini-interviews. The procedures are similar to selection processes for graduate entrants to the MBBS course, the exception being that there will be equal weighting of all three GAMSAT sections. The double weighting of section three (which focuses on science skills and knowledge) will no longer be necessary given that all applicants will have already completed second year (or above) university subjects in anatomy, physiology and biochemistry.

The MMS has specific admission and recruitment policies for Australian Aboriginal and Torres Strait Islander students.

2012 Team findings

The School advised in its submission that the MD admission policy was amended in August 2011 to allow applicants with undergraduate degrees completed ten or more years before beginning the MD program to be eligible for selection if they had completed graduate studies within the past ten years. The School had developed, with input from the University's Disabilities Liaison Unit, a Core Participation Statement detailing the abilities necessary to successfully complete the program and proceed to practise as an intern.

The Multi-Mini Interview (MMI) has been reduced from ten stations to eight following analysis by the School, and is done in conjunction with the School of Physiotherapy. Students accepted into the Chancellors Scholar program (ATAR of 99.95) may select any course at the University, and the School advised that those selecting medicine must also sit the MMI.

It was noted that the School carried out approximately 40 international student MMIs via Skype rather than by telephone. The School found that this improved marking characteristics. The Australian medical system question was removed for students overseas.

The School continues to consider ways of increasing recruitment of Aboriginal and Torres Straits Islander medical students. The application rate and intake of Indigenous students remains, as in many schools, very low. The School noted that Indigenous students can feel isolated if small numbers of Indigenous students are enrolled. The Team recommend that the School maintain its efforts in this area and this be an area for future reporting.

The Team was pleased that the School reported exceeding its target for rural student intake.

The MMS offers Commonwealth Supported Places first, followed by bonded Commonwealth Supported Places and then domestic fee paying places. The School reported that some students had accepted a domestic fee paying place rather than a bonded place.

7.3 Student support

The medical school offers appropriate student support, including counselling, health and academic advisory services, to cater for the needs of students including social, cultural and personal needs.

The school has procedures to detect and support students who are not performing well academically.

The school has policies on the admission of, and procedures for, the support of students with disabilities and students with infectious diseases, including blood-borne viruses.

The school has procedures for identifying and dealing with students with needs related to mental health or professional behaviour issues.

The school has appropriate support for students with special support needs including those coming from under-represented groups or admitted through widening-access schemes.

2010 Team findings

The MMS employs an Academic Mentor who offers appropriate support for those students with special support needs and for those who are not performing well academically. The academic mentor predominantly deals with students in Years 1 and 2 of the current MBBS and focuses on rural, interstate, international and Indigenous students. The academic mentor is also in regular contact with the Clinical Deans and Clinical Sub-deans at each clinical school, and receives student referrals where specific problems are identified requiring greater levels of support than available at the clinical school. Pastoral support in the context of the proposed graduate medical program may need enhanced resourcing.

The objectives for Phase 2, beginning in Year 2 of the course, state students should maintain their own 'physical, emotional, social and spiritual health and understand the importance of professional support in this process'. The pastoral staff the Team met acknowledged that the first year resulted in a lot of the stress among students. The Team encourages the MMS to implement a formal, preventative, wellbeing program that teaches students how to recognise stress within themselves and others, and provides them with coping strategies.

A sophisticated approach to language and study skills support is provided by 3.5 FTE staff through the Clinical Communication and Learning Development (CCLD) group within the MEU. The unit was aware of the increased difficulty of dealing with student needs in the more isolated rural settings. The unit is looking for greater integration of CCLD in the new MD program, with a focus on developing a communication curriculum at both preclinical and clinical levels of the course.

The MMS has no formal fitness to practice policy in place. However, a committee has been established to develop fitness to practice documentation in the context of the new MD.

2012 Team findings

The School continues to offer appropriate student support both on main campus and at Clinical Schools.

Many of the students interviewed had found moving into the second year of the program quite stressful. High initial levels of anxiety were confirmed by tutors and coaches but they and many students indicated that these were diminishing as students familiarised themselves with the clinical environment. Empathic Practice / Ethical Practice (EP2) tutors and Clinical Skills Coaches reported that they often provided student support but were also clear about available additional support services, including the Academic Mentor. Most issues appear to be handled at Clinical School level. The School and Clinical Schools were clearly aware of this and the need to manage student expectations.

