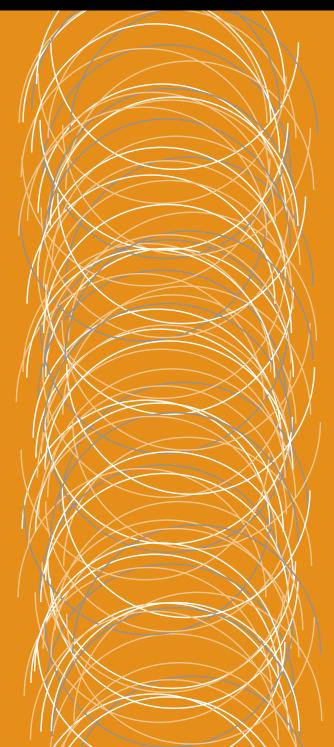
# Accreditation of Medical Program of the Macquarie University Faculty of Medicine and Health Sciences





Medical School Accreditation Committee March 2020

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# **Executive summary 2019**

In 2019, the AMC conducted a follow-up assessment of the medical program of Macquarie University. This follow-up assessment was a condition on accreditation following the AMC's 2017 accreditation assessment of the program. This accreditation report includes the 2017 and the 2019 findings.

In completing the follow up assessment, an AMC team reviewed the Faculty's submission and the student report, and visited Macquarie University and Royal North Shore Hospital, Sydney in the week of 16 September 2019.

The accreditation of the Macquarie University, Faculty of Medicine and Health Sciences program expires on 31 March 2023.

This report presents the AMC's findings against the *Standards for Assessment and Accreditation of Primary Medical Programs by the Australian Medical Council 2012.* 

## 2017 accreditation assessment

The Macquarie University, Faculty of Medicine and Health Sciences was first assessed as a new program by the AMC in 2017. An AMC team visited Macquarie University, Sydney and associated future clinical teaching sites and a sub-team travelled to Apollo Hospital, Hyderabad, India to undertake a site visit. Accreditation was granted until 31 March 2023, subject to conditions on accreditation and a follow-up visit in 2019.

Accreditation of the program was subject to meeting the monitoring requirements of the AMC, including satisfactory progress reports, and a follow-up assessment in 2019 to assess whether the detailed plans for the later stages of the program meet the standards.

The Executive Summary of the 2017 accreditation report is at **Appendix One**.

A report on conditions was received in 2018, which was considered by the Medical School Accreditation Committee. The outcomes of the reporting against the conditions are provided in table 1 below.

Standard	#	Condition	To be met	Status
Standard 1	1	Develop a structure for the Apollo clinical school which details the interface with the Australian based governance structures, and specifies the teaching, training and assessment expectations, funding, student indemnification and services commitment. (Standard 1.1)	2018	Satisfied 2018
	2	Confirm a formal agreement with Northern Sydney Local Health District (NSLHD) to support effective partnerships for delivery of the program, specifically clinical placements. (Standard 1.6)	2018	Progressing 2018
	3	Provide the structure of clinical leads for each discipline in the Apollo clinical school, as well as at Royal North Shore Hospital to illustrate the interaction of clinical school leads with Macquarie University. (Standard 1.8)	2018	Progressing 2018

Table 1 - Accreditation conditions

Standard	#	Condition	To be met	Status
Standard 2		Nil		
Standard 3	4	Provide an update on Year 3 placements in Paediatrics, and Obstetrics and Gynaecology. (Standard 3.2)	2018	Satisfied 2017
	5	Provide specific learning objectives for Year 1. (Standard 3.4)	2017	Satisfied 2017
	6	Provide the finalised MD Program Handbook. (Standard 3.4)	2017	Progressing 2018
	7	Provide specific learning objectives for Year 2. (Standard 3.4)	2018	Satisfied 2018
	8	Provide a curriculum map for the Indigenous Health content. (Standard 3.5)	2018	Satisfied 2018
	9	Provide further detail on the selective and elective terms in Year 4. (Standard 3.6)	2018	Progressing 2018
Standard 4		Nil		
Standard 5	10	Provide an update on the implementation of Entrustable Professional Activities (EPAs) in capability based assessment in the medical program. (Standard 5.2)	2017	Satisfied 2018
	11	Provide evidence that work is progressing on the Stage 2 assessment strategy. (Standard 5.2)	2017	Satisfied 2017
	12	Provide the Stage 2 assessment blueprint. (Standard 5.2)	2018	Satisfied 2018
Standard 6	13	Provide information on the implementation of monitoring and evaluation, specifically plans for the evaluation of the first year cohort. (Standard 6.1)	2017	Satisfied 2018
	14	Provide updates on the operational aspects of monitoring and evaluation of the program. (Standard 6.1)	2018	Satisfied 2018
Standard 7	15	Provide evidence that the draft fitness to practice policy has been approved through the appropriate University processes. (Standard 7.4)	2017	Satisfied 2018
16 inst		Provide further detail on student indemnification and insurance agreements, particularly for the Apollo Hospital and elective rotations. (Standard 7.6)	2017	Satisfied 2017
Standard 8	17	Confirm the availability of appropriate accommodation for students while undertaking placements at Apollo Hospital. (Standard 8.1)	2018	Satisfied 2018
	18	Confirm the physical facilities available to medical students at Apollo Hospital. (Standard 8.1)	2018	Satisfied 2018
	19	Develop opportunities beyond MQ Health for general practice experience. (Standard 8.3)	2018	Progressing 2018

Standard	#	Condition	To be met	Status
	20	Confirm opportunities for rural clinical experiences. (Standard 8.3)	2018	Progressing 2018
		<b>o i i</b>	2018	Progressing 2018
	22	Provide the plans to ensure well trained clinical teachers and supervisors at Apollo Hospital for the first cohort of students in 2020. (Standard 8.4)	2018	Progressing 2018

#### Scope of the 2019 follow-up assessment

As per the 2017 accreditation decision, the focus of the 2019 follow-up assessment was to assess whether the detailed plans for the later stages of the program meet the accreditation standards. Concurrently, the assessment team considered the 2019 conditions, and the conditions that were progressing from previous years.

The School's follow-up submission formed the basis of the 2019 follow-up assessment and review of current conditions.

Since the 2017 assessment the Faculty has continued to develop the curriculum, minor changes have been made to the capability expectation statements, the assessment framework for Entrustable Professional Activities (EPAs) has been finalised, and several key appointments have been made. A new Deputy Vice Chancellor (Medicine and Health) role that integrates the Faculty with the University's health care campus has been formed. This role is held by the Executive Dean.

### Decision on accreditation

Under the Health Practitioner Regulation National Law, the AMC may grant accreditation if it is reasonably satisfied that a program of study, and the education provider that provides it, meet the approved accreditation standards. It may also grant accreditation if it is reasonably satisfied that the provider and the program of study substantially meet the approved accreditation standards and the imposition of conditions will ensure the program meets the standards within a reasonable time.

Having made a decision, the AMC reports its accreditation decision to the Medical Board of Australia to enable the Board to make a decision on the approval of the program of study for registration purposes.

The accreditation decision that can be made by the AMC as a result of this assessment is:

- (i) confirm the Macquarie University, Faculty of Medicine and Health Sciences' accreditation to 31 March 2023, subject to satisfactory progress reports
- (ii) to set conditions to ensure the standards are met in a reasonable timeframe if the Program is found not to meet all the standards.

# The AMC is satisfied that the medical program of the Macquarie University continues to meet the approved accreditation standards.

The 6 March 2020 meeting of AMC Directors agreed:

- (i) that the four-year Doctor of Medicine program of Macquarie University, Faculty of Medicine and Health Sciences has its accreditation confirmed to 31 March 2023
- (ii) that accreditation of the program is subject to meeting the monitoring requirements of the AMC, including: satisfactory progress reports; reports on conditions and the following conditions:

#### By the 2020 progress report:

23	Demonstrate that the time allocation that is available to the Senior Lecturer, Indigenous Health Education is adequate to meet current and future program needs. (Standards 1.4, 1.8, 3.5 and 7.3)
24	Appoint clinical leads for Year 4. (Standard 1.8)

9	Provide further detail on the selective and elective terms in Year 4. (Standard 3.6)
25	Embed opportunities for interprofessional learning in Stage 2 of the Program. (Standard 4.7)
26	Provide the EPA framework for each clinical term. (Standard 5.1)
27	Employ validated methods of standard setting. (Standard 5.2)
28	Evaluate the student and Faculty experience of the accommodation in Hyderabad. (Standard 8.1)
29	Confirm the arrangements to support mental health/psychiatry clinical learning. (Standard 8.3)
30	Confirm the arrangements to support emergency medicine clinical learning at Royal North Shore Hospital. (Standard 8.3)
31	Confirm that an adequate number of appropriate general practices have been confirmed as a site for learning in primary care. (Standard 8.3)
32	Confirm the availability of rural and regional selectives and electives for 2021. (Standard 8.3)
33	Confirm that adequate resourcing is available to continue to develop relationships with Aboriginal health services. (Standard 8.3)
19	Develop opportunities beyond MQ Health for general practice experience. (Standard 8.3)
20	Confirm opportunities for rural clinical experiences. (Standard 8.3)
21	Develop opportunities for students to have experience in the provision of culturally competent health care to the Aboriginal and Torres Strait Islander peoples. (Standard 8.3)
22	Provide the plans to ensure well trained clinical teachers and supervisors at Apollo Hospital for the first cohort of students in 2020. (Standard 8.4)

# Key findings

Under the *Health Practitioner Regulation National Law*, the AMC can accredit a program of study if it is reasonably satisfied that: (a) the program of study, and the education provider that provides the program of study, meet the accreditation standard; or (b) the program of study, and the education provider that provides the program of study, substantially meet the accreditation standard and the imposition of conditions will ensure the program meets the standard within a reasonable time.

The AMC uses the terminology of the National Law (met/substantially met) in making decisions about accreditation programs and providers.

**Conditions**: Providers must satisfy conditions on accreditation in order to meet the relevant accreditation standard.

**Recommendations** are quality improvement suggestions for the education provider to consider, and are not conditions on accreditation. The education provider must advise the AMC on its response to the suggestions.

1.	. The context of the medical program	Met	

Standards 1.4 and 1.8 are substantially met.

#### Conditions

2020

- 23 Demonstrate that the time allocation that is available to the Senior Lecturer, Indigenous Health Education is adequate to meet current and future program needs. (Standards 1.4, 1.8, 3.5 and 7.3)
- 24 Appoint clinical leads for Year 4. (Standard 1.8)

#### Recommendations

- A Develop the capacity of others to undertake some of the key program governance roles that the Executive Dean, who is also Vice Chancellor (Medicine and Health) currently undertakes. (Standard 1.2)
- B Recruit additional academic expertise in the area of assessment, with a particular focus on standard setting. (Standard 1.4)
- C Actively support the Senior Lecturer, Indigenous Health Education to develop a relationship with the Leaders in Indigenous Medical Education (LIME) secretariat to access support and resources to assist with teaching, student support, curriculum development and clinical placements processes and procedures. (Standard 1.4)
- D Provide accessible opportunities to engage with, and support, clinical staff who are not based at Macquarie University in professional development. (Standard 1.9)

#### Commendations

The strong support for the Program by the Vice-Chancellor and his clear vision for the establishment of an academic health centre, which has now come to fruition under the leadership of the Executive Dean.

The outcomes of the medical program Met
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Nil

3. The medical curriculum	Met
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#### Recommendations

E Evaluate the student experience of the research project and, in particular, how the students based in Apollo are supported during this activity. (Standard 3.6)

### Commendations

The Faculty's approach to developing, embedding and delivering a well integrated curriculum. (Standard 3.3)

The Faculty is commended for the participation of a large proportion of its staff in the Cultural Safety Training program and for the aim to extend this program to all staff. (Standard 3.5)

4. Teaching and learning	Met
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Standard 4.7 is substantially met.

Conditions

2020

25 Embed opportunities for interprofessional learning in Stage 2 of the Program. (Standard 4.7)

#### Recommendations

F Expand the interprofessional learning that occurs in Year 1 to include other health professional groups and contexts beyond Physiotherapy. (Standard 4.7)

#### Commendations

The team recognises the input from the clinical staff at MQ Health and commends the Faculty for privileging teaching as a pillar and condition of employment at MQ Health. (Standard 4.4)

The planned foci of research projects promote the concepts of patient-centred care and collaborative engagement.

5. The curriculum – assessment of student learning Met	5. The curriculum – assessment of student learning	Met
--	--	-----

Standard 5.2 is substantially met.

