



Developing a Framework of Competencies for Medical Graduate Outcomes

Final Report

February 2011

Report prepared on behalf of Medical Deans Australia and New Zealand Inc by:

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EXECUTIVE SUMMARY

In 2010, the Australian Government Department of Health and Ageing (DoHA) provided funding to Medical Deans Australia and New Zealand Inc (Medical Deans) to document competencies for the medical graduate outcomes required by the Australian Medical Council (AMC), and which depend on clinical placements. The AMC's forty attributes for medical graduates provided the anchor point for the project.

The project evolved from priorities identified from the National Clinical Training Review¹ prepared by Medical Deans for the Medical Training Review Panel in 2008. That Review confirmed that medical education faced significant pressures to be able to continue to provide quality clinical training places for the current and projected number of medical students. This current work, translating the AMC forty attributes into a framework of competencies has helped to quantify the learning that occurs in a quality clinical placement and thus will assist in addressing the pressures of increased medical student numbers.

The project has been a resounding success. Thirty of the AMC graduate attributes have been successfully delineated into Student Learning Outcomes and then competencies which rely on clinical placements to produce a Framework of Competencies for Medical Graduate Outcomes.

The Framework has been endorsed by key stakeholders in medical education in Australia. It has provided a platform to bring key people together in medical education to discuss clinical placements and to provide transparency regarding the learning which occurs in a clinical environment.

The key outcomes of the project include:

- defining the current competence – based medical education environment
- the development of the Attributes Spectrum
- the use of Student Learning Outcomes in the delineation process
- the development of an interactive framework utilising eight common clinical rotations identified in the National Clinical Training Review report
- the introduction of lists of common procedural and diagnostic skills
- extensive stakeholder consultation
- delineation of thirty out of the 40forty AMC attributes into Student Learning Outcomes and then competencies which rely on clinical placements

Substantial research was conducted on competency frameworks, reports, related projects and competency based education occurring in medical schools.

The project has relied on two key findings from this research:

- the release of a new definition of competence/competency by the International Competence – Based Medical Education Collaborators in 2010; and
- the concept of tacit and codified knowledge as explored in the Australian Medical Council's Consultation Paper on Competence – Based Medical Education in August 2010².

¹ Medical Deans, National Clinical Training Review Report to the Medical Training Review Panel, Clinical Training Sub-Committee, February 2008.

² Australian Medical Council, Competence - Based Medical Education, AMC Consultation Paper , August 2010

The introduction of the Attributes Spectrum was a major development for the project. The Attributes Spectrum ranks the AMC graduate attributes according to their degree of reliance on a clinical setting thus allowing for all of the AMC graduate attributes to be developed in a clinical placement. Attributes were ranked in three categories, with those in the red zone, the area designated as predominately acquired in a clinical setting, the initial focus for the delineation process into competencies.

Student Learning Outcomes were also introduced to help address the paradigm shift from attributes/statements to an outcomes - based education process. The use of the Student Learning Outcomes as an intermediary step assisted with the identification of competencies which relied on clinical placements.

The use of mind mapping software to present the draft framework of competencies was a significant development in conceptualising how the Framework could be presented. The incorporation of the mind mapping enabled the AMC graduate attributes to be mapped to the Student Learning Outcomes, then competencies; and then to the eight common clinical rotations as identified by the National Clinical Training Review Report: Surgery, General Medicine, Obstetrics and Gynaecology, Paediatrics, Mental Health, General Practice, Emergency Medicine/Critical Care and Others.

The introduction of lists of common diagnostic and procedural skills has refined the Framework further by aiming to identify the diagnostic and procedural skills which the medical student should have attained on graduation.

There has been a progressive consultation with key stakeholders across the medical education continuum to assist with the documentation of the competencies which rely on clinical placements. The consultation process culminated in the convening of these stakeholders at a Consensus Conference, with the main outcomes being:

1. Solid endorsement of the Framework
2. Support for the further development of the lists of common diagnostic and procedural skills for the medical graduate, specifying the level of achievement for the medical graduate.
3. Strong support for the AMC to review their graduate attributes.

The Framework has now also been endorsed by the Deans as a whole. It will provide a useful resource to assist with the development of new clinical placements or as a resource for evaluating existing clinical placements.

Medical Deans is appreciative of the support provided by the Department of Health and Ageing which has ensured that the Competencies Project has developed into a project of importance for medical education.

Introduction

Medical Deans received funding in early 2010 from the Australian Government to develop a framework of competencies for medical graduate outcomes which rely on clinical placements.

The objectives of the project were to:

1. Identify the competencies associated with each of the attributes in knowledge, skills and attitudes/behaviours specified by the AMC for competent medical graduates and which depend on clinical placements.
2. Use the AMC Accreditation Standards and Processes for medical graduates (including International Medical Graduates), the Medical Deans' National Clinical Training Review report, the Australian Curriculum Framework for Junior Doctors (ACFJD) and any other relevant reports/projects as the basis of the development of a document that maps competencies to AMC prescribed attributes and which enables graduates to practice at the beginning of the PGY1 Year.
3. Ensure engagement of stakeholders in the identification and specification of competencies.
4. Ensure that the competencies documented are appropriate for a graduating medical student to commence work as an intern in the standard clinical rotations of the intern year (PGY1).
5. Ensure that the competencies enable a graduating medical student to continue to undertake further learning and clinical training.

This report provides a comprehensive account of the manner in which the project was undertaken and the project's achievements. It also outlines the potential future use of the Framework.

A copy of the Framework of Competencies for Medical Graduate Outcomes is attached as a separate document, and a version of the 'mind mapped' Framework accompanies this report.

Background

For medical schools, adequate clinical places are necessary to produce graduates who are competent to practice safely and effectively as interns. It is also essential for graduates to have had the appropriate foundation for further training in any branch of medicine, and for this training to allow for continued professional development throughout their career. This has become critical as numbers of medical students increase

The Medical Deans' Competencies Project grew out of the 2007 - 2008 Medical Deans' National Clinical Training Review which identified the need for sufficient and quality clinical placements in medical education.

It was felt that by developing a Framework of Competencies which relies on clinical placements, a level of clarity and precision around the training that occurs in a clinical environment could be devised.

Research informing the development of the Framework

Current literature was reviewed to assist with the development of the Framework and to determine the competence – based medical education environment. There were three significant reports which influenced the development of the Framework:

*General Medical Council: Tomorrow's Doctors*³ - an example of an outcomes - based framework implemented in medical education in the United Kingdom. United Kingdom medical schools are now being accredited against this framework. *Tomorrow's Doctors* is an example of an outcomes - based framework which is implemented at the medical graduate level.

*The CanMEDS 2005 Physician Competency Framework*⁴ - a world recognised competency framework for physician competencies. The CanMEDS framework provided insight into the development of, and implementation of, a competency framework at the vocational level of medical education.

*The Future of Medical Education in Canada (FMEC) report*⁵ - an example of a national outcomes measurement and which includes references to competencies. The FMEC report looked at how the education programs for medical doctors can best respond to societal needs. The release of the FMEC report included ten recommendations for medical education in Canada. Of particular significance was recommendation number nine, the adoption of a competency – based and flexible approach.

Of significant importance was the release of the International Competence – Based Medical Education Collaborators new definition of Competence, Competencies and Competency - Based Medical Education. The collaborators conducted a systematic review of the literature on Competency Based Medical Education to develop new definitions. The definitions are:

³ General Medical Council, *Tomorrow's Doctors*, September 2009.

⁴ Frank, JR. (Ed). 2005 *The CanMEDS 2005 physician competency framework*. Better Standards. Better physicians. Better care. Ottawa: the Royal College of Physicians and Surgeons of Canada.

⁵ The Association of Faculties of Medicine of Canada, *Future of Medical Education in Canada (FMEC)*, A Collective Vision for MD Education, 2010

Competency / Competencies

- An observable ability of a health professional
- Reflects a spectrum
- Integrates multiple components such as knowledge, skills, values, and attitudes.
- Multiple competencies can be combined
- Measureable with respect to a defined outcome

Competency - Based Medical Education

- Is an outcomes - based approach to the design, implementation, assessment and evaluation of a medical education program using an organising framework of competencies.

Competent

- Possessing the required abilities in all domains at a specified stage of medical education or practice.

The Medical Deans' Competencies Project adopted these definitions when referring to competence, competencies and competency.

Of equal importance was the release of the AMC Consultation Paper on Competence – Based Medical Education in August 2010. The AMC internal working party which oversaw this work was chaired by Professor Nicholas Glasgow and also included Professor David Prideaux. Both were members of the Competencies Project Reference Group and Writing Group, enabling a useful sharing of information between the AMC Project and the Competencies Project.

The proposed AMC framework makes distinctions between codified knowledge and tacit knowledge. Clinical placements are a combination of codified and tacit knowledge with early clinical experiences comprising mostly codified knowledge. The Reference Group and Medical Deans supported the framework proposed by AMC. This framework has helped to inform the competencies identified which rely on clinical placements.

Projects informing the development of the Framework

There were a number of key projects being conducted in Australia which had concurrent themes around addressing clinical competence, academic standards and quality and safety. These included the Australian Learning and Teaching Council's Academic Standards Project for Health, Medicine and Veterinary Science, HWA's Simulated Learning Environments for Medicine, HWA's National Health Competency Framework and ACFJD. These related projects helped to inform the development of the Framework, facilitated stakeholder engagement and also provided the conduit for sharing related information.

Competency - based education currently in place in medical education

A brief review of competence – based education across medical education in Australia revealed that some universities had adopted an outcomes - based approach to curriculum delivery, although there were very few medical schools utilising a competency - based approach. The medical schools at the University of Queensland and the University of Notre Dame were the only two schools identified that have adopted a competency – based approach to sections of their medical curriculum.

The most comprehensive demonstration of competence - based education was found at the University of Queensland where a competency - based initiative has been implemented for first year clinical skills sessions using a model of 'rolling' assessment. This initiative delivers a highly structured

clinical coaching program for first year clinical and procedural skills resulting in improved clinical skills for first year medical students.