The majority of students clearly valued the close relationships with their Clinical Skills Coach.

The Team commends the establishment of the Fitness to Practice Committee, as commented on at Standard 1.3 and 5.2.

7.4 Student representation

The medical school supports and encourages student representation in its governance and curriculum management.

2010 Team findings

Students are well represented within the governance structure of the MD with active and enthusiastic participation in the Medical Course Committee and each of the Phase 1 through Phase 4 sub-committees.

2012 Team findings

Student representation within the governance and curriculum management structure remains appropriate. The Clinical School Subcommittees are subcommittees of the University of Melbourne Medical Students Society (UMMSS) involved in organising, promoting and running the UMMSS events at the relevant clinical site. There are now six Clinical School Subcommittees:

1. Austin Clinical School Subcommittee;
2. Northern Clinical School Subcommittee (previously combined with Austin);
3. Royal Melbourne Hospital Clinical School Subcommittee;
4. Rural Clinical School Subcommittee;
5. St Vincent's Hospital Clinical School Subcommittee;
6. Western Hospital Clinical School Subcommittee.

The University of Melbourne Medical Students Society had replaced the Education Officer role with an MD Education Officer and an MBBS Education Officer.

7.5 Student indemnification

The school has adequately indemnified students for relevant activities.

2010 Team findings

The MMS provides adequate indemnification of medical students through the University's current combined 'Professional Indemnity, Medical Practice and Clinical Trials Insurance' policy.

2012 Team findings

No additional comments.

8 Implementing the Curriculum – Educational Resources

8.1 Physical facilities

The medical school has sufficient university-based physical facilities for staff and students to ensure that the curriculum can be delivered adequately.

The school has sufficient clinical teaching site physical facilities for staff and students to ensure that the curriculum can be delivered adequately.

2010 Team findings

Students in the MD Phase 1 will be taught at the Parkville Campus where the University of Melbourne has impressive educational facilities. This includes several lecture theatres and 31 tutorial rooms in the Medical Building. Each tutorial room can seat 12 students, and the complex will comfortably accommodate students in Phase 1. There are 11 laboratories that can accommodate close to 800 students. Although these will also be used for students in other programs, there is ample room for Phase 1 students.

The MMS also has extensive computer laboratories open six days per week. The Brooks-Allen Museum of Anatomy and Pathology has a large number of preserved specimens, seven spaces for small group study, computer workstations and microscopes arranged over two floors.

The Brownless Biomedical Library has an extensive collection, and has recently been upgraded. Study carrels and ample computers are available. The library is open extended hours, and offers a welcoming environment conducive to effective study and learning.

The MMS has a large number of clinical training sites in metropolitan Melbourne, in outer suburbs and in rural Victoria. The Royal Melbourne Hospital has over 600 beds and is embedded in a large biomedical research precinct. This includes two lecture theatres (200 and 70 seats), tutorial rooms, a large library and appropriate IT facilities. Student places are also available at smaller adjacent hospitals. The Royal Women's Hospital has recently been rebuilt adjacent to the Royal Melbourne Hospital, with which it shares a library and retail precinct. It has a large (110 seat) conference room and a lecture theatre (180 seats), together with tutorial rooms. Over 6,000 babies are delivered each year. The Royal Children's Hospital is nearby, its new building reaching completion. This building has an impressive wing for education, which will be shared by the Department of Paediatrics and will provide excellent teaching facilities.

The Eastern Hill cluster has St Vincent's Hospital, Peter MacCallum Institute, and the Victorian Eye and Ear Hospital. The clinical school at St Vincent's Hospital is housed in a separate building with a small adjacent student residence. There are lecture theatres, tutorial and small group discussion rooms, IT facilities and a library. The University facilities are ageing and redevelopment is being discussed. The Peter MacCallum Institute and St Vincent's Private Hospital have significant capacity for expanding student teaching.

The Austin Hospital, Repatriation Hospital and the Mercy Hospital for Women are at Heidelberg. The Austin Hospital has excellent teaching facilities and additional clinical experience is available at the adjacent Repatriation Hospital and the Royal Talbot, a rehabilitation hospital. The Mercy Hospital for Women is a large women's hospital, delivering over 5,000 babies each year, and having satisfactory student accommodation.