Conditions

2020

26 Provide the Entrustable Professional Activities (EPA) framework for each clinical term. (Standard 5.1)

27 Employ validated methods of standard setting. (Standard 5.2)

### Recommendations

- G Evaluate the assessment load for Year 3. (Standards 5.1 and 8.3)
- H Consider setting the major integrated examinations, mini-CEXs and DOPS prior to the end of Year 4 in order to relieve some of the emphasis on Year 4 assessment, promote opportunities for improvement in areas of deficit, and allow for remediation. (Standard 5.1)
- I Procure assessment expertise related to Workplace Based Assessments to assist with the implementation of Entrustable Professional Activities. (Standard 5.2)
- J Evaluate the effectiveness of Faculty training in supporting consistency in clinical education. (Standard5.4)
- K Provide a more detailed assessment blueprint for students and staff. (Standard 5.4)

6. The curriculum – monitoring	Met
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#### Recommendations

- L The Faculty should consider joining further national collaborative initiatives to expand the perspectives available to them. (Standard 6.1)
- M Utilise annual surveys to seek systematic feedback from clinical partners. (Recommendation 6.4)
- N Implement a joint placement committee to ensure that sites with shared placements are collaborative. (Standard 6.3)

#### Commendations

The implementation of an evaluation framework that clearly aims to embed a culture of evidencebased curriculum improvement and enhancement. (Standard 6.1)

The outcomes seen in the Quality indicators for Learning and Teaching (QiLT) data for 2017-2018 are positive indicators of the quality of the Program. (Standard 6.1)

7. Implementing the curriculum – students	Met
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#### Recommendations

0 Consider adding student representation to the MD Evaluation and Enhancement Committee (MDEEC) and the Faculty Executive Group. (Standard 7.5)

#### Commendations

The remedial action plan and supports available for students at risk. (Standard 7.3)

The relationship between the Faculty and Walanga Muru is strong and results in good support for students. (Standard 7.3)

8. Implementing the curriculum- learning environment	Met
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Standard 8.3 is substantially met.

#### Conditions

2020

- 28 Evaluate the student and Faculty experience of the accommodation in Hyderabad. (Standard 8.1)
- 29 Confirm the arrangements to support mental health/psychiatry clinical learning. (Standard 8.3)
- 30 Confirm the arrangements to support emergency medicine clinical learning at Royal North Shore Hospital. (Standard 8.3)
- 31 Confirm that an adequate number of appropriate general practices have been confirmed as a site for learning in primary care. (Standard 8.3)
- 32 Confirm the availability of rural and regional selectives and electives for 2021. (Standard 8.3)
- 33 Confirm that adequate resourcing is available to continue to develop relationships with Aboriginal health services. (Standard 8.3)

#### Recommendations

P Develop strategies to support students with complex lives and commitments in managing the requirements for clinical placements in Year 3. (Standard 8.3)

# 2019 Report on outstanding conditions

#### Condition 2

Confirm a formal agreement with Northern Sydney Local Health District (NSLHD) to support effective partnerships for delivery of the program, specifically clinical placements. **(Standard 1.6)** 

2019 Finding	Unsatisfactory	Not Progressing	Progressing	Satisfied and closed
				$\checkmark$

A formal Student Placement Agreement (SPA) between Macquarie University and NSLHD was signed in 2016. The SPA has recently been complimented by a new Schedule which more clearly articulates the number of placements that will be provided by NSLHD in 2020 and the resources that will be provided by Macquarie University. As such, this Condition is now met.

Condition 3				
Provide the structure of clinical leads for each discipline in the Apollo clinical school, as well as at Royal North Shore Hospital to illustrate the interaction of clinical school leads with Macquarie University. <b>(Standard 1.8)</b>				
2019 Finding	Unsatisfactory	Not Progressing	Progressing	Satisfied and closed
U				$\checkmark$
The Faculty have provided the structure of clinical leads for disciplines based at MQ Health and Apollo for Stage 2 of the MD program (Figure 27). As such, this Condition is met. However, given that some of these key appointments remain unfilled, particularly with respect to NSLHD, the team will be interested in progress reports about the appointment of staff to the roles identified in the structure, consequently, a new condition has been recommended.				

#### Condition 6

Provide an update on Year 3 placements in Paediatrics, and Obstetrics and Gynaecology. **(Standard 3.2)** 

2019 Finding	Unsatisfactory	Not Progressing	Progressing	Satisfied and closed
0				$\checkmark$
The Faculty emplo	oyed a Paediatric dis	scipline lead in July	2019 with a shared	appointment
between MQ Heal	th and RNSH. The Le	ead is working on cu	urriculum developm	ient and delivery
to students at RNS	SH and Apollo Hospi	ital. The curriculum	consists of online n	nodules which
can be delivered a	cross both sites. Th	e Paediatric Discipli	ine Lead is working	closely with the
Discipline Lead in	Paediatrics at Unive	ersity of Sydney wh	o has expressed exc	itement about
working and teaching together at RNSH. The Paediatric Discipline Lead has visited Apollo				
Hospital and feels confident about delivery of the curriculum in India. In addition to the				
Paediatric Discipline Lead, MQ Health will provide an ED Fellow in Paediatrics.				
The Obstetrics and Gynaecology curriculum is being developed by a Curriculum Coordinator				
who is also employed part time by the University of Sydney. The teaching of the course will				
occur at the Faculty in the simulation laboratories and tutorial rooms. Practical clinical				
experiences will occur at RNSH and outlying clinics. In addition to the 0.8 EFT appointment of				
Curriculum Co-or	dinator, the Faculty	is funding a 0.5 FTE	E consultant position	n for teaching
students. Confirm	ation of the uptake	of the curriculum at	Apollo still needs to	o occur.

#### Condition 6

The team applauds the rapid development of the Paediatric and Obstetrics and Gynaecology curricula and the framework for delivery at RNSH and Apollo Hospital. The team is satisfied with the guide books provided and recognises the work gone in to developing them so quickly. The paediatric guide book states the students will recognise and manage paediatric problems at a level of an intern or resident medical officer. An acknowledgement that this occurs 'with supervision' needs to be included in this statement.

#### Condition 9

Provide further detail on the selective and elective terms in Year 4. (Standard 3.6)

2019 Finding	Unsatisfactory	Not Progressing	Progressing	Satisfied and closed
			$\checkmark$	

This condition has not been met.

The Selective and Elective placements in Year 4 are still being developed. The students will need this information in early 2020 to commence their planning. The team would like to see more detail on both these placements including options, specific outcomes, learning guide and placement processes.

#### Condition 19

Develop opportunities beyond MQ Health for general practice experience. **(Standard 8.3)** 

2019 Finding	Unsatisfactory	Not Progressing	Progressing	Satisfied and closed
			$\checkmark$	

While the Faculty seems confident that recruitment targets (21 practises in 2019) will be achieved by the end of November, the team felt that recruitment should be more advanced by this time, including having written agreements with teaching practices.

Condition 20				
Confirm opportunities for rural clinical experiences. (Standard 8.3)				
2019 Finding	Unsatisfactory	Not Progressing	Progressing	Satisfied and closed
			$\checkmark$	
There are no mandatory rural placements, although opportunities for placements in a regional hospital (Coffs Harbour), and probably other regional locations, will be available as options in the Year 4 Selectives, and a rural general practice placement will be available for 4-8 weeks of Year 4 Electives.				

Condition 21				
Develop opportunities for students to have experience in the provision of culturally competent health care to Aboriginal and Torres Strait Islander peoples. <b>(Standard 8.3)</b>				
2019 Finding	Unsatisfactory	Not Progressing	Progressing	Satisfied and closed
8			$\checkmark$	
Currently there is little exposure to clinical Indigenous health. While all students have contact in Years 1 and 2 with Aboriginal health workers and briefly visit an Aboriginal community controlled health service, opportunities for students to engage in culturally safe care of Aboriginal and Torres Strait Islander people could be enhanced. The approach of the Faculty to respectfully develop relationships with Aboriginal health services is valuable, and adequate resourcing must be made available to support this work.				

Condition 22							
Provide the plans to ensure well trained clinical teachers and supervisors at Apollo Hospital for the first cohort of students in 2020. <b>(Standard 8.4)</b>							
2019 Finding	Unsatisfactory	Not Progressing Progressing		Satisfied and closed			
				$\checkmark$			
Staff at MQ Health have had access to specific sessions on medical education topics. Clinical staff at the Apollo Private Hospital attended a workshop on teaching skills in August 2019 as preparation for their roles.							

### Introduction

#### The AMC accreditation process

The AMC is a national standards body for medical education and training. Its principal functions include assessing Australian and New Zealand medical education providers and their programs of study, and granting accreditation to those that meet the approved accreditation standards. The purpose of AMC accreditation is to recognise medical programs that produce graduates competent to practise safely and effectively under supervision as interns in Australia and New Zealand, with an appropriate foundation for lifelong learning and further training in any branch of medicine.

The *Standards for Assessment and Accreditation of Primary Medical Programs by the Australian Medical Council 2012* list the graduate outcomes that collectively provide the requirements that students must demonstrate at graduation, define the curriculum in broad outline, and define the educational framework, institutional processes, settings and resources necessary for successful medical education.

The AMC's Medical School Accreditation Committee oversees the AMC process of assessment and accreditation of primary medical education programs and their providers, and reports to AMC Directors. The Committee includes members nominated by the Australian Medical Students' Association, the Confederation of Postgraduate Medical Education Councils, the Committee of Presidents of Medical Colleges, the Medical Council of New Zealand, the Medical Board of Australia, and the Medical Deans of Australia and New Zealand. The Committee also includes a member of the Council, a member with background in, and knowledge of, health consumer issues, a Māori person and an Australian Aboriginal or Torres Strait Islander person.

The AMC appoints an accreditation assessment team to complete the follow-up assessment. The medical education provider's accreditation submission forms the basis of the assessment. The medical student society is also invited to make a submission. Following a review of the submissions, the team conducts a visit to the medical education provider and its clinical teaching sites. This visit may take a week. Following the visit, the team prepares a detailed report for the Medical School Accreditation Committee, providing opportunities for the medical school to comment on successive drafts. The Committee considers the team's report and then submits the report, amended as necessary, together with a recommendation on accreditation to the AMC Directors. The Directors make the final accreditation decision within the options described in the *Procedures for Assessment and Accreditation of Medical Schools by the Australian Medical Council 2018*. The granting of accreditation may be subject to conditions, such as a requirement for follow-up assessments.

The AMC and the Medical Council of New Zealand have a memorandum of understanding that encompasses the joint work between them, including the assessment of medical programs in Australia and New Zealand, to assure the Medical Board of Australia and the Medical Council of New Zealand that a medical school's program of study satisfies approved standards for primary medical education and for admission to practise in Australia and New Zealand.

After it has accredited a medical program, the AMC seeks regular progress reports to monitor that the provider and its program continue to meet the standards. Accredited medical education providers are required to report any developments relevant to the accreditation standards and to address any conditions on their accreditation and recommendations for improvement made by the AMC. Reports are reviewed by an independent reviewer and by the Medical School Accreditation Committee.

#### The University, the Faculty and the Program

Macquarie University was established in 1964 and identifies itself as a university of service and engagement. The University has over 40,000 students and employs more than 3,000 professional and academic staff members. The location of the campus at North Ryde, within close proximity of what is now Australia's largest high-technology precinct, Macquarie Park, New South Wales, facilitates industry partnerships in research and innovation.

The University is comprised of five faculties:

- Arts
- Business and Economics
- Human Sciences
- Science and Engineering; and
- Medicine and Health Sciences.

The Macquarie University medical program is a four-year graduate-entry Masters Degree leading to a Doctor of Medicine (MD) qualification.

Macquarie does not seek any medical Commonwealth Supported Places for its MD students.

The Macquarie medical program is distinctive in Australia as a significant component of learning occurs in a university-led and operated not-for-profit private teaching hospital and clinics. The Program aims to provide medical students with a quality assured international education, recognising the value of learning experiences outside Australia. To that end, the Program includes core clinical placements at the Apollo Hospital in Hyderabad, India, and selective opportunities with a number of international clinical partners.

The Apollo Hospital in Hyderabad is a private multi-specialty hospital, which is part of the larger Apollo Hospitals group. The hospital has approximately 470 beds and has accreditation from the USA-based health care organisation, the Joint Commission International (JCI). The hospital is located on a large health city campus that includes two hospitals (one private, one public), a maternity hospital, a large rehabilitation facility, several related medical services, and student and staff accommodation.

The core clinical placements at Apollo will occur in Year 3, with each rotation five weeks in duration. Including orientation and assessments, students will spend a total of 22 weeks spent in India.

The architecture of the Program is set around individual years, and each year has a distinct focus and purpose.

*Year 1: Foundation of Medical Practice Year 1* is held on the university campus and is composed of coursework units in medical science, social aspects of health, professionalism, and foundations of clinical practice.

*Year 2: Integrated Clinical Learning.* This year has three 11-week blocks of integrated clinical studies that cover the areas of medicine and surgery (including several subspecialties), primary care and mental health, which are largely practised at the Macquarie University Hospital and Clinic. A nine-week block focusing on critical care, patient safety and quality, and research is also included in this year.

*Year 3: Core Clinical Placements*. This year includes five-week blocks of each core clinical placement in medicine, surgery, paediatrics, obstetrics and gynaecology, primary care and mental health.

Students must undertake 22 weeks of all core clinical placements in Australia and 22 weeks at the Apollo Hospital in Hyderabad, India, inclusive of orientation, induction and assessment.

*Year 4: Advanced Clinical Practice.* Students must complete eight weeks of placements in Australia (four weeks in each of emergency medicine and mental health), 16 weeks of selective placements, and eight weeks of elective placements in Australia or in a global health setting.

### Accreditation Background

#### Stage 1 Submission 2015

The *Procedures for Assessment and Accreditation of Medical Schools by the Australian Medical Council 2018* state at section 3.2.1 that institutions contemplating the establishment of a primary medical program should conduct independent negotiations with the appropriate state/territory and national authorities concerning student places and clinical facilities. If a decision is made by the relevant authorities to support the establishment of a new medical program, the AMC undertakes the assessment an assessment of a Stage1 submission against the approved accreditation standards.

The purpose of a Stage 1 assessment is to determine the education provider's readiness for assessment. The Stage 1 submission also describes the proposed curriculum and indicates support for the program.