At the prevocational level, most state prevocational medical councils referenced the Australian Curriculum Framework for Junior Doctors (ACFJD) as the educational curriculum for teaching interns.

At the vocational level, the majority of colleges have either adopted, or are in the process of transitioning to a CanMEDS style of framework for the delivery of their curriculum.

Methodology

Initial activities involved the establishment of a Reference Group whose role was to provide strategic advice and direction for the project. The Reference Group was led by Medical Deans with the Chair of the Reference Group Professor Allan Carmichael, previous President of Medical Deans, and the Deputy Chair, Professor Nicholas Glasgow, a member of the Medical Deans' Executive and the representative for the Australian Medical Council. Other members of the Reference Group represented major stakeholder organisations across the medical education continuum. A full list of members of the Reference Group Membership is included in Appendix A.

Early on, it was clear that it would be beneficial for the project to establish a smaller more specialised Writing Group to help with the delineation process and to help achieve the objectives of the project. The Writing Group included members from Medical Deans, Medical Educators, Confederation of Post Graduate Medical Education Councils (CPMEC), Australian Medical Association – Council of Doctors in Training (AMACDIT) and Australian Medical Students Association (AMSA). A full list of Writing Group Membership is included in Appendix A.

In order to contain the scope of the project, the Reference Group decided that the project focus on those clinical placements that occur in the second half of a University Medical Program. This is when the students are full time in their clinical rotations. These clinical placements have also been identified as the pressure point in medical education with the increase in student numbers in the future and the challenges of providing a quality clinical placement.

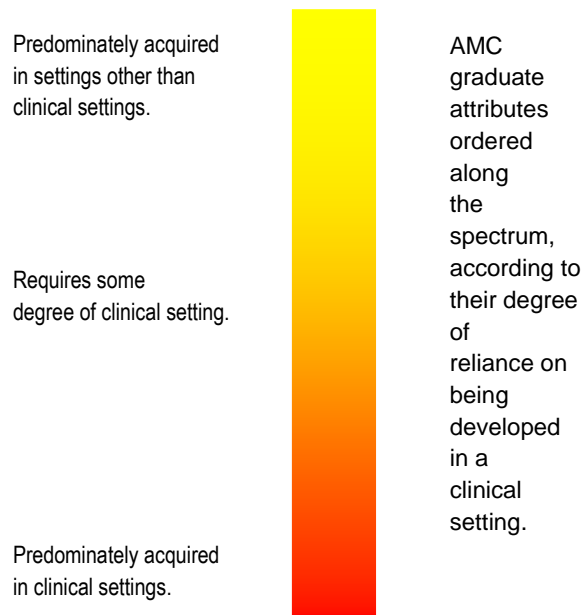
Key stages in the development of the Framework

Attributes Spectrum

One of the first challenges was identifying which of the AMC graduate attributes relied on clinical placements. This led to the development of the Attributes Spectrum which identifies and ranks attributes according to their degree of reliance on being acquired in a clinical setting. The Reference Group ranked the forty AMC graduate attributes according to their degree of reliance on being acquired in a clinical setting. This important development for the project provided a system to address the major objective of the project.

The Attributes Spectrum also identified a starting point for the delineation process. The delineation process involved translating those attributes which relied on clinical placements, into Student Learning Outcomes and then competencies. The delineation of attributes started with the attributes in the red zone of the Attributes Spectrum (attributes predominately acquired in a clinical setting), and worked up the spectrum towards the yellow zone (attributes which can be acquired in settings other than clinical settings).

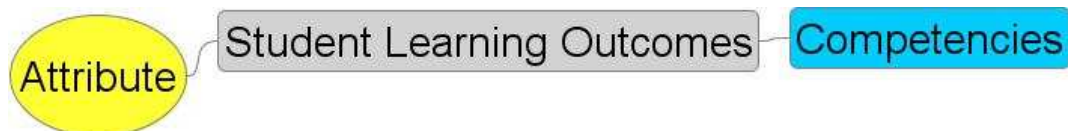
Sample Attributes Spectrum



Student Learning Outcomes

Now that there was an identifiable starting point for the delineation process, there was still the challenge of undertaking the delineation of attributes into competencies. To help address the paradigm shift from goals, objectives or statements to one of an outcome - based approach; the use of Student Learning Outcomes was incorporated as an intermediary step. Thus the delineation of attributes would focus on those attributes which rely on clinical placements, and delineate them into Student Learning Outcomes and then competencies.

Delineation process concept map



To assist with the delineation process, medical schools were contacted and requested to supply curriculum documents for clinical placements which occur in the second half of a medical program. The documents helped form the basis of the Student Learning Outcomes and competencies. The use of these documents also assisted in developing competencies which were appropriate for the medical graduate and would also ensure further learning.

The Student Learning Outcomes (SLO's) and competencies developed were purposely kept broad and high level so as to avoid a reductionist approach. The intention behind writing the SLO's and competencies was to capture the essence of the attribute, and express this in an outcome - based/competency model. The goal was to produce a framework which had a functional use – a framework which contained a large number of competencies would be of little benefit.

Critiquing against Australian Curriculum Framework for Junior Doctors (ACFJD)

The competencies developed for each attribute were dynamically critiqued against the ACFJD. This critiquing against the ACFJD helped to develop competencies which were not beyond the level of the medical graduate. By analysing the competencies against the ACFJD, vertical integration was also addressed. Using the ACFJD as a benchmark has established the basis for a future mapping exercise of the competencies developed for the medical graduate to the ACFJD capabilities.

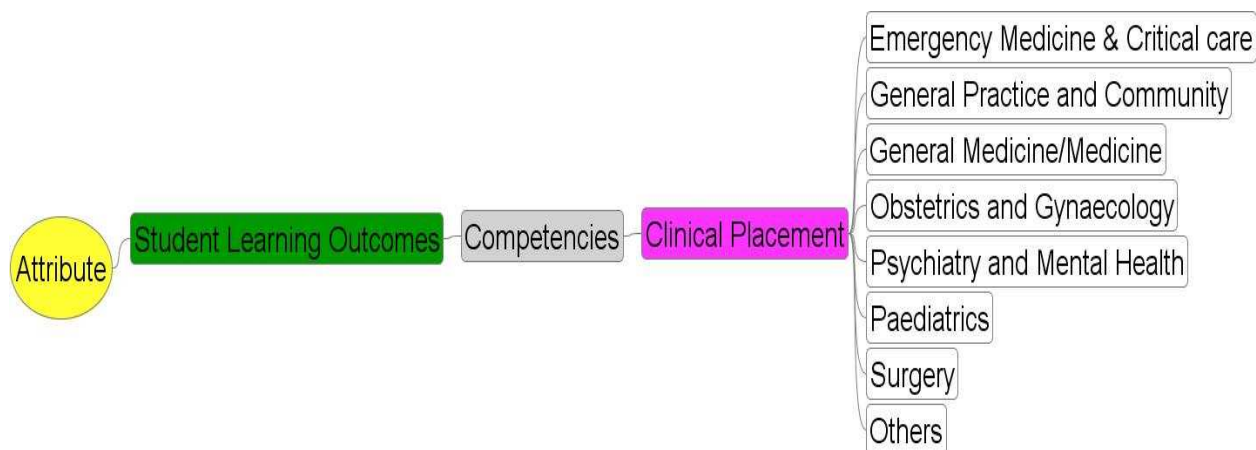
Lists of common diagnostic and procedural skills

The delineation process for attributes pertaining to diagnostic and procedural skills (attributes 18 and 15) lead to the development of lists of common diagnostic skills and procedural skills. The use of lists in the Framework aims to identify what diagnostic and procedural skills a medical graduate should have attained regardless of the medical program they undertook. These lists were developed via a modified Delphi technique from data obtained from three medical schools. Refinement of these lists will help in the identification of competencies which are developed in a clinical setting. These lists will be useful to health service providers as it will help to identify the competencies medical graduates have acquired in clinical settings.

Common clinical rotations

The draft Framework utilised the Attributes Spectrum as the foundation of the framework. The introduction of the eight common clinical rotations as identified by the National Clinical Training Review Report was incorporated into the Framework. The eight clinical rotations provided the context for the development of the Student Learning Outcomes and competencies in a clinical setting. The eight common clinical rotations as identified by the National Clinical Training Review Report are: Emergency Medicine/Critical Care, General Practice and Community, General Medicine/Medicine, Obstetrics and Gynaecology, Psychiatry and Mental Health, Paediatrics, Surgery and Others.

Draft framework including eight common clinical rotations concept map



The mapping of competencies to the eight common clinical placements has helped set the context for the competencies which have been developed. Currently, all of the competencies developed are mapping to all of the eight clinical rotations. This is to be expected as the delineation process focused on those attributes which are developed in a clinical setting.

Mind mapping software

A noteworthy outcome regarding the development of the Framework was the incorporation of mind mapping software to present the Framework. The use of an electronic format for the Framework provided a more interactive and dynamic way to present the framework. The mind mapping allows for greater flexibility as information can be added or subtracted, according to the needs of the user. The electronic format also permits the user to map backwards from the competencies to the AMC attributes. Whilst the mind mapping concept is good, it is still in its developmental stage. It is hoped that future work will involve the refining of the electronic format to enable a more sophisticated version.

Writing Group

The Writing Group advanced the project work significantly and its meetings were a major component of the methodology of the project enabling the project's objectives to be achieved. The face to face nature of the meetings allowed for consultation with key figures in medical education to ensure stakeholder engagement. The meetings also assisted in the utilisation of medical educator's expertise in identifying competencies appropriate for the medical graduate.

Stakeholder Consultation

There was extensive consultation with stakeholders throughout the entire project term. Competence – based medical education is currently a topic of significant interest in not only medical schools but also health departments, prevocational medical education councils and specialty colleges. Stakeholders from related projects, medical schools, health departments and prevocational medical education colleges showed interest in the Competencies Project due to the unique focus of the project on clinical placements. This level of stakeholder consultation is demonstrated by the large number of people/organisations consulted with over the project period. A list of people/organisations consulted is attached as Appendix B.