The CRESCENT development in an arc north and west of Melbourne involves transforming the Footscray (Western) and Sunshine Hospitals, and the Northern Hospital into tertiary

institutions. The Western Hospital at Footscray has academic and student facilities in a dedicated demountable building adjacent to the emergency department. The hospital itself is ageing and there are plans to replace it in the next ten years. Many of its more acute care departments are being moved ten kilometres to the Sunshine Hospital where a $52 million combined hospital and academic/teaching/research building is nearing completion; academic facilities at Sunshine are currently housed in a demountable building. The academic group at Western Hospital will then move to Sunshine Hospital, although some clinical placements may remain at Footscray, depending on that hospital's eventual role.

The Northern Hospital was built about 12 years ago and has 225 beds. It is also being transformed into a tertiary institution with a $32 million research and education building about to be constructed. A strong feature of CRESCENT is the integration of student learning in a large number of community general practices.

The RCS is based in Shepparton with branches at Ballarat, Wangaratta and Bendigo. Large-scale infrastructure, comprising office accommodation, a sophisticated clinical skills centre and library, are shared with La Trobe and Victoria Universities. Melbourne University also occupies an academic health centre in Shepparton, which has private consulting rooms for student teaching, strong IT support and a large set of tutorial rooms.

Facilities are shared with Monash University at Bendigo, and with Deakin University at Ballarat. There are memoranda of understanding with these universities that underpin these shared locations. This part of Victoria has a large Indigenous population and the RCS has a strong cultural awareness program. All Melbourne University students spend at least three weeks in the rural school, the first of which is spent in the cultural awareness program. Further clinical interactions with Indigenous patients are common at the primary care practices students attend.

2012 Team findings

The School has excellent clinical education facilities, including clinical skills centres. Most of the additional teaching facilities proposed at the time of the 2010 visit are now in place. The facilities at all clinical schools visited were appropriate.

The recently completed Royal Children's Hospital is impressive. Co-located with the Murdoch Research Institute, it forms an academic medical centre which includes a Health Education and Learning Precinct shared by students and staff, with spaces that include tutorial rooms, teaching spaces, lecture rooms and simulation rooms.

At Austin Academic Centre, the Olivia Newton John Cancer and Wellness centre had recently opened. The co-located Warringal Private Hospital has informally taken students and has capacity to provide clinical opportunities for students based at Austin.

At the Eastern Hill Academic Centre, the Peter MacCallum Cancer Institute is being redeveloped which will provide enhanced resources for students in the future.

The new shared building at Sunshine Hospital, in the Western Clinical School, has excellent student and staff facilities which are also shared with other health disciplines and schools.

Northern Hospital is still using demountable office blocks but the proposed multi-storey academic building is soon to be built.

At Northern and Western Clinical Schools, the Primary Care clinical placements have successfully recruited teaching general practices and community health centres for students. Practices have received federal government funding to expand their infrastructure by creating

a student dedicated consulting room. A considerable number of practices now offer student placement, and the School was working to recruit more.

At Ballarat, the Team was impressed by the clinical skills facilities sited in the hospital very close to the clinical school. These resources are shared with Deakin University and the arrangement was working well.

At Bendigo, the Melbourne students are located in the Monash University owned and run building.

8.2 Information technology

The school has sufficient information technology resources and expertise for the staff and student population to ensure the curriculum can be delivered adequately.

Library facilities available to staff and students include access to computer-based reference systems, supportive staff and a reference collection adequate to meet curriculum and research needs.

2010 Team findings

All libraries available to students provide access to computer-based reference material and adequate reference collections. The MMS is also developing an innovative web-based program, Curriculum Connect™, which serves several functions. It acts as an electronic health record, allowing students to record their cases and browse literature, and also facilitates linkages to the curriculum and curriculum resources, and to web-based information relevant to clinical cases. These cases are then available to their peers, thus building a large database of educational material. Basic biomedical knowledge and clinical medicine are thereby integrated. Curriculum Connect™ also provides calendar and scheduling functions for individualised timetabling.

2012 Team findings

Curriculum Connect™ remains an impressive concept, amalgamating previous systems so off-campus students need only access one system to obtain MD-specific information. Its functions include timetabling, curriculum resources, administration and the logging of patient records and procedures. It also includes a library module for linkage to main campus reference collections. It should be noted that students will still need to access the University-mandated Blackboard-based system for more general information.