The Macquarie University, Faculty of Medicine and Health Sciences submitted their Stage 1 submission for accreditation of a medical program in November 2015. The Medical School Accreditation Committee considered Macquarie University's Stage 1 submission at its November 2015 meeting and the Committee's advice was considered by the AMC Directors at their December 2015 meeting. It was determined that:

- (i) The information provided in the Stage 1 submission does not demonstrate the Program is likely to satisfy the accreditation standards; and
- (ii) The proposal had insufficient information to decide if it meets the criteria set out in section 4 of the Medical Courses Conducted Offshore policy that defines the proposals the AMC will assess.

The AMC invited the Faculty to resubmit the Stage 1 application with greater detail.

#### Stage 1 Resubmission 2016

The Medical School Accreditation Committee considered the Faculty's Stage 1 resubmission at its August 2016 meeting and the Faculty was invited to proceed to Stage 2.

#### Stage 2 Initial Accreditation Submission 2017

The Macquarie University, Faculty of Medicine and Health Sciences was first assessed as a new program by the AMC in 2017. An AMC team visited Macquarie University, Sydney and associated future clinical teaching sites and a sub-team travelled to Apollo Hospital, Hyderabad, India to undertake a site visit. Accreditation was granted until 31 March 2023.

Accreditation of the program was subject to meeting the monitoring requirements of the AMC, including satisfactory progress reports, and a follow-up assessment in 2019 to assess whether the detailed plans for the later stages of the program meet the standards.

## This report

This report details the findings of the 2017 and 2019 assessments. Each section of the accreditation report begins with the relevant accreditation standards. The comments of the two AMC assessment teams are recorded under the standards in chronological order.

The 2017 Executive Summary is at **Appendix One.** 

The Collated Findings 2017 and 2019 are at Appendix Two.

The members of the 2017 AMC team are at Appendix Three.

The members of the 2019 AMC team are at Appendix Four.

The groups met by the AMC team in 2019 are at **Appendix Five.** 

The collated accreditation conditions and quality improvement recommendations are at **Appendix Six.** 

## Appreciation

The AMC thanks the University and the Faculty of Medicine and Health Sciences for the detailed planning and the comprehensive material provided for the team. The AMC acknowledges and thanks the staff, clinicians, students and others who met members of the team for their hospitality, cooperation and assistance during the assessment process.

## **1** The context of the medical program

#### 1.1 Governance

- 1.1.1 The medical education provider's governance structures and functions are defined and understood by those delivering the medical program, as relevant to each position. The definition encompasses the provider's relationships with internal units such as campuses and clinical schools and with the higher education institution.
- 1.1.2 The governance structures set out, for each committee, the composition, terms of reference, powers and reporting relationships, and allow relevant groups to be represented in decision-making.
- 1.1.3 The medical education provider consults relevant groups on key issues relating to its purpose, the curriculum, graduate outcomes and governance.

### 2017 team findings

The governance of the proposed medical program is innovative, well defined and representative. A wide range of stakeholders has been consulted over the course of the program's development.

The genesis of the medical program at Macquarie can be found in the University's 2013 strategic priorities document, Our University: A Framing of Futures. One of the aspirations outlined in this plan included developing an integrated academic health campus which brought together education, biomedical and translational research with state-of-the-art clinical care.

Macquarie University has achieved this aspiration through the creation of MQ Health, Australia's first university-owned academic health sciences centre. The integration of medical research, health care and higher education is articulated through MQ Health's core purpose: Heal Learn Discover.

In order to achieve the MQ Health vision, in 2014 the University Council resolved to create the Faculty of Medicine and Health Sciences, moving programs from the Australian School of Advanced Medicine (ASAM), and the established Department of Health Professions from the Faculty of Human Sciences, into this new Faculty. Soon after, the Australian Institute of Health Innovation (AIHI) moved from the University of New South Wales to Macquarie University, adding research strengths in health systems, patient safety, and health informatics to the Faculty. The Faculty of Medicine and Health Sciences was structurally established in 2015 with four academic departments (Biomedical Sciences, Clinical Medicine, Health Professions, and Health Systems and Populations), plus the AIHI.

The clinical programs within MQ Health support the intersection of the specialty expertise in MUH and MQ Health Outpatient Clinics with the academic strategy of the Faculty. The Head of each clinical program is responsible for leadership, strategy and development of the clinical program, as well as integration of the clinical services, teaching and research within the program across MQ Health.

Table 2 - MQ Health Clinical Programs

Clinical Program Structure			
Neuroscience	ENT/head and neck		
	Neurology		
	Neuropsychology		
	Neurosurgery		
	Ophthalmology		
Cardiovascular and Respiratory	Cardiology		
	Cardiothoracic surgery		
	Respiratory medicine		
	Vascular medicine and surgery		
Cancer	Cancer surgery (MDTs)		
	Medical oncology		
	Radiation oncology		
Surgery and Gastrointestinal	Colorectal surgery		
	Gastroenterology		
	General surgery		
	Gynaecology		
	Plastic, reconstructive and maxillofacial		
	Urology		
	Upper GI surgery		
Bone and Joint	Hand surgery/therapy		
	Orthopaedics and sports medicine		
	Rheumatology		
Primary Care, Wellbeing and	Allied health		
Diagnostics	• eHealth		
	General practice		
	Imaging		
	Pathology		
<b>Critical Care and Anaesthetics</b>	Anaesthetics		
	Intensive care		
	• Theatre		

The introduction of a medical program within Macquarie University is strongly aligned with the University's strategic objectives. The team was impressed by the evident commitment of the University's Vice-Chancellor and senior leadership to the implementation of a distinctive Doctor of Medicine (MD) program which will be embedded within MQ Health. The medical program features an international dimension, in particular a 20 week core clinical placement which will be carried out at the Apollo Hospital in Hyderabad, India.

Within the Faculty of Medicine and Health Sciences there is a well-defined committee structure which oversees the executive and academic responsibilities of the Faculty. A set of medical program committees provides an appropriate organisational structure to guide the development and later implementation of the program and interface with the Faculty structure.

The Executive Dean of the Faculty chairs the MD Executive and Curriculum Committee (MDECC), which provides oversight of the MD program and guides the development, accreditation, implementation and evaluation of the program. The MDECC is also responsible for the coordination, development and ongoing quality assurance of the curriculum for the program to ensure integration and achievement of the Macquarie MD Capabilities. There is a broad diversity of expertise and disciplinary backgrounds represented on this committee.

Committees reporting to the MD Executive and Curriculum Committee include:

**MD** Assessment Development Committee which provides oversight, coordination, development and ongoing quality assurance of the assessment framework. The Associate Dean (Learning and Teaching) chairs this committee.

**MD Evaluation and Improvement Committee** will facilitate continuous quality improvement for all components of the medical program.

**MD** Admissions and Selections Development Committee will provide oversight to the admission and selection model for the medical program. This committee also develops selection criteria, entry pathways, access schemes, and scholarships. The Associate Dean (Learning and Teaching) chairs this committee.

The MD Program Board provides cohesive management of all operational aspects of the medical program, including admissions, assessment of inherent requirements and reasonable adjustments, progression, fitness to practise and individual student cases. The core members of the Program Board include the Associate Dean, Learning and Teaching (Chair), Program Lead, Academic and Student Services Manager.

A sub-set of committee members from the following domains will join the meeting as required: admissions and selections, inherent requirements and reasonable adjustments, ratification of results processing, progression, fitness to practice and behavioural issues. The Program Board will meet at least six times per year, and reports to the MECC.

Reporting to the MD Program Board and the MD Assessment Development Committee, the MD Stage Committees have responsibility for operational aspects of the program.

**MD Stage 1 Committee (MDS1C)** oversees the development of Year 1 and 2 of the medical program, within established curriculum and assessment frameworks. It will also be responsible for implementation, management and evaluation of all aspects of Year 1 and 2 of the program.

Members include the Stage 1 Lead (Chair); Year 1 and Year 2 Unit Convenors; along with up to 6 other members drawn from the academic staff to facilitate representation from the capability aspects.

**MD Stage 2 Committee (MDS2C)** will oversee the development, implementation and evaluation of Year 3 and 4 and has a key role in developing and maintaining strong relationships with the program's clinical settings and the staff involved in the delivery of clinical placements for the program.

Members include the Stage 2 Lead (Chair); Associate Dean, Clinical Partnerships; Year 3 and Year 4 Unit Convenors; Director, Clinical Experience (MQ Health); Director, Clinical Experience (NSLHD); Director, Clinical Experience (Apollo); along with up to 6 other members drawn from the academic staff to facilitate representation from the major clinical disciplinary areas and clinical learning sites.

In addition to the formal MD governance structure, academic leads ensure the learning in each aspect is connected and vertically integrated throughout the medical program. This cohesive group of energetic and committed scientific, clinical, professional and medical education experts feeds into the Stage 1 and 2 Committees and the MD Assessment Development Committee and provides a consultation framework for the development of teaching blocks, topics, cases and assessment.

The Australian-based governance structure of the medical program is clear and allows for wide representation in decision making.

The team notes the signed Memorandum of Understanding and Clinical Affiliation Agreement between Macquarie University and Apollo Hospitals. However, there is a need for an agreement which further delineates the roles and responsibilities of each partner in the relationship. The team was concerned that a detailed contract between Macquarie and Apollo Hospitals Group in India had not been finalised at the time of the site visit given the critical nature of the 20 week core clinical placement to the entire medical program. Following the team's site visit, Macquarie provided to the AMC a detailed agreement developed and signed by Macquarie and Apollo Hospital Group outlining the responsibilities of the respective organisations, governance arrangements, and placement details. This agreement addresses the team's concerns.

The team was highly impressed by the leadership, facilities and clinician engagement at Apollo Hospital. However, the clinical school structure and governance arrangements between Macquarie and the Apollo Hospital require further elaboration. There is a need to develop the organisation structure for the Apollo clinical school which details the interface with the Australian-based governance structures, and specifies the teaching, training and assessment expectations, funding, student indemnification and services commitment.

The program has undertaken extensive consultation with relevant groups to support the development of the medical program.

The program seeks strategic advice on the direction and future development of the medical program through an MD External Advisory Board (MDEAB). The MDEAB will offer guidance, provide intelligence on the medical services industry with potential implications for the Faculty and medical program.

The MDEAB includes consideration of the Faculty's relationships to its communities, including students, staff, health care consumers, researchers, health service providers, government and regulatory bodies. The Board is comprised of clinical academics and health care professionals with diverse expertise and experience in developing and implementing medical education programs in Australia.

The role and membership of the Board will be reviewed at the commencement of the academic term for the first intake of students (February 2018). The MDEAB will meet quarterly and report to the Executive Dean and MD Executive and Curriculum Committee.

In order to inform the early planning of the medical program, the Faculty established an external student reference group comprised of recent graduates from Australian medical schools.

The MQ Health Consumer Advisory Committee, consisting of patients and community members, has provided feedback on aspects of the program including graduate capabilities, the program's vision and mission statements, and the proposed admissions model. It is envisioned that engagement with this committee will continue as members will be invited to participate as panel members for the MMI admissions process.

Consultation with clinical partners, the establishment of an MD External Advisory Board and representation of clinical academics on a range of medical programs has strongly engaged clinicians, particularly those in MQ Health, in the program development.

The Macquarie MD Program sits within the Faculty of Medicine and Health Sciences at Macquarie University. The Program commenced in 2018 and has admitted two cohorts of students. There have been a number of changes to the governance structure of the organisation since commencement. Macquarie University Hospital and Macquarie University Clinical Associates have merged to form MQ Health Pty Ltd. MQ Health Pty Ltd, together with the Faculty of Medicine and Health Sciences now constitutes the integrated entity MQ Health. The Executive Dean of the Faculty has recently been appointed as Deputy Vice-Chancellor (Medicine and Health) and now leads MQ Health, providing a single point of leadership for the University health service and the Faculty. The team noted the strong support for the Program by the Vice-Chancellor and his clear vision for the establishment of an academic health centre, which has now come to fruition under the leadership of the Executive Dean.

The Faculty has provided a clear overview of the University and Faculty's governance structures. The University Council is the principal governing body of the University, with the Academic Senate and Faculty Board being the principal academic governing bodies of the University and Faculty, respectively. A number of subcommittees support the academic business of the Faculty. These include the Faculty Education Committee, Faculty Assessment Committee, Faculty Research Committee, Faculty Higher Degree Research Committee and Faculty Student Experience Committee. Each committee/subcommittee has clearly articulated Terms of Reference. The Faculty also has an Executive Group that sits outside the formal academic governance structure but provides strategic advice to the Executive Dean.

						Advisory Stream: Formal	Advisory Stream: External Input
łty		Faculty Board		Faculty Executive Group			
Faculty	Faculty Discipline Committee	Faculty Student Experience Committee	Faculty Assessment Committee	Faculty Education Committee		MD External Advisory Board	
			MD Course Board		MD Executive & Curriculum Committee		Student Groups
							Apollo Clinical School
		MD Assessment Development Committee	MD Evaluation & Enhancement Committee	MD Admissions & Selection Development Committee			
		Stage 1 Committee (Year 1 & 2)	Stage 2 Committee (Year 3 & 4)				Working Group: Convened by Stage Leads

Figure 1 - Macquarie MD Committee Structure

The Faculty receives input and feedback from a range of stakeholders, including clinicians and students, via a number of avenues including membership of the External Advisory Board, MD Admission and Selection Development Committee (MDASDC), MD Assessment Development Committee (MDADC), MD Stage 1 (Years 1 and 2) and 2 (Years 3 and 4) Committees (MDS1C and MDS2C) and MD Evaluation and Enhancement Committee (MDEEC), as well as liaising with the MQ Health Consumer Advisory Committee.