In depth discussions were held with a number of key stakeholders to assist with the documentation of competencies. Medical schools, Clinical Rotation Leaders, Heads of Clinical Departments in medical schools, post graduate medical education councils and Health Workforce Australia were consulted to discuss the level necessary for a medical graduate to commence work as an intern. These discussions assisted with the documentation of Student Learning Outcomes and competencies and also assisted with the contextualisation of the project work.

The project was reported on at key meetings where Medical Deans were represented. Of particular importance were the presentations at the Medical Deans' Annual Conference and to the Australian Medical Council's Medical Schools Accreditation Committee (MedSAC).

The presentation to the Deans at the Medical Deans' Annual Conference gave the Deans the opportunity to comment on the direction and progress of the project. The project received solid endorsement from the Deans and recognition that this was a useful project for medical education. This was very pleasing as it reinforced the direction of the project and generated significant interest from medical schools in the upcoming Consensus Conference.

Following on from the Medical Deans' Annual Conference, the Chair and the Project Manager presented the project to the MedSAC board meeting in October 2010. This was an opportunity to brief the AMC on the work conducted thus far. It was also an opportunity to advise the AMC that there had been a number of attributes identified by the Writing Group deemed suitable for revision. It is hoped that there will be future collaborations with the AMC regarding the review of their attributes.

The convening of the Consensus Conference was an opportunity to bring together stakeholders for a face to face meeting to discuss and refine the work conducted on the Framework. The participation was opened up to a wider stakeholder audience, namely individuals and organisations that had been consulted during the project period. The wider participation facilitated greater stakeholder buy in and an excellent opportunity to elicit targeted feedback. The participation consisted of individuals from the Reference Group, Writing Group, Medical Schools, AMSA, Health Departments, CPMEC and related projects. A full participation list is included as Appendix C.

The Consensus Conference was a resounding success. It provided a large stakeholder audience with a significant insight into the work being undertaken on the development of competencies which rely on clinical placements. There was substantial targeted feedback elicited, and solid endorsement of the Framework was achieved.

The major outcomes from the Consensus Conference were:

1. A wider stakeholder audience being made aware of the Competencies Project and having a greater understanding of the work conducted during the project period.
2. Solid endorsement of the draft framework. There was general acknowledgement that the Competencies Project was a valuable project for outlining the competencies which a graduate will acquire in a clinical placement. The framework may be used to assist schools in achieving the AMC graduate attributes in clinical settings.
3. Strong endorsement of the need to review the AMC medical graduate attributes.
4. Support for a proactive approach to coordinating the various projects in the health and education sectors which are addressing clinical competence, academic standards, quality and safety, especially HWA's simulated learning environments project.
5. Strong support for further development of the list of graduate skills and competencies related to investigations, clinical examinations and procedures. Further work to complete these lists was seen as high priority.
6. Feedback on the delineated attributes and lists of common diagnostic and procedural skills be incorporated into the Framework and reviewed by the Writing Group and the Reference Group.
7. Recommendations for a second stage phase of the project to include mapping the competencies developed with the ACFJD capabilities specifying the level of achievement of competencies at each level.

Notes from the Consensus Conference are attached as Appendix D.

The Consensus Conference yielded a significant amount of feedback on the Student Learning Outcomes and then competencies. There was also a large amount of feedback provided regarding the lists of common diagnostic and procedural skills for the medical graduate.

Following the Consensus Conference, the project focused on the feedback provided on the Student Learning Outcomes and then competencies in order to refine the Framework. The feedback was collated and reviewed by the Writing Group at the last meeting in January 2011. The Writing Group reviewed all of the thirty delineated attributes and refined the Framework accordingly.

Refining the Framework

The final Writing Group Meeting produced some significant changes to the Attributes Spectrum and the Framework. In order to address the challenge of interrelated attributes and competencies there were four significant changes.

1. Better alignment of attributes which have concurrent themes around knowledge and understanding and the skills associated with these attributes.
2. Attributes 4 and 5 specifying knowledge and understanding for management and diagnostic procedures, were moved down the Attributes Spectrum so that they are next to attributes 19 and 17 specifying the associated skills and abilities for management and diagnostic procedures.
3. For attributes which have concurrent themes, the competencies can refer to those attributes.
4. The inclusion of the AMC graduate attribute 'stem' in the Attributes Spectrum. The stems are:-

Knowledge and Understanding

Attributes 1 -12

'Graduates completing basic medical education should have knowledge and understanding of':

Skills

Attributes 13 -25

'Graduates completing basic medical education should have developed the following skills and abilities':

Attitudes as they affect Professional Behaviour

Attributes 26 – 40

'At the end of basic medical education, students should demonstrate the following professional attitudes that are fundamental to medical practice':

The stems are included as a footnote at the bottom of the Attributes Spectrum.

The Reference Group endorsed the changes to the Attributes Spectrum and the Framework at its final meeting in January, 2011.

The final version of the Attributes Spectrum is attached as Appendix E.

The completed Framework of Medical Graduate Outcomes is attached as Appendix F. As mentioned previously, there is also a mind mapped version of the Framework which accompanies this report.

Endorsement of the Framework

There has been a solid endorsement of the Framework and this is represented by the extensive consultation which occurred during the project period. The endorsement of the Framework is also demonstrated by the attendance of such a diverse stakeholder group at the Consensus Conference. The Consensus Conference Participation and Notes are further evidence to the level of support the Competencies Project has received.

The Deans endorsed the Competencies Framework at the Medical Deans' 2010 Annual Conference and have continued to provide support at the meetings of the Medical Deans Executive. A letter of support from Medical Deans is attached as Appendix G.

Future Use of the Framework

The Competencies Project provides some clarity and transparency around the learning that occurs in a clinical training environment. It is Medical Deans' intention that once the lists of common diagnostic and procedural skills for the medical graduate have been further developed the Framework will be made available to medical schools for their use. It is anticipated that the Framework will be particularly helpful for medical schools that are establishing new clinical placements, such as those growth places currently being established under Health Workforce Australia's Clinical Training Funding.

The Framework has also been identified as being useful for clinical supervisors who are teaching medical students in clinical placements. There may be opportunity to liaise further with Heads of Disciplines and Heads of Clinical Schools to establish if the Framework would be beneficial for clinical teachers.

Once the Framework is ready for release to medical schools, it is hoped that there will be an opportunity to discuss the Framework further with medical schools and establish how it can be used to help develop and refine clinical placements.

Next steps

The next logical body of work for the Competencies Project is further refinement of lists of common diagnostic and procedural skills for the medical graduate. There was overwhelming support for this obtained at the Consensus Conference. As this work falls out of the scope of the current project, incorporating the feedback obtained on these lists and refining the lists of common diagnostic and procedural skills will form the basis of a second stage of work. It is anticipated that this will involve further consultation with medical schools and Directors of Clinical Training to ascertain the content of the lists of common diagnostic and procedural skills. The refinement of these lists will also aim to identify to what level of achievement the medical graduate has obtained these skills. A draft version of lists of common diagnostic and procedural skills is included as Appendix F.

Mapping of the medical graduate competencies to the ACFJD was also seen as a beneficial exercise to address vertical integration. Once the common diagnostic and procedural skills have been established and the level of achievement specified, future work will involve a mapping exercise to the ACFJD skills and procedures section. The aim of this exercise will be to articulate what level of skill is obtained for the medical graduate and what level of achievement there is for the same skill after PGY2.

Future work will also involve the refining of the delineation process for Attribute 21 – which references the National Patient Safety Education Framework. This is a 214 page document with a four point matrix system which identifies the levels of a health worker from cleaners to the CEO of a hospital. This attribute needs to be reviewed separately so that there is a not large amount of competencies developed relating to the National Patient Safety Education Framework. This would potentially slant the Competencies Framework in a different direction.

Future recommendations also involve the coordination of the various projects in health and education sectors to ensure that the projects align, and true vertical integration of the curriculum can occur, thus improving clinical education.

The sharing of information in the future with HWA's Simulated Learning Environments project for Medicine will help to align the Competencies Project and HWA's project findings. The alignment of future work for the Competencies Project with existing projects in medical education will ensure an

integrated approach to projects which aim to improve the quality of clinical placements in medical schools.

There was also strong support for the revision of the AMC graduate attributes from the Reference Group and participants of the Consensus Conference. Medical Deans will liaise with the AMC at a future date when the AMC undertakes this process.

At the time of writing this Final Report, Health Workforce Australia have provided in principle support for a second stage of work to proceed on the further development of the lists of common diagnostic and procedural skills for the medical graduate. The development of these lists of diagnostic and procedural skills was seen as a high priority from key stakeholders. The Competencies Project hopes to retain the expertise of the Reference Group and Writing Group should this funding become available.

Conclusion

The *Developing a Framework of Competencies for Medical Graduate Outcomes Project* has achieved significant results in the last twelve months.

The framework of competencies which rely on clinical placements has provided some precision and transparency around the learning which occurs in a clinical placement. The project has brought together key figures in medical education to discuss the quality and content of clinical training.

It is hoped that the future intended work of the Competencies Project will encourage innovation and diversity in teaching and learning to help assist with capacity building to create quality clinical placements for the future.

This project would not have been possible without the support from the Strategic Medical Education Section, Australian Government Department of Health and Ageing. Medical Deans is grateful for their support and looks forward to working with the Department on future related work.

Summary of Key Outcomes against Project Objectives

A summary of the major outcomes of each project objective follows:

1. *Identify the competencies associated with each of the attributes in knowledge, skills and attitudes/behaviours specified by the AMC for competent medical graduates and which depend on clinical placements.*

Key achievements:

- The development of the Attributes Spectrum which identified which attributes relied on clinical placements.
- The delineation of thirty of the AMC's graduate attributes which rely on clinical placements, as identified on the Attributes Spectrum, into Student Learning Outcomes and then competencies.
- The incorporation of the Attributes Spectrum, Student Learning Outcomes and competencies into a mind mapping framework to develop a Framework of Competencies for Medical Graduate Outcomes.