There had been significant problems extending Curriculum Connect™ to the wider student community. Many students expressed disappointment at their inability to use the software. Currently the Curriculum Connect™ software is provided to MD students on a USB memory stick and should run directly from the USB stick on most computers. However, many students reported technical difficulties in accessing the software. The School has recognised the issues experienced and has obtained funding to establish Curriculum Connect™ as a web-based program. This should resolve the present problems though it remains an area for future reporting.

8.3 Clinical teaching resources

The medical school ensures there are sufficient clinical teaching and learning resources, including sufficient patient contact, to achieve the outcomes of the course.

The school 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).

The school provides all students with experience of the provision of health care to Indigenous people in a range of settings and locations.

The school actively engages with relevant institutions including other medical schools whose activities may impact on the delivery of the curriculum.

The school ensures that the outcomes of the programs delivered in the clinical facilities match those defined in the curriculum.

2010 Team findings

The MMS has a rich array of clinical training places ranging from urban and rural primary care practices to sophisticated tertiary and quaternary hospitals embedded in world class biomedical research precincts. The Rural Clinical School has proved popular, and its presence is undoubtedly improving clinical care in rural Victoria. Its close integration with the healthcare of Indigenous Australians makes it a potentially important site for increased student contact.

The hospital-based clinical schools include those with long-established academic teaching and research centres, and those that began as community hospitals and are now rapidly evolving to tertiary hospital status. These latter either have, or will soon have, associated sophisticated academic and research facilities built in partnership with government. These partnerships are to be commended. A rapid recruitment program of clinical academic and specialist staff is increasing clinical, educational and research expertise at these hospitals.

The rapid development of new academic health centres will inevitably present challenges to the hospitals and the MMS. Funding the RCS and some of the peripheral sites has been achieved by infusing government-derived funds that may or may not be increased or continued. Some funds will move from the centre to the periphery, and this is causing concern to some of the centrally-located schools. Student numbers will increase in peripheral sites and require increasing resources to support them.

Another challenge for the MMS is introducing a new curriculum. While there has been extensive consultation in the new curriculum's design, a significant number of interviewed clinical teachers knew little or nothing about it. The possible discordance between the written and delivered curriculum is real. The MMS is well aware of this and has specific plans, including frequent visits of the MEU Head, to increase awareness. The inputs of the clinical schools' heads will be crucial to the fidelity of curriculum delivery. The Team was impressed with the clinical teachers' enthusiasm and the dedication of heads of schools, and is confident that the teaching will reflect the new curriculum.

2012 Team findings

The Team considered that there was an increased understanding of the new curriculum across the Clinical Schools. The Team met clinical tutors, coaches and clinical skills centre staff at Clinical Schools and were impressed with their support of the new medical course. The prolonged relationship between Clinical Skills Coaches and students during the second year of the course appeared to be highly beneficial. The Team did note that this prolonged contact was not achieved at St Vincent's Hospital where Clinical Skills Coaches changed each rotation.

The overlap of the old and new curricula had been a major challenge for the School, teachers, students and hospitals. By and large the overlap has been managed well and will soon be resolved by the teach-out of the MBBS program.

The MMS continues to share facilities with students from Monash University, Deakin University and the University of Notre Dame Sydney at several sites. Melbourne students did describe occasional problems from these co-locations but overall they seemed to work well. Rural Clinical School Year 2 students at Bendigo did comment that although they were well-supported and taught by Monash University staff, they felt detached from the MD cohort as they largely followed the Monash program.

The Team was able to interview the Pro Vice-Chancellor, Faculty of Health at Deakin University and the Deputy Dean at Monash medical school, Monash University who were both pleased with their cooperative relationships with MMS.

It was noted that the requirement by the Department of Health and Ageing that CSP students undertake a four-week rural rotation will strain the capacity of the Rural Clinical School. To remedy this, some rural students would need to be diverted to metropolitan placements, which concerned some rural teachers. The School advised that, in 2013, it would follow student preferences as students had not been informed about the four week requirement. In 2014, students would be required to move between rural and metropolitan sites. The Team understands the School is currently negotiating with the Department regarding these requirements and urges this dialogue to continue.

Rural capacity in Principles of Clinical Practice 3 was raised as a concern, though the School advised that the Department of Health and Ageing requirement that certain students must complete one year fulltime in a rural placement would be achieved by Year 2, so some students will return to metropolitan Clinical Schools, meaning fewer PCP3 places will be required.