# 1.2 Leadership and autonomy

- *1.2.1* The medical education provider has autonomy to design and develop the medical program.
- 1.2.2 The responsibilities of the academic head of the medical school for the medical program are clearly stated.

# 2017 team findings

The Executive Dean of the Faculty (Head of Program) has full autonomy over the medical program. Additionally, the Executive Dean is cross-appointed as the Managing Director of the Macquarie University Clinical Associates (MUCA). This organisation operates MQ Health outpatient clinics, employs academic clinicians who work at the Macquarie University Hospital, appoints clinicians to clinical leadership structures across MQ Health, and develops the health care workforce through its Doctors in Training program. As such, MUCA provides a key integration function which facilitates an opportunity to expand the role of a private health care provider in health professional education, research and patient care. The medical program will clearly benefit from this arrangement.

Clinicians employed by MUCA have clearly protected time for teaching and research in addition to their clinical responsibilities. The MQ Health paradigm Heal Learn Discover has attracted many highly experienced clinicians who will contribute to teaching in the planned medical program. The vision of an academic health sciences centre has been clearly communicated and embraced through the organisation.

The team was impressed by the outstanding leadership of the Executive Dean, and the diverse and high quality expertise of the academic, professional and clinical staff associated with the medical program.

A newly-appointed Deputy Dean of the Faculty (0.4 FTE), will be responsible for oversight of educational innovation and quality, management of academic workloads, and assist the Executive Dean and Heads of Department in introducing new academic promotions processes. The Deputy Dean brings strong educational expertise and deep, relevant experience in the development and implementation of the Faculty's Doctor of Physiotherapy (DPT) program. The medical program will benefit from the experience and evaluation of key elements of the DPT program and student experience, particularly in regard to the students' research projects, Health and Wellbeing Collaboration (HAWC) program, longitudinal portfolio advisors and interprofessional health care learning.

# 2019 team findings

The Faculty has an appropriate level of autonomy, within the University and faculties policies and procedures, to oversee the design and ongoing development of the Program. There is also evidence of strong support from the University to achieve the objectives of the Faculty with regards to the Program and more broadly with their suite of courses and research agenda. The responsibilities of the Executive Dean of the Program are clearly outlined. The Executive Dean,

who is also Deputy Vice-Chancellor (Medicine and Health), holds a range of existing Program governance roles which may prove challenging over time despite the support of other leadership in the Faculty. Approaches to develop others to undertake some of the key functions of the Program may be beneficial.

# **1.3 Medical program management**

- 1.3.1 The medical education provider has a committee or similar entity with the responsibility, authority and capacity to plan, implement and review the curriculum to achieve the objectives of the medical program.
- 1.3.2 The medical education provider assesses the level of qualification offered against any national standards.

# 2017 team findings

The MD Executive and Curriculum Committee (MECC) is responsible for the coordination, development and ongoing quality assurance of the curriculum. This committee reports to the Faculty Executive Committee and the Faculty Education Committee and will ensure the program achieves the Macquarie MD Capabilities.

MECC membership includes the Executive Dean; Faculty General Manager; Associate Dean (Learning and Teaching); Program Manager, Education and Faculty Initiatives; Head of Department and Director (Physiotherapy Program); Head of Department (Clinical Medicine); Clinical Professor and Head of MQ Health Clinical Program (Primary Care, Wellbeing and Diagnostics); Faculty Student Services Manager, and an external consultant with expertise in program-level curriculum and assessment design.

The University Senate approved the medical program proposal as an Australian Qualifications Framework Masters Degree (Extended) program on 1 November 2016.

# 2019 team findings

The MDECC provides oversight of the Program and has overarching responsibility, authority and capacity to plan, implement and review the curriculum. MDECC is supported by a number of committees including the MDADC, MDASDC, MDS1C, MDS2C and MDEEC. In parallel to this structure, the MD Course Board provides management of all operational aspects of the course and is supported by the Stage 1 (Year 1 and 2) and Stage 2 (Year 3 and 4) committees. The Terms of Reference and membership of these committees is clearly articulated.

The Program has been assessed by Macquarie University against the Australian Qualifications Framework (AQF) and determined to be AQF Level 9 Masters Degree (Extended). This was been approved by the University Senate in November 2016. The Program was recently reviewed as part of the University's curriculum renewal project (CA2020) and the course re-approved by the Senate in October 2018.

## **1.4 Educational expertise**

1.4.1 The medical education provider uses educational expertise, including that of Indigenous peoples, in the development and management of the medical program.

The team was impressed with the breadth and depth of medical education expertise contributing to the medical program. A number of staff hold education qualifications and several have held very senior roles in medical programs in Australia. This rich skill set facilitates the development and implementation of an educationally sound, innovative program. The team noted the Faculty's aim to develop a distinctive educational experience which links learning and translational research to clinical activities should be realised through the well-designed program.

While the Faculty does not have a dedicated medical education unit, the team was of the view that this did not pose an issue as the year level committees will provide valuable input into the development and implementation of the program.

The Faculty has identified the need to build expertise in Indigenous Health teaching and learning. An Indigenous Health academic will be appointed, however should this appointment be delayed for any reason, it will be critical for the Faculty to identify other sources of Indigenous Health expertise to inform the development of the curriculum. Following the site visit, Macquarie provided further information to advise that the Indigenous Health academic would commence in August 2017. This appointment addresses the team's concerns.

The Faculty has a strong relationship with the staff of Walanga Muru, the University's Office of Indigenous Strategy. The team was impressed by the enthusiasm of the Walanga Muru staff in engaging with the Faculty in the development of the medical program, and in facilitating links with Indigenous communities.

## 2019 team findings

The Faculty has decided not to establish a formal Medical Education unit but has educational expertise across the academic staff profile, including senior leadership, with considerable experience in medical and health professional programs. The Faculty also has access to learning designers to support the planning and development of educational activities. The available expertise in medical program assessment within the Faculty could be enhanced and the Faculty is urged to consider recruitment of additional academic assessment expertise, with a particular focus on standard setting, as a high priority.

The Faculty has recently appointed an Aboriginal staff member to provide oversight of the Indigenous Health curriculum following the departure of the previous incumbent. The new appointee will work 0.2 EFT for the remainder of 2019 moving to 0.6 EFT in 2020. There are some concerns that this time allocation may not be sufficient to establish the internal and external relationships required to establish an integrated Indigenous Health curriculum and clinical placements despite the support of the central Walanga Muru unit. The Faculty have indicated that this will be monitored and additional support allocated if required.

## 1.5 Educational budget and resource allocation

- 1.5.1 The medical education provider has an identified line of responsibility and authority for the medical program.
- 1.5.2 The medical education provider has autonomy to direct resources in order to achieve its purpose and the objectives of the medical program.
- 1.5.3 The medical education provider has the financial resources and financial management capacity to sustain its medical program.

There is a clear line of responsibility for the medical program and the team is comfortable with funding arrangements. The authority for allocation of funds within the Faculty is clearly at the discretion of the Faculty executive based on strategic priorities.

There is a well-articulated commitment from the University's senior leadership to provide the resources required to develop and implement a successful medical program.

There is explicit recognition from the University's Vice-Chancellor and Chief Operating Officer, and CEO of Macquarie University Hospital, that medical programs are resource intensive, but have the potential to add significantly to the reputation of the University. The University's commitment to integrating research, teaching and learning, and clinical care within MQ Health and the medical program is firmly held.

There is a clear commitment to the cross-subsidisation of the Faculty's teaching and learning, and high quality research, through clinical and teaching income generated elsewhere in the University.

The Faculty has plans to grow the teaching and learning space within the Faculty Building, and the University plans to develop an additional biomedical science teaching and research building, which should be available for 2020-21.

Financing has been identified to support student teaching and services at Apollo Hospital in Hyderabad, and the appointment of a staff member to support administration and student services at the Northern Sydney Local Health District (NSLHD) has been discussed. The team expects that adequate funding arrangements will be outlined in the contracts that will be executed between Macquarie and the relevant clinical sites.

## 2019 team findings

The Executive Dean has overall responsibility and designated authority for the Program. The Executive Dean is also responsible for management of the Faculty budget with support from the Faculty General Manager. Department level funding is allocated by the Faculty based on strategic priorities rather than income generated. This approach provides the Faculty with flexibility to direct resources as required. The Faculty continues to generate additional income via philanthropic support as well as delivering specialised workshops on surgical skills using the state-of-the-art anatomy facilities. The Faculty has experienced a budget deficit for the Program during the establishment phase with a surplus forecast in 2021 onwards. The Vice Chancellor has indicated full support for the Program and is not concerned by the short-term deficit.

There has been considerable capital investment to support the Program including infrastructure, research and staffing.

## **1.6 Interaction with health sector and society**

- 1.6.1 The medical education provider has effective partnerships with health-related sectors of society and government, and relevant organisations and communities, to promote the education and training of medical graduates. These partnerships are underpinned by formal agreements.
- 1.6.2 The medical education provider has effective partnerships with relevant local communities, organisations and individuals in the Indigenous health sector to promote the education and training of medical graduates. These partnerships recognise the unique challenges faced by this sector.

The team spoke with several key stakeholders who clearly supported the implementation of the medical program.

The Faculty provided documentation such as Student Placement Agreements and Memoranda of Understanding to the team to substantiate engagement with key stakeholders, particularly those organisations providing clinical placements for the program. Macquarie also provided additional documents to the AMC following the site visit that confirmed agreement from the Northern Sydney Local Health District (NSLHD) to provide the required number of clinical placements in the relevant disciplines at Royal North Shore Hospital. A clinical placement agreement will be executed between the two organisations. The team will be interested in viewing the clinical placement agreement with NSLHD.

The program has developed good partnerships with various health and community organisations in the state and with the Apollo Hospital in India.

Partnerships with the Indigenous health sector are in the process of development. The staff of Walanga Muru are supportive of the program and spoke with the team regarding their ideas of where they will further develop relationships.

## 2019 team findings

The Faculty has developed strong relationships with a number of key partners to enable the delivery of the Program. The relationship between the Faculty and Macquarie University Hospital (MUH) is a cornerstone of the Program and staff at MUH are highly engaged at all levels. The Faculty will deliver a substantial component of Year 3 of the course in India through the Apollo Hospital. This relationship is underpinned by a formal agreement. Since the last AMC visit, the Faculty has appointed a Campus Dean at Apollo to oversee the clinical teaching at this site. In addition, senior Faculty leadership and key MD clinical staff have visited Apollo on a number of occasions in preparation for delivery in 2020. Macquarie University Doctor of Physiotherapy students completed clinical placements at Apollo Hospital in early 2019. The AMC will wish to review the implementation of the MD teaching in this setting.

The partnership of the Northern Sydney Local Health District (NSLHD), in particular the Royal North Shore Hospital, with the Faculty has been slower to develop than initially hoped. This issue has been exacerbated by changes to the hospital network in New South Wales (i.e. closing of Manly Hospital and downgrading of Mona Vale Hospital) and the establishment of the Northern Beaches Hospital, which appear to have reduced the opportunities for clinical placements in NSLHD. However, the strong commitment of the NSLHD CEO and senior leadership to support the Macquarie University MD Program was noted.

The Faculty continues to explore additional opportunities for local and international clinical partners in order to expand their scope and breadth of offerings.

The Faculty continues to explore opportunities to develop partnerships with relevant local communities, organisations and individuals in the Indigenous health sector. This area will require further attention and was raised by the MD students as a matter of concern. The Faculty has engaged with the Leaders of Indigenous Medical Education (LIME) network as well as Australian Indigenous Doctors Association (AIDA).

## **1.7** Research and scholarship

1.7.1 The medical education provider is active in research and scholarship, which informs learning and teaching in the medical program.

# 2017 team findings

Macquarie University has a strong research profile in a number of areas of medical and clinical research including cancer, neurosciences, health systems/services, patient safety and quality, and clinical sciences. The Faculty has clearly identified areas of research focus, and is on a steep trajectory of growth in research income. The University's location within Australia's largest high technology precinct adds significantly to its capacity for translational research and industry impact.

Research opportunities in the medical program are well documented. The medical program leverages the excellent health care systems research expertise found within the Australian Institute of Health Innovation, which is located in the Faculty. There are a few areas of academic medicine yet to be developed, such as in paediatrics and mental health, and the team is confident this will be developed in coming years.

The Faculty's researchers are eager to become involved in teaching in the medical program, particularly in supervision of research projects.

# 2019 team findings

The Faculty of Medicine and Health Sciences is a research-intensive faculty, which has shown impressive growth in external research income and Higher Degree Research students in recent years. The Faculty accounts for more than 30% of the research income for the University. Research expertise exists across a broad range of areas including neurosciences, health systems research, clinical sciences, cancer biology, and public health. The Faculty is ideally situated close to Macquarie Park Innovation District providing access to a large number of pharmaceutical, medical device and technology companies. Many of the staff teaching into the Program are research active, providing the opportunity to embed research and scholarship into their teaching.