2. *Use the AMC Accreditation Standards and Processes for medical graduates (including International Medical Graduates), the Medical Deans' National Clinical Training Review report, The Australian Curriculum Framework for Junior Doctors (ACFJD) and any other relevant reports/projects as the basis of the development of a document that maps competencies to AMC prescribed attributes and which enables graduates to practice at the beginning of the PGY1 Year.*

Key achievements:

- The AMC graduate attributes are the anchor point for the project to identify attributes which rely on clinical placements, and to delineate competencies from these attributes.
- The Medical Deans' National Clinical Training Review report was utilised to identify the eight common clinical rotations which forms the basis of clinical placements for the project.
- The competencies developed were dynamically critiqued against the ACFJD.
- Relevant reports and projects helped in the development of the framework, these have been covered extensively in Progress Report 1, 2, Draft Final Report and in Section One of this report.

3. *Ensure engagement of stakeholders in the identification and specification of competencies.*

Key achievements:

- Extensive consultation with the Reference Group and Writing Group which includes representatives from key organisations in medical education.
- Liaising with related projects with concurrent themes around competency and academic standards.
- Involvement of the medical schools in the determination of competencies and the level required for a graduating medical student.
- Convening of the Consensus Conference which was a major forum of key stakeholders to discuss the proposed framework and to elicit targeted feedback.

4. *Ensure that the competencies documented are appropriate for a graduating medical student to commence work as an intern in the standard clinical rotations of the intern year (PGY1).*

Key achievements:

- Utilisation of medical educators with expertise in teaching medical graduates.

- Competencies developed were dynamically critiqued against ACFJD to ensure they were appropriate for a graduate to commence work as an intern.
 - Consultation with medical schools to ensure competencies developed were appropriate for the medical graduate.
 - Convening of the Consensus Conference to elicit feedback as to the level necessary for a medical graduate.
5. *Ensure that the competencies enable a graduating medical student to continue to undertake further learning and clinical training.*

Key achievements:

- The introduction of lists of common diagnostic and procedural skills which can be added to through the prevocational and vocational years.
- Cross referencing competencies developed to ACFJD to address vertical integration.

By achieving the principle objectives of the project, the Medical Deans' Competencies Project has achieved the aim of the project which was to identify and document competencies for the medical graduate outcomes required by the AMC and which depends on clinical placements.

List of Appendices

- A. Reference Group and Writing Group Membership**
- B. Stakeholder Consultation List**
- C. Consensus Conference Participation**
- D. Consensus Conference Notes**
- E. Final Attributes Spectrum**
- F. Framework of Competencies**
- G. Deans' Letter of Support**

Reference Group**Member**

Professor Allan Carmichael (Chair)
 Professor Nicholas Glasgow (Deputy Chair)
 Dr Andrew Singer
 Ms Meredith Williams
 Dr Jagdishwar Singh

Dr Gregory Keogh

Professor David Prideaux
 Professor Fiona Lake
 Dr Michael O'Sullivan

Mr Sam Whitehouse
 Dr Morton Rawlin
 Dr Geoff Copland
 Associate Professor Andrew
 Ms Teresa Valentine
 Ms Monique Hourn

Representing

Medical Deans
 Medical Deans and Australian Medical Council
 Department of Health and Ageing
 Department of Health and Ageing
 Confederation of Post Graduate Medical Education
 Councils
 Confederation of Post Graduate Medical Education
 Councils/Clinical Education and Training
 Medical Educators
 Medical Educators/Clinical Teachers
 Australian Medical Association Council Doctors in
 Training
 Australian Medical Students' Association
 Committee of Presidents of Medical Colleges
 Clinical Supervisors
 Clinical Supervisors
 Health Workforce Australia
 Medical Deans

Member

Professor Allan Carmichael
 Professor Nicholas Glasgow
 Professor David Prideaux
 Dr Jagdishwar Singh

Professor Fiona Lake
 Dr Michael O'Sullivan

Mr Sam Whitehouse
 Ms Monique Hourn

Representing

Medical Deans
 Medical Deans and Australian Medical Council
 Medical Educators
 Confederation of Postgraduate Medical Education
 Councils
 Medical Educators/Clinical Teachers
 Australian Medical Association Council Doctors in
 Training
 Australian Medical Students' Association
 Medical Deans

Stakeholder Organisation	Individual	Occasion/Meeting
Deans	All Deans	MDANZ Midyear Meeting 2010 MDANZ Annual General Meeting MDANZ Annual Conference MDANZ Midyear Meeting 2011
Individual Deans	Professor Allan Carmichael Professor Nicholas Glasgow Professor Richard Hays Professor Brendan Crotty Professor Alison Jones Professor Justin Beilby	Multiple times Multiple times
Medical Schools	Dr Jennifer Schafer (UQ) Dr Karen D'Souza (Deakin) A/Prof Rosa Canalese (Notre Dame Sydney) Ms Jennifer Lindley (Monash) Professor Phillip Jones (UNSW) Professor David Prideaux (Flinders) Dr Fiona Hawthorne (UQ) Professor Fiona Lake (UWA) Professor Chris Dennis (Sydney) Dr Julie Ash (Flinders) A/Prof Mellick Chehade (Adelaide) A/Prof Wendy Hu (UWS) A/Prof Andrew Hill (Auckland) Ms Joy Rudland (Otago) Professor David Harris (Sydney) Professor Ian Symonds (Newcastle) A/Prof Selzer (Monash) Professor Ben Canny (Monash) A/Prof Campbell (Monash) A/Prof Gary Roger (Griffith) Professor Geoff McColl (Melbourne) A/Prof Carole Stekete (Notre Dame Fremantle) Professor Michael Frommer (Sydney) Professor Richard Murray (JCU) Professor David Kandiah (UWA) Professor Brian Jolly (Monash) Professor James Vickers (UTAS) Professor Craig Zimitat (UTAS)	Multiple times Multiple times Multiple times Multiple time Multiple times Multiple times Multiple times Multiple times
Department of Health and Ageing	Mr Tony Hyland Ms Meredith Williams Professor Judy Searle Ms Lina Cachia Dr Andrew Singer	Multiple times Multiple times Multiple times Multiple times

Stakeholder Organisation	Individual	Meeting
Confederation for Post Graduate Medical Education Councils (CPMEC)	Dr Jagdishwar Singh Dr Greg Keogh Ms Deborah Paltridge	Multiple times Multiple times Multiple times
Australian Medical Council	Professor Nicholas Glasgow Professor Heather Alexander Ms Theanne Walters Med SAC Board	October 2010 Board Meeting
Australian Medical Association – Council of Doctors in Training	Dr Michael Bonning Dr Michael O'Sullivan	Multiple times
Australian Medical Students' Association (AMSA)	Mr Ross Roberts – Thomson Mr Sam Whitehouse	Multiple times
Health Workforce Australia (HWA)	Ms Luisa Abiuso Ms Teresa Valentine Professor Liz Farmer	Multiple time Multiple times
Australian Learning and Teaching Council (ALTC)	Professor Christine Ewan Professor Amanda Henderson A/Prof Maree O'Keefe	
Health Workforce Australia – related projects Simulated Learning Environments Project National Health Competency Framework	Professor Brian Jolly Ms Katie Walker Ms Beverley Sutton A/Prof Sharon Brownie Professor Helen Chenery	Multiple times Multiple times Multiple times
Committee of Presidents Medical Colleges (CPMC)	Mr Les Apolony Dr Morton Rawlin	Multiple times
Royal Australian College of Psychiatrists	Dr Andrew Gosbell	
NSW Health Department	Dr Linda Macpherson Ms Robyn Burley	
NSW CETI	Dr Greg Keogh	
Queensland Health ClnEdQ	A/Prof Victoria Brazil	
Clinical Supervisors	Dr Geoffrey Copland A/Prof Andrew Hill	
Deans Medical schools CPMEC CPMC DoHA HWA AMACDIT AMSA Clinical supervisors Medical Educators	Reference Group Membership Writing Group Membership	Reference Group Meetings 1 – 6 Writing Group Meetings 1 - 3

Reference Group

Professor Allan Carmichael (Chair)
 Professor David Prideaux
 Dr Andrew Singer (Medical Advisor)
 Associate Professor Andrew Hill
 Mr Sam Whitehouse
 Dr Jagdishwar Singh
 Ms Teresa Valentine
 Dr Gregory Keogh
 Dr Morton Rawlin
 Dr Geoffrey Copland
 Ms Monique Hourn

Organisation

Medical Deans
 Medical Educator/Flinders University
 DoHA
 Clinical Supervisors
 AMSA
 CPMEC
 HWA
 CPMEC/Director of CETI
 CPMC
 Clinical Supervisors
 Medical Deans

DEANS or Nominees

Professor Warwick Bagg
 A/Professor Gary Rogers
 Professor Richard Murray
 Professor Ben Canny
 Professor Geoff McColl
 A/Professor Carol Stekettee
 Professor Michael Frommer
 Professor David Kandiah
 A/Professor Craig Zimitat

UNIVERSITY

Auckland
 Griffith
 James Cook
 Monash
 Melbourne
 Notre Dame Fremantle
 Sydney
 UWA
 UTAS

External Stakeholders

A/Professor Maree O'Keefe
 Professor Amanda Henderson
 Ms Deborah Paltridge
 A/Professor Victoria Brazil
 Dr Jennifer Schafer
 Professor Brian Jolly
 Ms Beverley Sutton
 Dr Linda MacPherson
 Professor Liz Farmer

Representing

ALTC
 ALTC
 CPMEC
 ClinEdQ
 UQ
 Monash University/HWA SLE Audit Project
 Monash University/HWA SLE Audit Project
 NSW DOH
 Health Workforce Australia

Mr Philip Pogson
 Ms Giti Datt

Facilitator
 Medical Deans (scribe)

Reference Group Apologies

Professor Nicholas Glasgow (Deputy Chair)

Professor Fiona Lake

Dr Michael O'Sullivan

Professor Allison Jones

Ms Meredith Williams

Medical Deans/ANU/AMC

Medical Educators/UWA

AMACDIT

UWS

DoHA

**Competencies Project
Consensus Conference
Notes**

**Thursday, 11 November 2010
Melbourne Airport Hilton
Victoria South Ballroom
10am – 4pm**

Attendees: Professor Allan Carmichael (Chair), Professor David Prideaux, Dr Andrew Singer, A/Prof Andrew Hill, Mr Sam Whitehouse, Dr Jagdishwar Singh, Ms Teresa Valentine, Dr Greg Keogh, Dr Morton Rawlin, Dr Geoffrey Copland, Ms Monique Hourn, Professor Warwick Bagg, A/Prof Gary Rogers, Professor Richard Murray, Professor Ben Canny, Professor Geoff Mccoll, A/Prof Carole Steketee, Professor Michael Frommer, Professor David Kandiah, A/Prof Craig Zimitat, A/Prof Maree O'Keefe, Professor Amanda Henderson, Ms Deborah Paltridge, A/Prof Victoria Brazil, Dr Jennifer Schafer, Professor Brian Jolly, Ms Beverley Sutton, Dr Linda MacPherson, Professor Liz Farmer, Mr Philip Pogson, Ms Giti Datt.