The Team was confident that the School was managing appropriately its plans for the implementation of clinical teaching and learning for Years 3 and 4 to achieve the outcomes of the course. It commends the School and its clinical teachers for the teaching and learning resources available to students.

Appendix One Membership of the 2010 and 2012 Assessment Teams

The 2010 Assessment Team

Professor Robin Mortimer AO (Chair) MBBS Hons *Qld* FRACP FRCP FAMS FCCP Hon FAMM FRCPI FRCPT FCPSA (Hon)
Executive Director, Office of Health and Medical Research, Queensland Health
Deputy President, Australian Medical Council

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Director Clinical Training, Royal Hobart Hospital
Chair, Accreditation Subcommittee, Postgraduate Medical Council of Tasmania

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Senior Lecturer in Medical Education
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Retired academic, Discipline of Physiology, University of Sydney

Ms Karin Oldfield (Secretary)
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Ms Sarah Vaughan
Medical School Assessment Officer, Australian Medical Council

The 2012 Assessment Team

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Associate Professor/ Academic Lead MBBS Curriculum/ Deputy Head of School, Faculty of Health Sciences & Medicine, Bond University

Professor Anne Tonkin BSc *Flin* BMBS *Flin* MEd *Melb* PhD *Flin* FRACP
Director, Medicine Learning & Teaching Unit, The University of Adelaide

Ms Stephanie Tozer
Manager, Medical School Assessments, Australian Medical Council

Ms Sarah Vaughan
Medical School Assessment Officer, Australian Medical Council

Appendix Two Groups met by the 2010 and 2012 Assessment Teams

Groups met in 2010

Senior Executive Staff
Acting Vice Chancellor, University of Melbourne
Dean, Faculty of Medicine, Dentistry and Health Sciences
Head, Melbourne Medical School

Medical School Staff
Academic Mentor
AMS Supervisors
Clinical Dean, Northern Health
Clinical Dean, Rural Clinical School
Clinical Dean, St Vincent's Hospital
Clinical Dean, Western Hospital
Clinical Directors
Clinical Sub-Dean, Austin
Clinical Sub-Dean, Royal Melbourne Hospital
Clinical Sub-Dean, Wangaratta
Coordinator, Clinical Communication and Learning Development (CCLD) Program
Deputy Head, Melbourne Medical School
Director, Medical Education Unit
General Manager, Faculty of Medicine, Dentistry and Health Sciences
Indigenous Project Officer, CRESCENT
Manager, Melbourne Medical School
Manager, Resources and Planning, Faculty of Medicine, Dentistry and Health Sciences
MDHS Student Centre Manager
PBL and ICM tutors
Royal Melbourne Hospital Clinical School Staff

Medical School Committees
Assessment team, MEU
Educational technology team, MEU
Evaluation team, MEU
Medical Education Unit
Phase 1 Committee
Phase 2 Committee
Phase 3 Committee
Phase 4 Curriculum Developers

Medical students
Graduates
Students from years 1 – 6

Teaching health services
Royal Children's Hospital
Acting Department Head
Clinical teachers and supervisors
Coordinator of CAHC

Executive Director of Medical Services
Medical Educator of CAHC
Project Manager, University of Melbourne Education Precinct at RCH

Royal Melbourne Hospital
Administrative staff
Clinical teachers and supervisors
Executive Director Clinical Governance and Medical Services
Executive Director, RMH
Hospital CEO

St Vincent's Hospital
CEO
Clinical teachers and supervisors
Director Medical Education Unit

Mercy Private
CEO
Medical Director
Medical Education Supervisor

Austin Hospital
Clinical Nurse Educator
Clinical teachers and supervisors
Hospital CEO
Junior medical staff
Senior medical staff

Mercy Hospital
Subject Coordinator Women's Health

Royal Women's Hospital
Academic staff
Clinical teachers and supervisors

Western Hospital, Footscray
CEO Western Health
Executive Director of Medical Services
Clinical teachers and supervisors

Sunshine Hospital
Clinical teachers and supervisors

Northern Hospital
CEO Northern Health
Clinical teachers and supervisors
Hospital Executives