## 1.8 Staff resources

- 1.8.1 The medical education provider has the staff necessary to deliver the medical program.
- 1.8.2 The medical education provider has an appropriate profile of administrative and technical staff to support the implementation of the medical program and other activities, and to manage and deploy its resources.
- 1.8.3 The medical education provider actively recruits, trains and supports Indigenous staff.
- 1.8.4 The medical education provider follows appropriate recruitment, support, and training processes for patients and community members formally engaged in planned learning and teaching activities.
- 1.8.5 The medical education provider ensures arrangements are in place for indemnification of staff with regard to their involvement in the development and delivery of the medical program.

# 2017 team findings

The Faculty and MUCA have most of the staff required for the development and delivery of the medical program. There is particularly strong medical education and student selection expertise,

and where there is a need to add clinical expertise not resident within MQ Health, such as in Obstetrics and Gynaecology, there is a plan to secure relevant expertise from Apollo Hospital, Royal North Shore Hospital and other clinical settings.

The University is committed to increasing the number of Indigenous staff and to providing appropriate support. Consistent with the objectives that have been established for Patyegarang: Macquarie University's Aboriginal and Torres Strait Islander Advancement Strategy 2012 – 2017, the University aims to increase the proportion of Indigenous Staff Members to 2.6% of the University's FTE fixed term and continuing staff. The Faculty will contribute to this objective through increasing the number of Indigenous staff and the AMC will be interested in receiving updates on this activity.

The seven MUCA-appointed Clinical Program Heads are senior leadership roles who are responsible for the development of a strategic framework for the integration of clinical services, teaching and research within the clinical program and across MQ Health. As the program further develops the details of implementation of Stage 2, the team requests the structure of clinical leads for each discipline in the Apollo clinical school, as well as at Royal North Shore Hospital, to illustrate the interaction of clinical school leads with Macquarie University.

The Faculty is guided by the University's Recruitment and Selection Policy and there is scope to allow the Faculty to develop its own structure. This is evidenced through the Faculty's success in creating a number of new and unique positions to specifically support its initiatives.

The University indemnifies staff in relation to work and duties carried out during their employment.

# 2019 team findings

The Faculty employs a range of academic, clinical and professional staff to deliver the Program, as well as support the educational and research activities of the Faculty. The Faculty has appointed a number of staff since the previous AMC visit as the Program has been rolled out, including key clinical appointments required for implementation of Stage 2. In addition, a number of existing MQ Health staff have been appointed to leadership roles within the Program. Additional appointments include placement staff within the Faculty, as well as clinical leads and professional staff at the Apollo Hospital. The team was impressed by the professional staffing profile of the Faculty and, in particular, the close working relationship between Faculty, University, and MQ Health based professional staff.

However, appointments for clinical leads for Year 4 remain unfilled, particularly with respect to NSLHD.

The Faculty has recently appointed an Aboriginal academic staff member to provide oversight of the Indigenous Health curriculum. The time allocation for this role should be monitored and additional support allocated if required.

The Faculty engages with patients and community members through the Health and Wellbeing Collaboration (HAWC) program as well as the Simulated Patient Program. Patients are also involved in bedside tutorials at MUH and the MQ Health Clinics. The Faculty has access to a Volunteer Coordinator appointed to MQ Health to support some of these initiatives, with additional support from the Faculty's Placement Support Officer, and MD Program Support Officers. The Faculty has outlined their recruitment strategy and the support provided to volunteers.

The University indemnifies staff employed to develop and/or deliver the Program. Honorary academics are covered by a range of insurance policies for work undertaken within their scope of appointment.

# **1.9** Staff appointment, promotion & development

- 1.9.1 The medical education provider's appointment and promotion policies for academic staff address a balance of capacity for teaching, research and service functions.
- 1.9.2 The medical education provider has processes for development and appraisal of administrative, technical and academic staff, including clinical title holders and those staff who hold a joint appointment with another body.

# 2017 team findings

The University, Faculty and MUCA have clearly articulated appointment and workload models, which have been strongly influenced by models in the United States where academic health care centres are common.

The university-wide appointment, promotion and development policies for academic staff are well described and of high quality. The relevant policies and processes should flow through to the Faculty but at this stage do not seem to have been fully established, especially for clinical title holders.

The framework for promotion at Apollo Hospital is explicit. The team understands that the framework that will specify how teaching is rewarded at Apollo Hospital will be informed by the Faculty-Apollo agreement as noted at Standard 1.1.

As noted at Standard 1.2, the team commends the expectation that clinicians employed by MUCA collectively achieve Key Performance Indicators across all three domains of teaching, clinical work and research, and that some clinicians have clearly protected time for teaching and research in addition to their clinical responsibilities, while others contribute to clinical teaching as part of their clinical activities.

The Faculty's Learning Innovation Faculty Training (LIFT) site provides information regarding workshops which will assist the Faculty design effective learning experiences, with specific focus on effective digital resources, learning assessment and feedback. A second set of workshops is planned for 2017.

# 2019 team findings

The Faculty follows Macquarie University policies and procedures regarding appointment and promotion of academic staff. Honorary academic, conjoint and clinical appointments are managed under the Academic Titles policy. The requirements for academic promotion are clearly articulated with five areas of academic endeavour being evaluated (i.e. scholarship of discovery / integration / teaching / application, and leadership and citizenship).

The University provides a range of development opportunities for staff as well as training modules for the induction of new staff. The Faculty has appointed a staff member to the Learning Design Team to lead specific professional development of staff including those based at the Apollo Hospital. Continued efforts to engage with, and support, clinical staff who are not based at Macquarie University will be important as the Program continues to roll out, as this is often a challenging area

# 2 The outcomes of the medical program

Graduate outcomes are overarching statements reflecting the desired abilities of graduates in a specific discipline at exit from the degree. These essential abilities are written as global educational statements and provide direction and clarity for the development of curriculum content, teaching and learning approaches and the assessment program. They also guide the relevant governance structures that provide appropriate oversight, resource and financial allocations.

The AMC acknowledges that each provider will have graduate attribute statements that are relevant to the vision and purpose of the medical program. The AMC provides graduate outcomes specific to entry to medicine in the first postgraduate year.

A thematic framework is used to organise the AMC graduate outcomes into four domains:

- 1 Science and Scholarship: the medical graduate as scientist and scholar.
- 2 Clinical Practice: the medical graduate as practitioner.
- 3 Health and Society: the medical graduate as a health advocate.
- 4 Professionalism and Leadership: the medical graduate as a professional and leader.

### 2.1 Purpose

- 2.1.1 The medical education provider has defined its purpose, which includes learning, teaching, research, societal and community responsibilities.
- 2.1.2 The medical education provider's purpose addresses Aboriginal and Torres Strait Islander peoples and/or Māori and their health.
- *2.1.3 The medical education provider has defined its purpose in consultation with stakeholders.*
- 2.1.4 The medical education provider relates its teaching, service and research activities to the health care needs of the communities it serves.

## 2017 team findings

Macquarie University's purpose in establishing a medical education program has three elements:

- 1 To educate medical students in an environment where learning is fully integrated with outstanding patient-centred clinical care and active health and medical research. This environment is MQ Health, Australia's first university-led and operated teaching hospital and academic health sciences centre.
- 2 To provide Australian medical students with a quality assured international education, recognising the value of student study abroad for learners, society and the health care system.
- 3 To graduate culturally responsive, engaged, global medical professionals, who understand the health systems they work within; have respect for, and sensitivity towards, the cultural needs of diverse populations, including Australian Indigenous peoples; and are aware of the impact of their own culture and values on their medical practice. (Revised April 2017)

The team acknowledges that developing culturally responsive doctors is a key priority of the program, and that Indigenous culture, history and health is an important focus. During the site visit, the team discussed with the Faculty the rationale for the inclusion of an explicit reference to Indigenous peoples in the purpose statement. The team reviewed a revision of the purpose statement which addresses Indigenous people, which is essential for inclusion in the purpose statement of an Australian medical school.

The program's vision: To educate medical students in environments where learning is fully integrated with outstanding patient-centred clinical care and active health and medical research, and to create the nation's first global medical program for Australian and international students.

The program's global focus has been developed in consultation with, and effectively communicated to, academic and professional staff who will be involved in delivering the program as well as other relevant stakeholders as outlined in Standard 1.

The program relates its teaching, clinical services and research to the health care needs of the communities it serves. MQ Health undertakes health services planning to determine clinical services necessary for the areas it serves, for example in the MQ Health outpatient clinics.

### 2019 team findings

The Macquarie medical program maintains it's three declared aspirational themes:

Firstly, medical student education is integrated into the patient-centred care services of MQ Health. This integration seeks to emulate aspects of the better North American academic medical centres through the active integration of medical education with active healthcare and medical research. As some health care services are not provided on the main MQ Health campus, partnerships have been, or are in the process of being, developed.

Secondly, an international medical education is provided by substantial immersion at the Apollo Hospital in Hyderabad, India. This busy complex has post-graduate medical trainees but thus far not medical students. There is also opportunity for selective/elective terms in Year 4. This international experience is a point of distinction for the Macquarie MD Program.

Thirdly, the Program aims to develop culturally and globally aware doctors, capable and comfortable working with diverse populations. Such doctors should be able to deliver culturally safe care for all peoples, including Aboriginal and Torres Strait Islander, and Māori peoples.

The Program has been developed in consultation with many stakeholders, including clinical staff of MQ Health, the broad Faculty of Medicine and Health Sciences, and related fields from other areas of the University. Many of the high-level Boards and committees of the University have contributed, with direct espoused support from the Vice Chancellor.

The Faculty has engaged with the University of Sydney and NSLHD, for geographic and service reasons and NSW Health and the Health Education and Training Institute (HETI) are aware of the Program. Other medical practitioners and consumers have been engaged with the developing Program.

Teaching within the Program is integrated into the clinical services. Clinicians teach into the Program, with dedicated time away from direct patient care. Research activities are well developed with prominent activities in motor neurone disease, neurosurgery and the Australian Institute of Health Innovation (AIHI).

While the Program is not obliged to provide rural training placements for its cohort, the Faculty has connections in Coffs Harbour that are likely to lead to rural experience for interested students. This is planned to occur within the selective/elective time in Year 4. Student and supervisor feedback should also influence how 'rural' health care concepts and outcomes are considered.

## 2.2 Medical program outcomes

A thematic framework is used to organise the AMC graduate outcomes into four domains:

- *1* Science and Scholarship: the medical graduate as scientist and scholar
- 2 Clinical Practice: the medical graduate as practitioner
- 3 Health and Society: the medical graduate as a health advocate
- 4 Professionalism and Leadership: the medical graduate as a professional and leader.
- 2.2.1 The medical education provider has defined graduate outcomes consistent with the AMC Graduate Outcome Statements and has related them to its purpose.
- 2.2.2 The medical program outcomes are consistent with the AMC's goal for medical education, to develop junior doctors who are competent to practise safely and effectively under supervision as interns in Australia or New Zealand, and who have an appropriate foundation for lifelong learning and for further training in any branch of medicine.
- 2.2.3 The medical program achieves comparable outcomes through comparable educational experiences and equivalent methods of assessment across all instructional sites within a given discipline.

### 2017 team findings

The team noted the mapping of the proposed program outcomes to the AMC Graduate Outcome Statements which reveals that all of the AMC outcomes are supported explicitly, except for two:

Outcome 3.1 which relates to the acceptance of responsibility for the advancement of the health and wellbeing of individuals, communities and populations.

Outcome 4.1 refers to Good Medical Practice: Code of Conduct for Australian and New Zealand Doctors.

Both outcome statements are implicitly supported by several of the Macquarie expectations, however the program considered both to be difficult to assess directly. The Faculty will implement a system to enable observed breaches or exemplary conduct in relation to these outcomes to be recorded and considered through the portfolio assessment process. The team accepts those comments.

The medical program graduate expectation statements have been broadly mapped to the thirteen Entrustable Professional Activities (EPAs), determined by the Association of American Medical Colleges (AAMC) as being required of students entering residency in the United States. The team noted the interesting innovations proposed with the adoption of EPAs into the program and, as noted in Standard 5, will be interested in the development of this initiative.

## 2019 team findings

The Program is an outcomes based medical course defined by capabilities supported by detailed expectation statements. These capabilities have been reviewed since 2017 to address specific alignment with some AMC Graduate Outcome Statements and the Program Capability framework comprehensively addresses the four AMC domains.

The Program has articulated four graduate capabilities (two aspects per capability) which operate as high level learning outcomes to be achieved before graduation, and provide the impetus for continuing learning related to future clinical experiences.

The Program has described Entrustable Professional Activities (EPAs) to be achieved by midprogram (Years 1 and 2), and the completion of Stage 2 (Year 3 and 4). The Faculty believes that the abilities that are described collectively through the EPAs and graduate capabilities, may be seen to define the aptitudes of the new Macquarie MD graduate, noting that the Stage 2 EPAs are related to the work tasks for intern medical doctors. Direct involvement with the NSW Health Intern Readiness working group supports this, and the EPAs have accordingly been reviewed and edited since 2017.

The typical medical student schedule across the first two years has been adjusted after the first iteration of Year 1 in 2018. The Stage 1 experiences and assessments are considered comparable.

The proposed schedule for Year 3 to be delivered in 2020 appears consistent across the cohorts. Practical issues related to the obstetrics & gynaecology, and paediatrics rotations were being worked through at the time of this visit, which have since been resolved. The clinical experiences planned for the first Year 3 cohort in 2020 in Hyderabad and at MQ Health appear complementary and each Year 3 medical student will have comparable experiences.