Apologies: Professor Nicholas Glasgow, Professor Fiona Lake, Dr Michael O'Sullivan, Ms Meredith Williams, Professor Alison Jones.

Session 1: Setting the scene

Participants were provided with a background to the project, an overview and comments from key stakeholders.

Key discussion points included:

- Student Learning Outcomes as part of the framework help to delineate attributes which have multiple components. SLO's allows for the illustration of tacit knowledge which cannot always be codified into competencies.
- The framework presented is not a prescriptive approach but a descriptive one which will allow medical schools to do things in a different way.
- Acknowledgments that the AMC graduate attributes require revision; they do not capture observable behaviour. This project will be able to provide feedback to the AMC about which attributes need revising.
- The need to acknowledge simulation in a clinical setting and to link in the Competencies Project project with HWA's SLE project.

DoHA perspective

- The competencies project will provide better delineation around what occurs in a clinical placement.
- Vertical integration is the ultimate goal. There is a level of consistency that DoHA would like to see whilst taking into consideration that medical schools would like to retain control over their own approaches.
- A hopeful outcome would be that medical schools will be able to do things as they see best for their program but ultimately we will all be heading towards a common outcome.

HWA perspective

- HWA are interested in delineating what occurs in a clinical placement but also looking at future meanings of the health workforce and competencies.
- HWA are conducting a suite of competency projects looking at the national and international competency landscape.

- There are parallels between this project and clinical supervision and the competence of supervisors.
- HWA is very supportive of any efforts to make competencies more explicit any profession.

CPMEC perspective

- This project runs in parallel with the prevocational training project, ACFJD.
- This project is useful for supervisors because they will now understand what they have to do on the ground as clinical supervisors.
- The delineation of the attributes can help form the basis of situational learning and assessment.
- The competencies presented today are sound building blocks for future work, collaboration is important and projects need to keep on mapping to make sure things align.
- Simulation will be an important component of future work.

Medical Educators perspective

- Competency-Based frameworks are a way of organising curriculum and it focuses on outcomes which is good because things can be transparent and students can be clear on what they need to achieve. It is easy to relate to practice.
- Negatives to Competency-Based frameworks – they are difficult to write. There is a very real risk of them being reductionist. There are some things that you cannot measure, like observable behaviour.
- A medical graduate has to have lots of contact with lots of patients to move from novice to expert.
- This project is important in increasing transparency and clarity particularly as we are expanding our clinical placements.

UQ perspective

- UQ developed a competency based assessment for their year one MBBS program due to the increase in student numbers and wanting to maintain standards.
- Broke year one down into sections and ended up with a list of competencies. This project was piloted one year and then implemented the next year.
- Outcomes of the project were that everyone knew what they had to do, teachers, students and examiners.
- All students are assessed and if students do not reach the standard they are given extra teaching until they do. No student falls through the cracks.
- Now looking at other areas of the course where this can be implemented and linked into other areas of the curriculum.

Session 2: Review of work developed

Participants were provided with a brief overview of the methodology of the delineation process, introduction of appendices A & B and demonstration of the mind mapping framework.

Key discussion points included:

- Need to revise previous competencies developed to ensure consistency in the framework.
- Mind mapping tool would be a useful tool to generate a report which identifies gaps.
- Where competencies are interrelated and are expressed in other attributes, the approach has had to be an ad hoc one. If this project is to deal with this systematically another matrix would be needed.

Breakout session 1:

Participants formed break out groups and provided feedback on a set of attributes from varied positions along the attributes spectrum.

Key discussion points included:

- The need to change some of the verbs at the beginning of the competencies.
- The introduction of a glossary of verbs so there is a consensus for what verbs are in the competency and how they were used.
- In general, participants were happy with the principles of the SLO's and the competencies.
- Some of the SLO's and competencies developed from attributes in the yellow zone of the attributes spectrum are beyond the level of a graduate and need revision.
- The stem of SLO's 'the student has the ability to' has created some difficulty.
- Recognise that content may be modified by context.
- Need a broader clinical input into the framework to make sure that things are lined up appropriately.
- Need to develop a 'laundry list' of common conditions and common information technology resources to show what is relevant.

Summation of breakout session one:

- Participants endorsed the principles behind the SLO's and competencies developed.
- There is the need for further revision of the work presented.
- Possible development of a glossary of verbs, laundry lists of common conditions and information technology resources.
- Acknowledgement that there will be difficulties in trying to capture metacognitive and tacit knowledge in words/competencies.
- General consensus that the AMC graduate attributes need to be revised.
- General support for a proactive approach to coordinating the various projects in the health and education sectors which are addressing clinical competence, academic standards, quality and safety.

Breakout session 2: Review of appendices A & B

Participants resumed their break out groups and reviewed appendices A & B.

Key discussion points included:

- Need to identify at what level graduates need to be familiar with diagnostic skills and procedural skills.
- Need to be more specific about procedural skills; i.e. 'need to know about versus perform'.
- Need to decipher with diagnostic skills whether the graduate can interpret the report or point out abnormal findings to the patient.
- Need to define 'What is a procedure and what is an examination'?
- Possible introduction of a matrix for diagnostic skills and procedural skills. i.e. understand, observe, under supervision, performs independently.
- Need to add procedural skills as they relate to men's health.
- Need to get program directors together to discuss the detail in appendix A & B.
- Important to map to ACFJD.
- Need to differentiate between interpretation of reports and interpretation of films.
- Cross check lists to ensure that there is not a doubling up of procedures and diagnostics.

Summation of breakout session two:

- Need to recognise the framework from a practitioner centric point of view which includes patients and risks to patients. Risk needs to be managed versus what students need to achieve. Important that health services are involved with this work.
- Possible incorporation of a statement that students should not do these things until we are absolutely certain that they can do them in a simulated environment.
- Important and helpful to look at these lists. We don't have a common list of diagnostic or procedural skills across our medical schools. Further refine of these lists will help to establish what graduates should be able to do.
- The formation of these lists will help supervisors know what they have to teach to medical students.

Session 3 Related Projects

ACFJD

- ACFJD has been picked up and modified by New Zealand.
- Project has not been funded since June.
- Looking to implement assessment but need to learn from the UK junior doctor problems.

HWA: SLE Project

- SLE project has revealed that medical schools are very interested in SLE.
- AMC does not have a view at the moment as to whether they recommend simulation as a method of teaching.
- There are some topics which are being taught almost entirely in simulation e.g. basic life support.
- The project has revealed that one size does not fit all when it comes to simulation.

ALTC Academic Standards Project

- Academic Standards Project looks at the attributes of a graduate on the day they graduate as opposed to certification for competency to practice.
- The focus of the project is to look at the outcomes of graduates at the professional entry level standard. What does every graduate need to have?
- The project was able to obtain competency standards or accreditation standards for all disciplines. Thematic analysis was conducted and competency standards were mapped to all six threshold learning outcomes.
- Information is being disseminated to relevant discipline bodies and hopefully there will be something available publicly through the ALTC very soon.

AMC Competence-Based Medical Education Paper

- The paper released in August is the penultimate draft.
- There will be a conference in December to look at the how tacit and codified knowledge sits within a competency based framework.

Recommendations

- General agreement that the framework presented is a useful one, and that it is useful for medical schools and perhaps medical education in general particularly in the area of assisting medical schools to have more specification around the competencies a graduate could be expected to acquire in a clinical placement. The framework could be used as a tool to assist schools as they look at new clinical placements and clinical settings.
- General support for the AMC to review their graduate attributes.

- Support for the means of coordinating other projects in the sector which focus on clinical competence.
- Agreement that we ought to develop a common list of very basic skills/competencies around examinations and procedures. General agreement that there is a place for simulation in the acquisition of these skills and competencies.
- May be useful to develop a simulation spectrum for which skills can be acquired in a simulation setting.
- Feedback provided regarding the rewording of SLO's and competencies will be incorporated by the Writing Group and the Reference Group.
- There is some discontinuity between the attributes. The ordering of attributes according to skills, knowledge and attitudes or importance of clinical placements results in a loss of cohesion of the actual outcome which we are looking for. The project may have to look at some matrix which brings those together.
- Recommendation that schools use the work from this project to investigate the quality of their clinical placements so that schools don't make the assumptions that the standards are there when it could be an inadequate environment. There may need to be further consultation with heads of clinical schools for this to occur.

Summation and Action Plan

- Integrate and implement the recommendations mentioned above and weave into the draft final report.
- Incorporate vertical integration into this project by talking with other organisations such as CPMEC and CPMC, other groups represented such as MTRP and higher education groups such as ALTC.