Rural Health Academic Centre
Assistant Head
Clinical Teachers
Director of Centre for Excellence in Rural Sexual Health
Head of Department of General Practice
Indigenous Community Safety Officer
Lecturer in Indigenous Rural Health Studies & Strategic Development Research Manager

Sia Medical Centre
General Practitioners
Practice Manager

Doutta Galla Community
General Practitioners
Practice Manager

External Bodies
Onemda VicHealth Koori Health Unit
Peter MacCallum Cancer Centre

Groups met in 2012

Senior Executive Staff
Dean, Faculty of Medicine, Dentistry and Health Sciences

Medical School Staff
Director, Medical Education Unit / Deputy Dean
Chair of Medicine, St Vincent's' Hospital
Head, Anatomy and Neuroscience
Head, General Practice
Director, Policy and Planning
Aged Care Discipline Coordinator
Children's and Adolescent Health Discipline Coordinator
PCP2 Subject Coordinator
Associate Dean, (Indigenous Development) / Director, Onemda
Chair, Clinical Education and Training Development
Scholarly Selective Subject Coordinator
Student Conference Coordinator
PCP1 and PCP2 Subject Convenor
Student Centre Manager, Faculty of MDHS
Clinical Teaching Associates Director and MD Academic Mentor
Academic Coordinator
Manager, Academic Programs and Policy, Faculty of MDHS
Deputy Head, GP Department
Director, General Practice and Primary Health Care node (North West Academic Centre)

Medical School Committees
Phase 1 Committee
Phase 2 Committee
Phase 3 Committee
Phase 4 Committee
Clinical Assessment Committee
Written Assessment Committee
Selection Committee
Curriculum Connect – IT

Medical Students
UMMS President
Years 1 and 2 MD Students
Austin Students
Ballarat Students
RMH Students
Western Students

Clinical Sites
Austin Hospital
Director, Medical Student Education
Director, Medical Services
Chief Executive Officer
Clinical Teachers

Clinical Skills Coaches
EP2 Tutors

Northern Hospital
Director, Medical Student Education
Anaesthetic Consultant
General Practitioner
ICU Consultants
Palliative Care Consultant

Sunshine Hospital
Head, Aged Care, Western Health / Associate Professor, Geriatric Medicine
Tutors

Warringal Hospital
Chief Executive Officer
Director, Clinical Services

Rural Clinical School, Ballarat
Acting Director, Medical Student Education
Director, Internal Medicine
Director, UDRH
Clinical Skills Lecturer
Executive Director, Medical Services, Ballarat Health Services
Professional Staff

Rural Clinical School, Bendigo
Director, ICU, Bendigo Health
Acting Director, Medical Student Education
Senior Operations Manager, SRH Monash
BRCS Regional Manager
BRCS Education Manager
Year 3 Academic Manager

Royal Children's Hospital
CAH Course Coordinators
Acting Head, Paediatrics
CAH Course Administrators
Teaching Staff
Health Education and Learning Precinct Manager
Hospital Management

Royal Melbourne Hospital
Deputy Director, Medical Student Education
Chief Executive
Executive Director, Clinical Governance
Clinical School Manager
Administrative Assistants
Tutors

Royal Women's Hospital
Dunbar Hooper Professor, Obstetrics and Gynaecology
Head, Diabetes Services
Associate Professor, Ultrasound Department
WH Course Coordinator
Women's Health Discipline Coordinator, Mercy Hospital
Director, Medical Services

St Vincent's Hospital
Director, Medical Student Education
Deputy Directors, MSE
Eastern Hill Academic Centre Manager
Chief Medical Officer
Director, Medical Education
Teaching Staff
Tutors

Peter MacCallum Cancer Centre
Associate Director, St Vincent's Clinical School (Peter MacCallum Hospital)
Surgeon / Clinical Teacher

Western Hospital
Professor, Medicine / Head, Academic Centre
Head, Aged Care, Western Health / Associate Professor, Geriatric Medicine
Clinical Nurse Educator
Nephrologist / Clinical Sub Dean / Clinical Skills Coach
Ethical Practice Tutor / Coordinator, Primary Care Community Base
Nephrologist / Clinical Skills Coach
Respiratory Physician
Head, General Medicine (Sunshine)
Executive Director, Medical Services
Acting Executive Director, Operations

Various
General Practitioners

External Bodies
Dean, Deakin University
Dean, Monash University