Relevant training has been provided for staff in Australia and in India to facilitate comparable teaching and learning and assessment approaches. The training provided should support the quality of student experience from supervision and assessment perspectives. Assessment principles and methods are expected to be consistent across the two years of Stage 2.

## 3 The medical curriculum

## 3.1 Duration of the medical program

The medical program is of sufficient duration to ensure that the defined graduate outcomes can be achieved.

# 2017 team findings

The proposed program is a four-year graduate-entry Doctor of Medicine (MD).

The curriculum is built around years. However, to promote integration, the years are organised into two stages (Stage 1 includes Years 1 and 2, with Stage 2 encompassing the final two years of the program).

The overall program duration of 150 weeks, over four years at an average student load of 32 hours/week, is equivalent to approximately 4,800 hours. These hours are distributed as follows:

- 40% is student-led learning (1,928 hours)
- 26% is teacher-led learning (1,232 hours); and
- 34% is experiential learning (1,640 hours).

The majority of experiential learning, and a proportion of teacher-led learning, occurs in clinical environments. The emphasis on student-led and experiential learning modes is consistent with the Faculty's educational philosophy to use a technology-enhanced approach, where face-to-face teaching time (traditionally teacher-led learning) is primarily used for interactive and integrative learning, and for specific clinical skill development.

The team concluded that the program duration would enable graduates to achieve the program's graduate capabilities.

## 2019 team findings

The Macquarie MD remains a 4-year graduate-entry course, divided into two Stages. In Stage 1, Year 1, the units are scheduled within 32 teaching weeks. It has a focus on normal systems. In Year 2, the units are scheduled for 42 weeks of study. It provides a basis for more advanced clinical skill development and a context for the integrated learning of applied clinical, medical and social sciences. In Stage 2, Year 3, clinical placements are taken over 44 weeks, with half of the weeks in Apollo Hospital. Research projects are initiated in Year 2 with the bulk of the activity occurring in Stage 2. In Year 4, the units and clinical placements are completed in 34 weeks. Students have the opportunity to complete Electives and Selectives.

The team is satisfied there is sufficient learning and teaching time available in the Program to allow students to achieve the Program outcomes.

# 3.2 The content of the curriculum

The curriculum content ensures that graduates can demonstrate all of the specified AMC graduate outcomes.

- 3.2.1 Science and Scholarship: The medical graduate as scientist and scholar.
- 3.2.2 Clinical Practice: The medical graduate as practitioner.

The curriculum contains the foundation communication, clinical, diagnostic, management and procedural skills to enable graduates to assume responsibility for safe patient care at entry to the profession.

3.2.3 Health and Society: The medical graduate as a health advocate.

The curriculum prepares graduates to protect and advance the health and wellbeing of individuals, communities and populations.

3.2.4 Professionalism and Leadership: The medical graduate as a professional and leader.

The curriculum ensures graduates are effectively prepared for their roles as professionals and leaders.

## 2017 team findings

The outcomes for the Macquarie University medical program have been articulated as graduate capabilities structured into four domains:

- Scientist and Scholar
- Clinical Practitioner
- Engaged Global Citizen; and
- Professional.

Each of the four domains are subdivided into two aspects; these eight aspects reflect the combined knowledge, skills, cognitive ability, and attitudes required of medical graduates. The eight aspects include:

- An applied medical scientist
- A scholar and research informed practitioner
- An effective personal and digital communicator
- A patient-centred and safe clinician
- A socially and culturally versatile practitioner
- A public health and systems aware practitioner
- A team worker
- An ethical and reflective practitioner.

The domains and aspects are summarised in the table below.

#### Table 3 - Curriculum Domains and Aspects

Domain	Scientist a	nd Scholar	Clinical Practitioner		Engaged Global Citizen		Professional	
Aspect	Scientist	Scholar & Research	Communicator	Patient Centred & Safe	Socially & Culturally Aware	Public Health	Team Worker	Ethical & Reflective

Flowing from the eight aspects are 31 expectation statements which reflect the standard expected at graduation.

A further 24 expectation statements have been defined as expectations of development at the midpoint of the program (end of stage 1). Satisfactory achievement of the relevant expectation statements will be mandatory for progression from stage 1 to stage 2 in the program (at the end of Year 2), and for completion of the program. The medical program's expectation statements are consistent with the AMC Graduate Outcomes. The medical program expectations extend on the AMC Outcomes in three key areas:

- There is greater emphasis on the medical graduate having a <u>global focus</u> in their practice and as a <u>health advocate</u>
- There is more explicit emphasis on using <u>digital and electronic systems in patient care and</u> <u>practice</u>; and
- The expectation statements are, in parts, <u>more integrated</u> across the four domains.

The content of the curriculum is organised into two stages, each stage being two years in duration.

#### Stage 1

#### Year 1 Foundations of Medical Practice

Year 1 consists of a combination of units in applied medical sciences, clinical practice and evidence-based and interprofessional health care presented in two sessions. Each session has three distinct units with separate assessments (and assessment components), with an overarching programmatic assessment framework. Progression rules exist for each unit and the year as a whole. The curriculum is organised through a series of three week case-based clinical colloquium and team-based learning, which are structured around body systems and common medical conditions. Clinical learning will occur in simulated clinical scenarios.

#### Year 2 Integrated Clinical Learning and Research

Year 2 is organised into four integrated units structured on the clinical programs that organise clinical activities at MQ Health. The strengths of MQ Health have been well utilised in defining the underlying structure of the curriculum.

Within the three units delivered over 12 weeks, the following disciplines are combined:

- Primary Care and Wellbeing and Diagnostic (including mental health) with Cancer.
- Neurosciences is combined with Bone and Joint; and
- Cardiovascular and Respiratory with Surgery and Gastrointestinal.

The framework for curriculum design in these three units uses a weekly high-level theme (common to all three units) linked to a set of unit-specific case presentations, topics or scenarios to provide a focus for learning. The proposed 12 weekly themes represent:

- Six commonly understood classical disease presentations or pathologies (collapse, infection, inflammation, pain, organ failure, and bleeding).
- Three important aspects of health care delivery (prevention, health promotion, and teambased care); and
- Three of the largest health burdens of modern society (multi-morbidity, psychological medicine, and ageing).

The second session of Year 2 consists of one of the remaining 12 week integrated block units plus MEDI923: Critical Care, Patient Safety & Quality and Research. This unit is studied by all students over the final six weeks of Year 2. The clinical context of this unit is the Critical Care and Anaesthetics Program of MQ Health, and the unit provides focused learning on the patient safety and quality aspects of health systems, plus more advanced learning about research methodologies.

Year 2 students will also enrol in MEDI924: Reflective Medical Practice 1, which is a unit designed for students to revise, reflect and be assessed on their consolidated learning at the mid-point of the medical program. This unit provides 150 hours of student load to facilitate meaningful reflection and prepare for major mid-point barrier assessments.

#### Research

In Year 2, research training will be delivered as part of the common longitudinal program, and within MEDI923. The research content of this unit will be focused upon skill development required to design and develop a specific research project plan, and it will include the equivalent of five days of research-related learning (30 hours).

Students will select from three streams: quantitative methods, qualitative methods, or clinical research depending upon the nature of the particular research project they have selected to undertake in Year 3 and 4. The five research areas offered to the students will be safety and quality, health care systems, clinical practice, public health and medical education.

## Stage Two

Years 3 and 4 represent work-integrated learning commonly referred to in medical education as clinical clerkships. A range of prescribed, selective and elective clerkships are proposed. In Year 3, all clerkships are designed as 4-week modules, which are combined into 20 or 24-week units of study. The Year 3 units are prescribed, with students rotating through the core clinical disciplines. Clerkships in Year 4 offer a large degree of flexibility, both with respect to student choice in the clinical disciplines, to experiences, and to the physical location in which these experiences occur.

#### Year 3: Core Clinical Placements

Year 3 will comprise a series of core clinical clerkships, each of 4-weeks duration, in the clinical disciplines of Medicine, Surgery, Paediatrics, Obstetrics and Gynaecology, Primary Care and Mental Health. Students will undertake two rotations through each of the core clinical placements in both Australia and India, with the exception of Mental Health which will only be undertaken in Australia.

In MEDI933: Core Clinical Placements B, students will undertake each of the following six core clinical placements in Australia (24 weeks duration):

- Internal Medicine: 4 weeks at MQ Health in clinical placements that include Cardiology, Respiratory Medicine, Neurology, Gastroenterology/Liver, Endocrine and Diabetes, and Cancer Medicine.
- Surgery: 4 weeks at MQ Health in clinical placements that include Colorectal and Upper GI Surgery, Orthopaedic Surgery, Cardiothoracic Surgery, Urology, and Neurosurgery.
- Paediatrics: 4 weeks at Northern Sydney Local Health District (NSLHD).
- Obstetrics and Gynaecology: 4 weeks at NSLHD.
- Primary Care: 4 weeks at MQ Health. Opportunities for students to undertake clinical placements in rural primary care practices will be pursued but these affiliations are yet to be established.
- Mental Health: 4 weeks at NSLHD plus opportunities at the MindSpot Clinic at Macquarie University.

In MEDI932: Core Clinical Placements A, students will undertake each of the following five core clinical placements at the Apollo Hospital Group in Hyderabad, India (20 weeks duration):

- Internal Medicine: 4 weeks at Apollo Hospital, Hyderabad in clinical placements of General Medicine with opportunities for experience in a range of Internal Medicine subspecialties.
- Surgery: 4 weeks at Apollo Hospital, Hyderabad in clinical placements of General Surgery with opportunities for experience in a range of surgical subspecialties.
- Paediatrics: 4 weeks at Apollo Hospital, Hyderabad.
- Obstetrics and Gynaecology: 4 weeks at Apollo Hospital and Apollo Cradle, Hyderabad.
- Primary Care: 4 weeks at Apollo Hospital, Hyderabad in clinical placements in the Hospital Emergency Department and Preventative Medicine setting.

Student groups undertaking parallel clinical placements in similar disciplines in India and Australia will compare their experiences through technology aided self-reflection and online communities of practice. Synchronous and asynchronous online discussions and tutorials will enable comparative discussion of experiences and reflection on cultural difference, medical practice and health systems across the two settings.

The team accepts that the clerkship model of clinical learning is experiential by its nature and thus variable in the particular clinical cases encountered by different students. The clerkships in Medicine, Surgery and Primary Care will have no set cases as the purpose is learning the key tenets of the broader clinical discipline including the approach to clinical assessment, reasoning and management, regardless of the particular case mix.

The attachments to General Medicine at Apollo Hospital in Hyderabad will expose students to a range of tropical diseases that they would rarely, if ever, encounter in Australia. With a total of eight weeks experience in each of these core disciplines on two separate occasions, combined with sharing cases of all students attached to that particular discipline through the communities of practice initiative, the team agrees that students will encounter a rich range of experiences across two different countries.

For clerkships in Paediatrics and, Obstetrics and Gynaecology, the program plans to organise a more structured 8-week experience to ensure students undertake learning in common health problems encountered in these disciplines. Further development work will be undertaken on these Year 3 placements in Paediatrics and Obstetrics and Gynaecology, and the team will be interested in updates on these initiatives.

The final component of Year 3 will be a year-long MEDI931: Research Project 1 in which 150 hours of student load is allocated to undertake a group research task. Students will work in pairs to develop and finalise a research question, plan and undertake the research projects.

#### Year 4: Advanced Clinical Placements

During Year 4, all students will undertake the following clinical clerkships in Australia (16 weeks duration):

- Emergency Medicine: 4 weeks at NSLHD.
- Selective clerkships: 4 weeks at MQ Health, NSLHD and/or MindSpot Clinic.
- Selective clerkships: 4 to 8 weeks at MQ Health, NSLHD and/or MindSpot Clinic.

During Year 4, all students will undertake the following clinical placements in global settings (16 weeks duration):

- Selective clerkships: 4 to 8 weeks at Apollo Hospital, Hyderabad, India.
- Elective: 8 weeks (student-initiated).

Year 4 continues the clinical clerkship model, but the key difference compared to Year 3 is a much greater degree of flexibility and student choice in assembling the particular clinical experiences to be undertaken, and the timeline in which the requisite 32 weeks are completed.

The only prescribed module is a 4-week clerkship in Emergency Medicine, which will be undertaken in Sydney at a hospital within the NSLHD. Students will be able to choose from a menu of selective clerkships available within MQ Health, the NSLHD, or Apollo Hospital of either 4 or 8-weeks duration, plus undertake an elective of 8-weeks duration which is student-initiated and organised.

The team commends the Faculty's partnerships with Apollo Hospital, the MindSpot Clinic and NSLHD to provide clinical experiences. In working with NSLHD, the Faculty has engaged with the University of Sydney, resulting in a collaborative relationship.

Students will finalise and present their research projects, in partnership with Doctor of Physiotherapy students as part of an Interprofessional Research Symposium, offering a good opportunity for interprofessional learning.

Detailed curriculum mapping is planned to include all learning activities, and each activity will have a set of learning objectives following the overarching format of capability – aspect – activity learning outcome. The team recognises that the first level of curriculum mapping for Year 1 has been achieved and commends the interactive searchable map. As noted at Standard 3.4, the team looks forward to reviewing a more detailed map including specific learning objectives for Year 1.