Meeting concluded at 3.30pm

**Predominately
acquired in
settings other than
clinical settings.**

- (1) Scientific method relevant to biological, behavioural and social sciences at a level adequate to provide a rational basis for present medical practice, and to acquire and incorporate the advances in knowledge that will occur over their working life.
- (2) The normal structure, function and development of the human body and mind at all stages of life, the factors that may disturb these, and the interactions between body and mind.
- (27). Recognition that the doctor should have the necessary professional support, including a primary care physician, to ensure his or her own well-being.
- (36). An appreciation of the systems approach to health care safety, and the need to adopt and practise health care that maximises patient safety including cultural safety.
- (30) A commitment to ease pain and suffering.
- (7) The principles of health education, disease prevention and screening.
- (38). A desire to achieve the optimal patient care for the least cost, with an awareness of the need for cost-effectiveness to allow maximum benefit from the available resources.
- (31). A realisation that it is not always in the interests of patients or their families to do everything that is technically possible to make a precise diagnosis or to attempt to modify the course of an illness.
- (10) Systems of provision of health care in a culturally diverse society including their advantages and limitations, the principles of efficient and equitable allocation and use of finite resources, and recognition of local and national needs in health care and service delivery.
- (3) The aetiology, pathology, symptoms and signs, natural history, and prognosis of common mental and physical ailments in children, adolescents, adults and the aged.
- (35) An appreciation of the responsibility to contribute towards the generation of knowledge and the professional education of junior colleagues.
- (34) An appreciation of the responsibility to maintain standards of medical practice at the highest possible level throughout a professional career.
- (24) The ability to interpret medical evidence in a critical and scientific manner and an understanding of the epidemiology of disease in differing populations and geographic locations.
- (29) Respect for community values, including an appreciation of the diversity of human background and cultural values.
- (26) Recognition that the doctor's primary professional responsibilities are the health interests of the patient and the community.
- (33) A realisation that doctors encounter clinical problems that exceed their knowledge and skills, and that, in these situations, they need to consult and/or refer the patient for help, in clinical, cultural social and language related matters as appropriate.
- (12) The principles of ethics related to health care and the legal responsibilities of the medical profession.
- (28) Respect for every human being, including respect of sexual boundaries.
- (25) The ability to use information technology appropriately as an essential resource for modern medical practice.
- (9) Factors affecting human relationships, the psychological, cultural and spiritual well-being of patients and their families, and the interactions between humans and their social and physical environment.
- (40) A realisation that one's personal, spiritual, cultural or religious beliefs should not prevent the provision of adequate and appropriate information to the patient and/or the patient's family, or the provision of appropriate management including referral to another practitioner.
- (8).The principles of amelioration of suffering and disability, rehabilitation and the care of the dying.
- (6). Normal pregnancy and childbirth, the more common obstetrical emergencies, the principles of antenatal and postnatal care, and medical aspects of family planning.
- (20) Communication skills, including being able to listen and respond, as well as being able to convey information clearly, considerately and sensitively to patients and their families, doctors, nurses other health professionals and the general public.
- (21) The skills needed to work safely as an intern, as outlined in the National Patient Safety Education Framework developed by the Australian Council for Quality and Safety in Health Care.
- (22) The ability to counsel patients sensitively and effectively and to provide information in a manner that ensures patients and families can be fully informed when consenting to any procedure.
- (37). A commitment to communicating with patients and their families, and to involving them fully in planning management.
- (39). A preparedness to work effectively in a team with other health care professionals.
- (11). Indigenous health, including the history, cultural development and health of the Indigenous peoples of Australia or New Zealand.
- (13) The ability to construct, in consultation with a patient, an accurate, organised and problem-focused medical history.
- (14) The ability to perform an accurate physical and mental state examination.
- (32) An appreciation of the complexity of ethical issues related to human life and death, including the allocation of scarce resources.
- (23) The ability to recognise serious illness and to perform common emergency and life-saving procedures, including caring for the unconscious patient and cardiopulmonary resuscitation.
- (15) The ability to choose, from the repertoire of clinical skills, those that are appropriate and practical to apply in a given situation.
- (16) The ability to interpret and integrate the history and physical examination findings to arrive at an appropriate diagnosis or differential diagnosis.
- (4) Common diagnostic procedures, their uses and limitations.
- (17) The ability to select the most appropriate and cost effective diagnostic procedures.
- (18) The ability to interpret common diagnostic procedures.
- (5) Management of common conditions including pharmacological, physical, nutritional and psychological therapies. A more detailed knowledge of management is required for those conditions that require urgent assessment and treatment.
- (19) The ability to formulate a management plan, and to plan management in concert with the patient.

**Requires some
degree of
clinical setting.**

**Predominately
acquired in clinical
settings.**

For Attributes 1- 12 "Graduates completing basic medical education should have knowledge and understanding of"

For Attributes 13 – 25 "Graduates completing basic medical education should have developed the following skills and abilities"

For Attributes 26 – 40 "At the end of basic medical education students should demonstrate the following professional attitudes that are fundamental to medical practice"

Attribute	Student Learning Outcomes	Competencies
(19) The ability to formulate a management plan, and to plan management in concert with a patient.	<ol style="list-style-type: none"> The student has the ability to formulate an appropriate management plan. The student has the ability to include patient preferences in the formulation of a management plan. 	<ol style="list-style-type: none"> Identifies the diagnoses/ issues requiring management. Explains diagnoses/issues or presenting problem to the patient. Selects the most appropriate management option(s) and formulates a management plan in concert with the patient. Identifies information, community resources and other resources which could assist with the management plan. Communicates clear statements regarding the next step; including investigations, treatment, interventions and plans regarding continuity of care. Demonstrates sound communication skills allowing the identification of patient preferences and inclusion through negotiation of those procedures into the final plan. Demonstrates knowledge of the impact of different cultural, social, religious and linguistic backgrounds on management plans.

Attribute	Student Learning Outcomes	Competencies
(5) Management of common conditions including pharmacological, physical, nutritional and psychological therapies. A more detailed knowledge of management is required for those conditions that require urgent assessment and treatment.	<ol style="list-style-type: none"> The student has the ability to understand and where appropriate apply the management of common conditions including the use of pharmacological, physical, nutritional and psychological therapies. The student has the ability to identify and manage those conditions which require urgent assessment and treatment. <p><i>Also refer to attribute 19</i></p>	<ol style="list-style-type: none"> Identifies a range of management options including pharmacological, physical, nutritional and psychological therapies available to manage common conditions. Identifies, assesses and treats common conditions which require urgent management. <p><i>Also refer to attribute 19</i></p>

Attribute	Student Learning Outcomes	Competencies
(18) The ability to interpret common diagnostic procedures.	1. The student has the ability to interpret common diagnostic procedures for a patient.	<ol style="list-style-type: none"> 1. Interprets the results of common diagnostic procedures listed in Appendix A. 2. Applies the concept of specificity, sensitivity, pre and post test probability to the interpretation of common diagnostic procedures. 3. Integrates results of common diagnostic procedures with clinical information to inform and enhance management.

Attribute	Student Learning Outcomes	Competencies
(17) The ability to select the most appropriate and cost effective diagnostic procedures.	<ol style="list-style-type: none"> 1. The student has the ability to select the most appropriate diagnostic procedure for the patient. 2. The student has the ability to select the most cost effective diagnostic procedure for the patient. 3. The student has the ability to organise or collect the specimens for the most appropriate diagnostic procedure. 	<ol style="list-style-type: none"> 1. Knows and explains the common diagnostic procedures listed in Appendix A. 2. Understands the clinical indications for the use of common diagnostic procedures. 3. Identifies the costs and benefits of potential diagnostic procedures in a given clinical situation/scenario. 4. Selects the most appropriate diagnostic procedure to assist in the formulation of a diagnosis and patient management. 5. Organises procedures or collects samples/specimens for diagnostic testing.

Attribute	Student Learning Outcomes	Competencies
(4) Common diagnostic procedures their uses and limitations.	<ol style="list-style-type: none"> 1. The student has the ability to understand and explain common diagnostic procedures and their limitations. <p><i>Also refer to attributes 17 & 18</i></p>	<p><i>Also refer to attributes 17 & 18</i></p>

Attribute	Student Learning Outcomes	Competencies
(16) The ability to interpret and integrate the history and physical examination findings to arrive at an appropriate diagnosis or differential diagnosis.	<ol style="list-style-type: none"> 1. The student has the ability to conduct a patient interview. 2. The student has the ability to perform a structured problem focused physical examination. 3. The student has the ability to integrate information obtained from a patient interview and physical examination. 4. The student has the ability to integrate information and to utilise clinical reasoning to arrive at a diagnosis and differential diagnosis. 	<ol style="list-style-type: none"> 1. Conducts a problem focused, structured clinical interview. 2. Elicits information for the purposes of a patient history from the patient, relatives, persons present for the interview. 3. Conducts a problem focused structured physical examination. 4. Conducts a whole person physical examination or organ(s)/system specific physical examination as appropriate. 5. Integrates the information obtained to arrive at an appropriate diagnosis and differential diagnosis.

Attribute	Student Learning Outcomes	Competencies
(15) The ability to choose from the repertoire of clinical skills, those that are appropriate and practical to apply in a given situation.	<ol style="list-style-type: none"> 1. The student has the ability to perform a range of diagnostic and therapeutic clinical skills. 2. The student has the ability to analyse a clinical presentation and select appropriate clinical skills for the situation. 	<ol style="list-style-type: none"> 1. Analyses the clinical presentation and determines the required clinical skills. 2. Performs diagnostic and therapeutic clinical skills as listed in Appendix B. 3. Recognises the limits of his/her clinical skills. 4. Recognises the limits of his/her authority.

Attribute	Student Learning Outcomes	Competencies
<p>(23) The ability to recognise serious illness and to perform common emergency and life saving procedures, including caring for the unconscious patient and cardiopulmonary resuscitation.</p>	<ol style="list-style-type: none"> 1. The student has the ability to recognise serious illness. 2. The student has the ability to perform common life saving and emergency procedures. 3. The student has the ability to perform cardiopulmonary resuscitation. 4. The student has the ability to care for the unconscious patient. 	<ol style="list-style-type: none"> 1. Identifies the signs and symptoms of serious illness. 2. Understands and where appropriate performs life saving and emergency procedures indicated in Appendix B. 3. Accurately performs cardiopulmonary resuscitation. 4. Appropriately cares for the unconscious patient.