Progress on curriculum content for Year 2 includes identification of cases for case-based tutorials in consultation with the Year 1 group, and development of draft learning outcomes for each week/case. A draft of the bedside teaching schedule has been developed and an example case developed. The team recognises that the Year 2 curriculum is now in development, and looks forward to receiving the learning objectives as referenced at Standard 3.4.

## 2019 team findings

The Program defines 4 Graduate Capabilities (divided into 8 Aspects) and 31 Graduate Capability Expectation Statements that are consistent with and mapped to the AMC outcomes. The Faculty have deliberately included Engaged Global Citizen as a primary capability in recognition of the Year 3 placement in India.

Learning in all four of the Capabilities occurs throughout the course and are integrated. However, each year has a distinct focus. In Year 1, the applied medical science units focus on normal systems with content from the six science discipline areas: anatomy, histology, cell biology and embryology; biochemistry and genetics; microbiology and immunology; pathology; pharmacology; physiology.

The clinical practice units introduce students to the principles underpinning the clinical practice of medicine (communication, history taking examination and early procedural skills) in a controlled environment. In the interprofessional units, students learn how to formulate clinical questions about diagnosis, prognosis and treatment, and locate and critically appraise relevant

high-quality evidence. The students develop foundation knowledge, skills and attributes necessary for working in an interprofessional environment.

In Year 2, students cover Primary Care, Wellbeing and Cancer; Musculoskeletal; Neurosciences and Ageing; Cardiovascular, Respiratory, Gastroenterology, Surgery and Metabolism; Critical Care, Anaesthetics, Patient Safety & Quality and Research. Integrated in this learning is a wide variety of supervised clinical experiences at both the Faculty, MQ Health and suburban GP practices.

Year 3 comprises a series of core clinical clerkships, each of 5-weeks duration, in the clinical disciplines of Medicine, Surgery, Paediatrics and Obstetrics and Gynaecology. Primary Care is embedded longitudinally across the 20-week block with students placed with the same general practice to undertake 1-day of Primary Care each week. Students undertake two rotations through each of the core clinical placements, one in Australia and another in India. In this year, Primary Care is only covered in Australia, with Emergency Medicine and Preventative Health covered in India given the different models of care. Students will also participate in a research project one day a week.

Year 4 continues the work-integrated learning with students undertaking core clinical clerkships in Emergency Medicine for 4 weeks, and Mental Health for 4 weeks. Students complete two Selective clerkships, each of eight weeks duration. Students will also complete eight weeks of elective clerkships of either 4 or 8 week's duration. Students also complete the research project and presentation.

The team recognises the vast amount of effort put into mapping the learning outcomes against the Capabilities, Expectation Statements, EPAs, learning activities and assessment activities and that the current focus is on delivery of Year 3 in both Australia and India.

The team welcomes the learning guides, specific learning outcomes, and site specific rosters for all clinical placements for delivery in Year 3.

There are, as yet, no details on the Year 4 Mental Health rotations or where they will be delivered. Emergency care is proposed to be delivered at RNSH, but no details are provided to date. These must be provided soon.

## 3.3 Curriculum design

There is evidence of purposeful curriculum design which demonstrates horizontal and vertical integration and articulation with subsequent stages of training.

## 2017 team findings

The curriculum has been purposefully designed, with horizontal and vertical integration embedded in the program. The curriculum is team and case-based. The Year 3 and 4 clinical clerkship model articulates well with the expectations of prevocational training. The final assessments in the program will focus on entrustment decisions in relation to the EPAs, to provide assurance that graduates are ready to contribute effectively as hospital interns in Australia.

The medical program has been designed by defining the learning outcomes of the program, developing assessment tasks that measure achievement of the stated outcomes, followed by development of content and pedagogical approaches. The team notes the staff involved in curriculum development are highly enthusiastic, skilled and engaged in the process.

A set of guiding pedagogical principles (Enhance-Extend-Empower-Entrust) have been devised to assist Stage Committees and Curriculum Working Groups with learning design. The clinical colloquium and team-based and case-based learning provide for integration across the applied medical science units and clinical practice units.

The case-based learning in Year 2, using twelve common themes across the three, 12- week units of teaching allows for further integration.

Longitudinal learning in Year 2, the long-term research project and the programmatic assessment practices provide integration opportunities.

The communities of practice concept will facilitate comparative case-based tutorials between students working in India and Australia in Year 3. This approach will facilitate a wealth of learning opportunities, including conversations regarding differences in health care systems and clinical presentations and management. As noted at Standard 8.4, the team commends the Faculty on the relationship with Apollo Hospital and recognises the wealth of learning that is possible during this clinical placement.

An Integration Team, comprised of members of the Year 1 and 2 groups and discipline or aspect leads, will have a role in program development and integration across the years and the various sites of student learning. The AMC team recognises the innovative nature of an Integration Team and its ability to communicate effectively and efficiently the extent and depth of discipline components in various years of the curriculum.

The enthusiasm, expertise and collaborative interaction between discipline and academic leaders, clinical staff and members of the various committees is impressive.

## 2019 team findings

The curriculum is designed, with horizontal and vertical integration. This is achieved in a number of ways:

- The overriding emphasis on EPAs, Expectation Statements and Capabilities in all curriculum development, rather than the content being the driver.
- The units are designed to horizontally integrate disciplines rather than be single discipline units.
- The teaching approaches such as Clinical Colloquia, bedside teaching, and team-based learning (TBL) are by nature integrated.
- Assessments test integrated knowledge.
- The large number of clinical experiences are integrated in nature.
- There are a number of themes, such as Indigenous Health, and patient Safety and Quality that are revisited and built upon each year.
- The governance structure of the Faculty has representation from the various disciplines as well as the Unit, Year and Stage Leads in all committees.

The Faculty's approach to developing, embedding and delivering a well integrated curriculum is commendable.

## 3.4 Curriculum description

The medical education provider has developed and effectively communicated specific learning outcomes or objectives describing what is expected of students at each stage of the medical program.

# 2017 team findings

The Faculty will employ a range of methods to communicate the graduate capability framework (including the capabilities, aspects and expectation statements) and the unit learning outcomes, to students and relevant staff.

All information about the medical program will be published in the MD Program Handbook, which will include information about the program structure, graduate capabilities, the program philosophy, year by year and stage by stage information about the units, timetables, unit and programmatic assessments and links to key policies relevant to students. The team reviewed a draft of the MD Program Handbook, and look forward to any updates of this. Unit Guides, which will contain unit specific information, will be released online two weeks before the start of the study period in 2018, in line with University policy.

An interactive website with information about the program, including a detailed curriculum map outlining the structure of the curriculum is available. Year 1 units have unit outcomes attached. However, learning objectives for all teaching sessions have not yet been developed, and are required for assessment blue printing. As noted at Standard 3.3, the team requests the program complete work on specific learning objectives for Year 1 and Year 2.

# 2019 team findings

The Faculty has developed learning objectives for Stage 1 (Year 1 and 2) of the course. These learning objectives map to the learning activity, unit and theme (body systems in Year 1 and longitudinal themes in Year 2). The Faculty employs a range of methods to communicate the Graduate Capability Framework, including the Capabilities, Aspects and Expectation Statements, the EPA Framework, the unit learning outcomes and learning objectives for each learning activity and assessment activities to students. These include the course handbook and unit guides. The learning management system (LMS), iLearn, also houses the information. A PowerPoint slide template is used to communicate learning objectives to students at the start of each learning activity including case-based learning sessions. Formal and informal communication sessions with students are well received.

Students and staff have commented they understand the Capability, Expectation and EPA Framework and are clear about what is expected of them.

# 3.5 Indigenous health

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

# 2017 team findings

The Indigenous Health curriculum is in the early stages of development. A Faculty-level Indigenous Strategy Committee will be charged with developing the Indigenous Health curriculum for the medical program.

It is anticipated that the students will have the opportunity to learn about Indigenous Health through rural and outer urban Aboriginal Medical Service visits, and GP settings.

The team commends the open communication with staff from Walanga Muru and looks forward to reviewing a curriculum map outlining the various components of Indigenous Health content.

# 2019 team findings

Since the previous AMC assessment, the Faculty has developed a map of the Indigenous Health Curriculum (IHC) that was endorsed by the University's Pro Vice-Chancellor (Indigenous). The map is to be embedded across the Program. The curriculum map includes:

- Learning of Indigenous cultural awareness, respect, and cultural responsiveness in interactions with Aboriginal and Torres Strait Islander peoples.
- Understanding key aspects of history and culture and their connection to current health problems affecting Aboriginal and Torres Strait Islander peoples.
- Strength-based knowledge and communication as important counters to problem-based perspectives of Aboriginal and Torres Strait Islander health and peoples.
- Communication sessions (incorporated into specific masterclasses; delivered as part of relevant core skills tutorials focussing on the key features of culturally appropriate history taking).
- Various interactive workshops provided as part of the Year 2 longitudinal lecture series (privilege and its impacts on wellbeing of Aboriginal and Torres Strait Islander peoples; Closing the Gap case study; issues and challenges in health care access).
- Experiential learning provided through two workshops with a panel of Aboriginal and Torres Strait Islander peoples.

The new Senior Lecturer in Indigenous Health Education works closely with Walanga Muru to engage students and staff and create a community of learning. There are some concerns that the time allocation may not be sufficient to develop the internal and external relationships required to establish an integrated Indigenous Health curriculum and clinical placements. This should be monitored and additional support allocated if required.

The University has launched a cultural safety training program, Manawari, for all staff. The Faculty is commended for the participation of a large proportion of its staff in this (64) and its aim to train all staff. The University is developing a student-version of the training that will be available in early 2020.

## 3.6 Opportunities for choice to promote breadth and diversity

There are opportunities for students to pursue studies of choice that promote breadth and diversity of experience.

# 2017 team findings

Students will be offered opportunities for breadth and diversity of learning during their research project. The projects, which will be presented in an interprofessional research symposium with the Doctor of Physiotherapy students, will also promote interprofessional learning and the team recognises the strengths of this approach. The program will also offer a variety of student initiated learning opportunities during clinical placements.

Selective and elective terms in Year 4 will provide opportunities for breadth and diversity of experiences and the team looks forward to receiving further details of these activities.

#### 2019 team findings

Students are able to choose from a list of developed research project topics. Students have commented they would like the list expanded to include more clinical research options.

Year 4 is the key opportunity for students to pursue choice. This will occur in Selectives and Electives. Electives are student initiated and negotiated but the students will be supported by a placement process and guide.

Selective clerkships are those offered by affiliated partners of the Faculty and must be quality assured. Students can choose placements with clinical partners, or at a range of locations experiencing global, rural, or Indigenous health experiences. There are some MOUs signed with partners for Selective options.

The Selective and Elective placements in Year 4 are still being developed. The students will need this information in early 2020 to commence their planning. More detail on both these placements including options, specific outcomes, learning guide and placement processes will be required.

#### 4 Learning and teaching

#### 4.1 Learning and teaching methods

The medical education provider employs a range of learning and teaching methods to meet the outcomes of the medical program.

#### 2017 team findings

The Faculty plans to use a wide range of learning and teaching methods across the curriculum to optimise learning and provide vertical and horizontal integration.

The Faculty's educational philosophy emphasises a technology-enhanced blended learning approach featuring a variety of teaching methods, examples being the Clinical Colloquium/teambased learning, the flipped classroom and clinical assessments. The team was impressed by the work of the Faculty's learning and design team who, in collaboration with subject matter experts, provide impressive and innovative learning and teaching items.

Given the focus on curriculum development in Years 1 and 2, firm details of all teaching and learning activities in Years 3 and 4 are still to be concluded. There is a commitment to continue the teaching and learning of clinically relevant medical sciences, although the exact format of this is still to be developed.

The use of a detailed curriculum map will play a major role in ensuring quality in the delivery of the spiral curriculum. As noted at Standard 3, the team acknowledges the mapping is under development and requests updates on progress.

#### 2019 team findings

The Faculty employs a range of learning and teaching methods which are chosen to align with their Capability and Stage Expectations.

In Stage 1, the Program delivers face-to-face content lectures, tutorials, laboratory practicals, masterclasses, clinical skill tutorials and Clinical Colloquia. The Faculty embraces online learning with an extensive suite of modules (76) made available to all students throughout the duration of the Program. This Connected Curriculum is scaffolded by level of difficulty for the students to use at any time.

The Clinical Colloquia utilizes technology for case-based learning approaches and team-based learning. The logbook and portfolio are designed to make the connection between assessment and learning easier for the students to understand and the staff to track. The Faculty plans to use Microsoft Teams to support the research collaboration between students and supervisors, which will assist students on their rotation in India.

Clinical experiences are embedded from the very early stages of the Program. Year 1 clinical experiences are delivered in simulated environments and with simulated patients. Real patients are seen in the Masterclasses and the HAWC program. Year 2 clinical experiences occur in bedside tutorials, skills tutorials, primary care, outpatient clinics, ward time and procedural settings such as ambulatory care, operating theatres and day surgery suites.

In Years 3 and 4, the Faculty has adopted a clinical clerkship model in clinical placements. These placements will be primarily located at MQ Health, RNSH and Apollo Hospital. An integrated research project component is initiated in Year 3 following tailored research training in Year 2.

Selectives will be provided by the Faculty as a quality-assured menu of options for student preferencing and Electives will be self-directed.

# 4.2 Self-directed and lifelong learning

The medical program encourages students to evaluate and take responsibility for their own learning, and prepares them for lifelong learning.

# 2017 team findings

Students will have a combination of structured and student-directed learning opportunities throughout the program.