Attribute	Student Learning Outcomes	Competencies
<p>(32) An appreciation of the complexity of ethical issues related to human life and death, including the allocation of scarce resources.</p>	<ol style="list-style-type: none"> 1. The student has the ability to understand and respond to ethical issues relating to human life and death. 2. The student has the ability to understand the implications of resource constraints on patient care. 	<ol style="list-style-type: none"> 1. Identifies ethical complexities in relation to life and death scenarios. 2. Identifies the ethical issues pertaining to: advanced care directives, withdrawal or refusal of treatment and organ donation. 3. Understands potential responses to ethical dilemmas in clinical scenarios. 4. Understands potential impacts of resource constraint on patient care.

Attribute	Student Learning Outcomes	Competencies
<p>(14) The ability to perform an accurate physical and mental state examination.</p>	<ol style="list-style-type: none"> 1. The student has the ability to perform an accurate physical examination. 2. The student has the ability to conduct an accurate mental state examination. 	<ol style="list-style-type: none"> 1. Conducts a whole person physical examination. 2. Conducts an accurate physical examination. 3. Conducts a problem focused structured physical examination. 4. Demonstrates the ability to conduct an organ(s)/system specific physical examination as appropriate. 5. Conducts an accurate mental state examination. 6. Shows respect, explains the process, gains consent and maintains patient dignity while performing a physical or mental state examination. 7. Recognises when a family member or a chaperone should be present for a physical or mental state examination.
<p>(13) The ability to construct in consultation with a patient, an accurate, organised and problem focused medical history.</p>	<ol style="list-style-type: none"> 1. The student has the ability to conduct an organised and problem focused patient interview to obtain a relevant medical history. 	<p>Competencies</p> <ol style="list-style-type: none"> 1. Takes a relevant, logical and comprehensive history. 2. Applies the key components of the patient history during the clinical interview. 3. Communicates effectively for the purposes of conducting a clinical interview. 4. Elicits relevant lifestyle, occupational, social and family history whilst conducting a clinical interview. 5. Tailors questions in the clinical interview according to knowledge of symptoms of common medical conditions. 6. Displays respect and empathy for the patient during a clinical interview.

Attribute	Student Learning Outcomes	Competencies
<p>(11) Indigenous health, including the history, cultural development and health of the Indigenous peoples of Australia and New Zealand.</p>	<ol style="list-style-type: none"> 1. The student is aware of, and able to relate to, the factors which contribute to the status of Indigenous health. 2. The student understands that culture is important to Indigenous people and can affect their health and sense of well-being. 3. The student understands Australian/New Zealand history and is aware of the experience of Indigenous peoples and how this impacts on Indigenous health and health care. 4. The student understands the diversity of Indigenous cultures, experiences and communities. 	<ol style="list-style-type: none"> 1. Applies an understanding of Indigenous mortality and morbidity patterns and their impact as well as recognising issues associated with access to health care. 2. Demonstrates a working knowledge of the social determinants of Indigenous health including the impact of colonisation, lifestyle, nutrition, socioeconomic factors, geography and access to housing, education and health care. 3. Considers the historical, cultural, social and political factors which impact on the health of an Indigenous patient. 4. Demonstrates a sensitive and respectful approach when interacting with Indigenous people / patients and practices with the knowledge that Indigenous cultures are diverse. 5. Plans and provides care in a comprehensive and culturally secure way.
<p>(39) A preparedness to work effectively in a team with other health care professionals.</p>	<ol style="list-style-type: none"> 1. The student has an ability to understand, respect and incorporate the roles of other health professionals in health care. 2. The student has an ability to work effectively in a team with other healthcare professionals. 3. The student has the ability to understand his/her role in a team with other health professionals. 	<p>Competencies</p> <ol style="list-style-type: none"> 1. Identifies and acts upon his/her role in a health care team. 2. Identifies roles of other health professionals in a health care team. 3. Displays professional courtesy for other health care professionals in a health care team. 4. Contributes to teamwork by behaving in ways which maximises the team's effectiveness.

• Attribute 39 has been identified by the Writing Group as requiring revised by the AMC.

<p>Attribute</p> <p>(37) A commitment to communicating with patients and their families, and to involving them fully in planning management.</p>	<p>Student Learning Outcomes</p> <ol style="list-style-type: none"> 1. The student has the ability to communicate effectively with a patient involving them fully in planning management in a range of settings. 2. The student has the ability to appropriately involve and communicate with family members and others in management plans. 	<p>Competencies</p> <ol style="list-style-type: none"> 1. Demonstrates sound communication skills allowing the identification and inclusion of patient and family preferences in the management plan. 2. Incorporates knowledge of different cultural, social, religious and linguistic backgrounds in communicating management plans to patients and their families.
<p>Attribute</p> <p>(22) The ability to counsel patients sensitively and effectively, and to provide information in a manner that ensures patients and families can be fully informed when consenting to any procedures.</p>	<p>Student Learning Outcomes</p> <ol style="list-style-type: none"> 1. The student has the ability to counsel patients sensitively and effectively. 2. The student has the ability to customise information to meet the requirements of patients and families. 3. The student has the ability to obtain informed consent from patients, families and others as required. 	<p>Competencies</p> <ol style="list-style-type: none"> 1. Empathises with and shows compassion towards patients and their families. 2. Effectively communicates whilst counselling patients. 3. Identifies how and where to source appropriate information for patients and their families. 4. Provides relevant information and options, contextualised to the circumstances of patients and their families. 5. Explains management options for the purposes of informed consent. 6. Explains adverse effects, risks, benefits and possible outcomes of a procedure to a patient for the purposes of informed consent. 7. Ensures that patients and their families are fully informed when consenting to management options. 8. Documents patient consent.

• Attribute 22 has been identified by the Writing Group as an attribute that could be revised by the AMC

Attribute	Student Learning Outcomes	Competencies
(21) The skills needed to work safely as an intern, as outlined in the National Patient Safety Education Framework developed by the Australian Council for Quality and Safety in Health Care.	<ol style="list-style-type: none"> 1. The student has the ability to work safely. 2. The student has the ability to apply the relevant skills of the National Patient Safety Educational Framework appropriate for a doctor commencing internship. 	<p><i>There will be a link created in the mind map framework to the National Patient Safety Education Framework.</i></p> <p>To be determined</p>

Attribute 21 needs to be taken out and worked on by another group.

Attribute	Student Learning Outcomes	Competencies
(20) Communication skills, including being able to listen and respond, as well as being able to convey information clearly, considerately and sensitively to patients and their families, doctors, nurses, other health professionals and the general public.	<ol style="list-style-type: none"> 1. The student has the ability to communicate effectively with patients and families in a range of settings. 2. The student has the ability to communicate effectively with other health professionals and the general public. 	<ol style="list-style-type: none"> 1. Listens and responds empathetically using verbal, non verbal and written formats. 2. Recognises and deals with barriers to effective communication in a range of settings. 3. Communicates professionally and considerately with the health care team for optimal patient outcomes. 4. Interacts professionally with the general public.

Attribute	Student Learning Outcomes	Competencies
<p>(6) Normal pregnancy and childbirth, the more common obstetrical emergencies, the principles of antenatal and postnatal care, and medical aspects of family planning.</p>	<ol style="list-style-type: none"> 1. The student has the ability to understand normal pregnancy and childbirth. 2. The student has the ability to apply knowledge regarding the more common obstetrical emergencies. 3. The student has the ability to apply the principles of antenatal and postnatal care. 4. The student has the ability to explain the medical aspects of family planning. 	<ol style="list-style-type: none"> 1. Explains normal pregnancy and childbirth. 2. Participates under supervision in the management of a normal childbirth. 3. Explains the more common obstetrical emergencies including pain and bleeding. 4. Explains the principles of antenatal care. 5. Explains the principles of postnatal care. 6. Communicates effectively with patients in regards to the medical aspects of family planning including advice on contraception, fertility and dealing with an unwanted pregnancy.

Attribute	Student Learning Outcomes	Competencies
<p>(8) The principles of amelioration of suffering and disability, rehabilitation and care of the dying.</p>	<ol style="list-style-type: none"> 1. The student has the ability to understand and ameliorate suffering. 2. The student has the ability to understand and apply the principles of managing disability. 3. The student has the ability to understand and apply the principles of rehabilitation. 4. The student has the ability to understand and apply the principles for care of the dying. 	<ol style="list-style-type: none"> 1. Contributes as a team member in the management of suffering, disability, rehabilitation and care of the dying. 2. Understands and applies the principles of amelioration of suffering. 3. Provides people with a disability with the resources and information required to attain independence and self determination. 4. Understands and applies the principles of rehabilitation including enabling people to maintain or achieve their optimal physical, sensory, intellectual, social and psychological functioning levels. 5. Understands and applies the principles of palliative care including symptom relief and psychological support for patients and their family. 6. Understands and applies the principles of end of life planning and care. 7. Engages with patients and their families to assess their needs including organising appropriate support and bereavement counselling. 8. Recognises and appreciates the need to call on appropriate supports for self and other members of the health care team.

Attribute	Student Learning Outcomes	Competencies
<p>(40) A realisation that one's own personal, spiritual, cultural or religious beliefs should not prevent the provision of adequate and appropriate information to the patient and/or the patient's family, or the provision of appropriate management including the referral to another practitioner.</p>	<ol style="list-style-type: none"> 1. The student has the ability to recognise his/her own personal, spiritual, cultural or religious values. 2. The student has the ability to realise that his/her own spiritual, cultural or religious beliefs should not prevent appropriate patient management. 3. The student has the ability to realise when referral to another practitioner is appropriate. 	<ol style="list-style-type: none"> 1. Identifies his/her own personal spiritual, personal, cultural and religious beliefs. 2. Communicates appropriate information to patients and their families irrespective of his/her own beliefs. 3. Plans appropriate patient management irrespective of his/her own beliefs. 4. Refers to another practitioner when appropriate.

Attribute	Student Learning Outcomes	Competencies
<p>(9) Factors affecting human relationships, the psychological, cultural, spiritual well-being of patients and their families, and the interactions between humans and their social and physical environments.</p>	<ol style="list-style-type: none"> 1. The student has the ability to understand the effect that human relationships have on a patient's health. 2. The student has the ability to understand the impact of social and physical environments on health, including the psychological, cultural and spiritual well being of patients and their families. 	<ol style="list-style-type: none"> 1. Identifies the key factors in human relationships that can affect health. 2. Recognises the importance of psychological, cultural and spiritual well being of patients and their families and how this contributes to health. 3. Recognises the impact on a patient's health of their social and physical environment. 4. Identifies the social determinants of individual and population health including risk factors. 5. Demonstrates culturally appropriate care.

Attribute	Student Learning Outcomes	Competencies
(25) The ability to use information technology appropriately as an essential resource for modern medical practice.	<ol style="list-style-type: none"> 1. The student has the ability to use information technology as an appropriate resource for accessing quality and up to date information. 2. The student has the ability to use information technology for optimal patient care. 	<ol style="list-style-type: none"> 1. Efficiently access relevant information for patient management, research and ongoing professional development using information technology. 2. Evaluates the quality and relevance of information found using information technology. 3. Proficiently uses available electronic patient management systems in various health care settings. 4. Applies information gained to optimise patient care.

Attribute	Student Learning Outcomes	Competencies
(28) Respect for every human being, including respect of sexual boundaries.	<ol style="list-style-type: none"> 1. The student has the ability to display respect for every human being. 2. The student has the ability to demonstrate respect for sexual boundaries. <p><i>Also refer to attribute 14</i></p>	<ol style="list-style-type: none"> 1. Treats patients with dignity at all times including during interviews and physical examinations. 2. Respect for patients sexual boundaries during a patient interview and a physical examination. <p><i>Also refer to attribute 14</i></p>

<p>Attribute</p> <p>(12) The principles of ethics related to health care and the legal responsibilities of the medical profession.</p>	<p>Student Learning Outcomes</p> <ol style="list-style-type: none"> The student has the ability to understand the principles of ethics as they relate to health care. The student has the ability to understand the legal responsibilities of the medical profession. 	<p>Competencies</p> <ol style="list-style-type: none"> Maintains ethical and legally appropriate standards at all times. Understands the legal responsibilities of health professionals especially those relating to informed consent, duty of care, confidentiality and conflict of interest.
<p>Attribute</p> <p>(33) A realisation that doctors encounter clinical problems that exceed their knowledge and skills, and that, in these situations, they need to consult and/or refer the patient for help, in clinical, cultural social and language related matters as appropriate.</p>	<p>Student Learning Outcomes</p> <ol style="list-style-type: none"> The student has the ability to recognise when the clinical encounter exceeds his/her knowledge and skill level. The student has the ability to recognise when they need to refer or consult with another practitioner. The student has the ability to recognise when to refer regarding clinical, cultural, social and language related matters. 	<p>Competencies</p> <ol style="list-style-type: none"> Knows his/her own level of skill and knowledge. Acknowledges when the clinical scenario exceeds their level of skill and knowledge. Consults and communicates with another practitioner as appropriate. Refers to appropriate support services.
<p>Attribute</p> <p>(26) Recognition that the doctor's primary professional responsibilities are the health interests of the patient and the community.</p>	<p>Student Learning Outcomes</p> <ol style="list-style-type: none"> The student has the ability to recognise that the doctor's primary professional responsibilities are the health interests of the patient and the community. 	<p>Competencies</p> <ol style="list-style-type: none"> Makes patient care his/her primary professional responsibility. Understands the professional responsibility of the doctor extends from the individual patient to the health interests of the community.

Attribute	Student Learning Outcomes	Competencies
<p>(29) Respect for community values, including an appreciation of the diversity of human background and cultural values.</p>	<p>1. The student has the ability to respect community values. 2. The student has the ability to appreciate the diversity of human backgrounds and cultural values. Also refer to attribute 28</p>	<p>1. Respects all patients, their families and colleagues regardless of age, gender, race, language, culture, disability, religion, sexual orientation or economic status. 2. Respects community values. 3. Appreciates diversity of human backgrounds. 4. Practices in a culturally safe manner. Also refer to attribute 28</p>
<p>(24) The ability to interpret medical evidence in a critical and scientific manner and an understanding of the epidemiology of disease in differing populations and geographic locations.</p>	<p>1. The student has the ability to interpret medical evidence in a critical and scientific manner. 2. The student has the ability to understand the epidemiology of disease in differing populations and geographic locations.</p>	<p>Competencies</p> <p>1. Interprets medical evidence in a critical and scientific manner. 2. Understands how disease affects differing populations and geographic locations. 3. Applies epidemiological data in managing the health of patients and their communities.</p>

Attribute	Student Learning Outcomes	Competencies
(34) An appreciation of the responsibility to maintain standards of medical practice at the highest possible level throughout a professional career.	1. The student has the ability to take responsibility to maintain standards of medical practice at the highest possible level.	<ol style="list-style-type: none"> 1. Demonstrates maintenance of highest professional standards of medical practice. 2. Demonstrates self directed learning. 3. Recognises and articulates learning goals arising from clinical scenarios. 4. Identifies learning activities that will enable him/her to address learning goals. 5. Undertakes appropriate learning activities. 6. Seeks feedback from peers, tutors, patients and colleagues.

Attribute	Student Learning Outcomes	Competencies
(35) An appreciation of the responsibility to contribute towards the generation of knowledge and the professional education of junior colleagues.	<ol style="list-style-type: none"> 1. The student has the ability to contribute towards the generation of knowledge. 2. The student has the ability to contribute towards the professional education of junior colleagues. 	<ol style="list-style-type: none"> 1. Participates effectively in research activities. 2. Undertakes teaching, including development of teaching skills as part of professional development. 3. Contributes to the professional education of peers and junior colleagues.

Appendix A: List of Common Diagnostic Procedures as relates to Attribute 18

The student has the ability to interpret or understands:

- Electrocardiograms
- Chest X-rays
- Spiral CT
- MRI
- Ultrasound
- Full Blood Counts, including liver function tests, urea, creatine and cardiac enzymes
- Endocrine function tests including thyroid functioning, plasma glucose, urine albumin and excretion rate in diabetics, serum cortisol, and serum parathyroid levels.
- Observes endoscopic procedures including Upper GI, lower GI, colonoscopy and ERCP procedures.
- Interpretation of plain films, CT, Ultrasound and MRI with common medical surgical, obstetric, gynaecological and paediatric conditions
- Interpretation of doppler and duplex scans
- Common haematology, biochemistry and microbiology tests
- CT scanning, bronchoscopy, fine needle aspiration biopsy, pleural tap and thoracoscopic biopsy
- Angiography
- Blood gas measurements

Appendix B: Common Procedural Skills as relates to Attribute 15**EMERGENCY**

- Performs Basic Life Support
- Performs Advanced Life Support
- Airway Management including management of the comatose patient
- Manage airway obstruction
- Administer Oxygen
- Provides Basic First Aid

GENERAL DOCTOR & PATIENT

- Interpret and perform Peak flow meter
- Interpret and perform Spirometry
- Perform and Interpret a resting ECG
- Performs blood pressure taking

EAR, NOSE AND THROAT

- Simple Ear, Nose and Throat examination
- Use an ophthalmoscope and a slit lamp
- Ophthalmoscope to examine for diabetic retinal changes
- Test for visual acuity
- Eyelid eversion
- Fluorescein - staining of cornea
- Pad eyes
- Removal of foreign body from eye
- Use of tuning forks
- Hearing loss tests
- Syringe an ear
- Insert an ear wick
- Use of a nasal speculum

GENERAL PROCEDURAL

- Performs Nasogastric tube insertion
- Performs IV cannulation
- Performs Venepuncture
- Collection and interpretation of Venous blood sample
- Collection and interpretation of Arterial blood sample
- Measures blood glucose
- Collects blood culture specimen using aseptic techniques
- Performs urinary catheterisation male and female
- Analyse a sample and read urinary dipsticks
- Performs a rectal examination
- Chest tube insertion
- Performs a lumbar puncture
- Simple swab using standard microbial collection
- Administer vaccinations

WOMEN'S HEALTH

- Performs a vaginal exam
- Performs a pap smear
- Collects urethral, vaginal and cervical swabs
- Performs a female breast examination

MUSCULOSKELETAL INJURY & ANAESTHESIA

- Performs suturing
- Plaster of the upper limb and lower limb
- Basic first aid techniques: splinting, slings, bandages and strapping.
- Application of a local anaesthetic
- Administer injections via Subcutaneous, Intramuscular or Intravenous methods
- Wound cleaning including debridement and wound dressing

24 January 2011

To whom it concerns,

Endorsement of Medical Deans' Competencies Project: Framework of Competencies for Graduate Outcomes which rely on clinical placements.

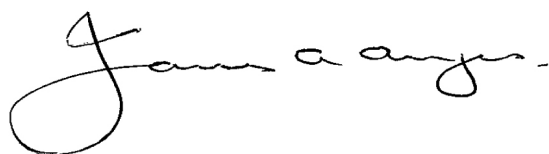
Medical Deans Australia and New Zealand Inc (Medical Deans) has undertaken a project, with funding from the Australian Government's Department of Health and Ageing, to develop a framework of competencies for medical graduate outcomes which rely on clinical placements. The project aimed to provide some precision around the purpose and content of clinical training in order to assist the continuing significant pressures on educational bodies and the Australian health system to be able to provide a sufficient number of high quality clinical training placements for the increased number of medical students.

The Competencies Project has generated significant stakeholder interest and buy in throughout the project period. The project has achieved endorsement from a broad range of medical education groups, Medical Schools and the Deans. In particular, the Framework has achieved solid endorsement from Deans of Medical Schools with the project being acknowledged as beneficial for aiming to define graduate outcomes from clinical placements.

Medical Deans endorses the Framework of Competencies for Graduate Outcomes which rely on Clinical Placements and supports further work developing the framework.

Medical Deans looks forward to continuing the work of the Competencies Project in consultation with our stakeholders.

Kind regards,



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