The proportion of teacher-led learning is highest in Year 1 (46% of student hours), and gradually reduces across year levels (i.e. 29% in Year 2 and  $\sim$ 13% in each of Years 3 and 4) consistent with a shift to more self-directed student-led and experiential learning, which are the dominant modes in Years 3 and 4. This shift across the program aims to encourage students to evaluate and take responsibility for their own learning, and to prepare them for lifelong learning.

Over the whole program, 40% of learning is student-directed. The addition of a large proportion of experiential learning and the use of reflective writing in an e-portfolio will provide opportunities for developing self-directed learning skills. All students will have a portfolio mentor who will guide the student and assist in reflection. The mentor will be reviewing up to six students a year, allowing for a team of students (up to 24) per mentor, to support each other.

# 2019 team findings

The Program has been designed to ensure students take responsibility for their own learning and develop core lifelong learning skills that can be used in both their professional and personal lives.

This is achieved in the course through teaching approaches such as TBL, the flipped classroom and active lectures. Bedside tutorials, small group teaching and the introduction of early placements with real patients encourage students to take responsibility for their learning.

The placement in India will encourage students to develop self-awareness and self-responsibility and the transnational learning experiences will encourage them to reflect on their learning.

Reflective practice is embedded in the Program and in the assessment process through the Capability Expectation Statements, Reflective Medical Practice units and the portfolio and logbook. Feedback is provided and built into this process.

The Program encourages students to evaluate and take responsibility for their own learning, and prepares them for lifelong learning.

# 4.3 Clinical skill development

The medical program enables students to develop core skills before they use these skills in a clinical setting.

# 2017 team findings

The program provides graded staging of learning, with increasing levels of clinical responsibility.

The Enhance-Extend-Empower-Entrust paradigm is used by the Faculty as the framework for developing integration and a step-wise approach to increasing the level of knowledge required before students are entrusted with using skills in a clinical setting.

One of the strengths of the Macquarie medical program is that student learning will occur within an active clinical facility.

In Year 1, students learn clinical skills in controlled and safe environments. The inclusion of a structured simulated-patient program, including use of the simulation laboratory in clinical skills sessions, will enable students to acquire and practise these skills in a safe and supervised environment in preparation for the clinical years. Clinical skills tutorials with clinical tutors will also assist in the acquisition of skills.

In Year 2, students will spend a minimum of eight hours/week interacting with real patients within MQ Health's hospital and clinics. The clinical interactions will be relatively structured and based around a weekly theme and set of clinical presentations. The team noted this year of scaffolded clinical learning is an appropriate approach to prepare students for the more independent clinical learning planned in the Stage 2 clerkships.

In later years, students will have the opportunity to develop and practise their clinical skills in authentic clinical settings with appropriate supervision and support. The program proposes extensive student clinical contact with patients.

# 2019 team findings

The teaching of clinical skills in Stage 1 (Year 1 and 2) of the course involve a combination of weekly specialist-led masterclasses, clinical skills sessions and regular peer practice. The clinical practice rooms are available for students supported by a Clinical Skills Development Coordinator. These sessions focus on communication, history taking and systematic physical examination of normal systems. In Year 2, clinical teaching transitions to a bedside teaching model utilising a variety of real clinical settings, including primary care, inpatient and outpatient settings. The focus is on recognition and diagnosis of abnormal history and examination findings. The Program enables students to develop core skills before they use these skills in a clinical setting.

The planned teaching of clinical skills in Stage 2 (Year 3 and 4) occurs on clinical placements and is facilitated by a clinical supervisor. Learning includes procedural components and management plans.

# 4.4 Increasing degree of independence

Students have sufficient supervised involvement with patients to develop their clinical skills to the required level and with an increasing level of participation in clinical care as they proceed through the medical program.

## 2017 team findings

The team is confident that students will be afforded appropriately staged involvement with patients that will safely develop their clinical skills. Small group bedside teaching in Year 2 allows the students to interact with real patients in a structured and supervised environment.

Students will have an opportunity to follow a patient from consultation through to treatment and discharge in MUH. This experience allows the student to develop professional relationships with both patients and their families, and develop a holistic understanding of the patient and their needs. The team acknowledges this innovative and valuable learning experience.

# 2019 team findings

Students move from a program of clinical skills development within the classroom setting where learning occurs from a tutor, peers and simulated patients (Year 1), through a systems-based clinical skills program with a bedside tutor or primary care specialist in a variety of clinical settings in Year 2. Stage 2 incorporates a model of supervision by clinicians in a variety of settings in Australia as well as at Apollo Hospital, where it is envisaged progressively less supervision and direction will be provided. Students are encouraged to take more responsibility for their learning as they progress through the Program. Both formative and summative assessment tasks are aimed at the level of skill development of the Stage and aligned with Expectation Statements.

Clinical staff at MQ Health provide significant input into the Program and having teaching as a pillar and condition of employment at MQ Health to strengthen this is commendable. This provides a significant pool of teachers and supervisors allowing students to develop their clinical skills to the required level and with an increasing level of participation in clinical care as they proceed through the medical Program.

# 4.5 Role modelling

The medical program promotes role modelling as a learning method, particularly in clinical practice and research.

## 2017 team findings

The MQ Health core purpose, Heal Learn Discover, represents a culture that places equal importance on teaching, research and clinical care and as a result creates the ideal environment for positive role modelling opportunities.

The strategic goals of MQ Health underpinning this core purpose are:

- 1 Integrated organisation Build an organisation that is capable of and committed to achieving the vision of an integrated academic health sciences centre.
- 2 Patient centred academic culture and identity Create an academically driven organisational culture that promotes and differentiates MUHSC to internal and external constituencies.
- 3 Signature clinical services Develop signature clinical programs and services that attract patients from across Australia and beyond.
- 4 Distinctive educational programs Design undergraduate and postgraduate educational programs that leverage our unique capabilities.
- 5 Impactful research Expand and develop biomedical, clinical, translational and health systems research towards improved health outcomes.
- 6 Synergistic partnerships Partner with industry, other academic institutions, government organisations and the community to advance research, education and clinical care.

As noted in Standard 1, the team recognises MUCA's innovative employment model which enables clinicians to become role models in the domains of clinical care, research and teaching.

## 2019 team findings

Students are fortunate to be learning in close proximity to the work place of their teachers and supervisors. The majority of the clinical teachers are MQ Health general practitioners or consultants who begin role modelling in their clinical skills and communication tutorials, masterclasses, bedside teaching or clinical colloquia. This allows students to practice and receive feedback in a safe environment to gain competency and independence, be mentored and observe

role models in clinical settings. Similarly, the research project, which is started at the end of Year 2, continues through Year 3 and is finalised in Year 4, is supervised by experienced researchers, including many associated with the Australian Institute of Health Innovation (AIHI), providing an opportunity for role modelling in this capability area.

# 4.6 Patient centred care and collaborative engagement

Learning and teaching methods in the clinical environment promote the concepts of patient centred care and collaborative engagement.

# 2017 team findings

The concept of patient centred care is embodied in the program's vision: To educate medical students in environments where learning is fully integrated with outstanding patient-centred clinical care and active health and medical research, and to create the nation's first global medical program for Australian and international students.

The curriculum design is informed by, and effectively supports, this vision, and the purpose of the program which is to educate medical students in an environment that integrates outstanding patient-centred clinical care and active health and medical research.

# 2019 team findings

Patient-centred care is promoted through the Capability Framework, the teaching and learning methods and the assessment approaches. Students are exposed to patient-centred care as a core Faculty value during small group teaching in clinical skills tutorials, Masterclasses with a real patient, bedside tutorials, and the HAWC program. During clinical placements in Year 2, this concept is reinforced in the clinical environment. The Faculty envisages this will continue in Stage 2.

Further to the clinical experience, the students engage in a series of learning sessions about ethics, patient safety and quality and clinical governance within health systems. The research projects have a focus on issues relevant to health systems, patient safety and quality or clinical research. This is one of the strengths of the curriculum and promotes the concepts of patient-centred care and collaborative engagement.

## 4.7 Interprofessional learning

The medical program ensures that students work with, and learn from and about other health professionals, including experience working and learning in interprofessional teams.

## 2017 team findings

Medical students will participate in evidence-based and interprofessional health care units (MEDI912 and MEDI915) with first year Doctor of Physiotherapy students. This approach represents a significant commitment to incorporate interprofessional education into the Faculty's two Masters (Extended) programs.

The presentation of the research projects within the medical program will be undertaken with the Doctor of Physiotherapy students, an opportunity which will promote interprofessional learning. The team recognises the strengths of this approach.

The Health and Wellbeing Collaboration (HAWC) program provides another opportunity for interprofessional learning. In Year 1, students engage in independent student-initiated interaction

with a volunteer member of the community with a health issue. The project has run successfully for the last five years in the physiotherapy program, and will be expanded to include medical students.

The team applauds the proposed dedicated space which would allow physiotherapy and medical students to interact with patients.

## 2019 team findings

Macquarie MD students experience and learn about healthcare teams, including interprofessional teams in the classroom or the clinical setting through content delivered by a variety of health professionals. They are required to document and reflect on experiences against Capability and Expectation Statements. The Faculty hopes that in Stage 2, Macquarie MD students will interact more closely with clinicians and have the opportunity to be part of interprofessional clinical teams during their placements in Australia and Apollo. Opportunities for interprofessional learning should be formally embedded where possible in Stage 2 of the Program.

The only formal interprofessional learning occurs in Year 1. The Macquarie MD students complete an evidence based and interprofessional healthcare unit with physiotherapy students. The MD student feedback indicates this unit may benefit by further adaption to the expectations of the Program. Expanding interprofessional learning to include other health professional groups beyond the physiotherapy cohort will be beneficial.

## 5 The curriculum – assessment of student learning

#### 5.1 Assessment approach

- 5.1.1 The medical education provider's assessment policy describes its assessment philosophy, principles, practices and rules. The assessment aligns with learning outcomes and is based on the principles of objectivity, fairness and transparency.
- 5.1.2 The medical education provider clearly documents its assessment and progression requirements. These documents are accessible to all staff and students.
- 5.1.3 The medical education provider ensures a balance of formative and summative assessments.

#### 2017 team findings

The Faculty has developed an assessment framework based on:

- Assessment of learning
- Assessment for learning
- Assessment as learning.

The Faculty has outlined their assessment philosophy and strategy, which aligns with the University's Assessment Policy. The Faculty will use a program level design approach to the development of assessment which will facilitate integration and balance of assessment tasks across the medical program.

The Faculty will focus primarily on capability-based assessment using a mix of unit and programmatic assessment. The capability-based assessment, which relies on the use of Entrustable Professional Activities (EPAs), is linked to the medical program's graduate capability framework. This framework is structured into four capabilities: Scientist and Scholar; Clinical Practitioner; Engaged Global Citizen; and Professional. Mid-program and graduation expectation statements have been mapped to specific EPA's in the medical program capability framework, and this work has been provided in the program's submission.

The program's proposed progression rules are described in terms of progression across the program and are supported by the University's General Coursework Rules.

The Faculty will adopt the University's five-point grading scale (i.e. High Distinction / Distinction / Credit / Pass / Fail), for reporting most Year 1 and Year 2 (Stage 1) units, with associated descriptors which have been specifically designed for the medical program.

Clinical units in Years 3 and 4 (Stage 2) will be assessed on a Pass / Fail basis. Within each unit capability-based assessment tasks will use a four-point grading scale (i.e. Pass+ / Pass / Pass- / Fail) with relevant descriptors. Students who fail a hurdle assessment task will be given the opportunity of supplementary assessment. Students who fail a unit will be required to successfully repeat the unit before proceeding to the next year level. Students who fail a unit at a second attempt will exit the program. This process aligns with Macquarie University policies and rules.

There will be no need to synchronise assessment between India and Australia as the only major assessment task will be the end of Year 3 OSCE, which will be held in India and Australia using different stations.

The Faculty will use an electronic portfolio to assess longitudinal learning of the students across the four years of the program. The portfolio will be regularly reviewed and assessed by a portfolio

mentor who will oversee students at each year level. Over time, this will facilitate the development of a community of practice with vertical peer mentoring.

The Faculty provided an assessment blueprint which indicates an extensive range of both summative and formative assessment across Stages 1 and 2. All major summative assessments will also be offered in a low-stakes formative format before being used for summative purposes.

## 2019 team findings

The assessment philosophy of the Faculty is towards frequent formative assessments. All assessments, including Objective Structured Clinical Examinations (OSCEs) and integrated examinations, are entered into a portfolio. The formative assessments are also considered as summative assessments, during the review of the portfolio, which occurs late in Stages 1 and 2. Students are able to seek an informal review and gain feedback about the overall portfolio as preparation for these major summative assessments. The portfolio can be viewed in multiple ways, such as an EPA progression view, or as an OSCE summary. The Faculty is encouraged to evaluate the authenticity of portfolio entries, the usefulness of reflection, and the degree to which the medical students make meaning, and take appropriate actions as a result of portfolio activities.

Evaluation of the portfolio, that provides insights into the authenticity of portfolio entries, the usefulness of reflection, and degree to which the medical students make meaning of this and take appropriate actions, may be beneficial.

The assessment design has established related assessments across Year 1 and 2, across the clinical areas, and between Stage 1 completion and Stage 2 completion. The assessment aligns with learning outcomes, although the first cohort of students is yet to complete Stage 1, and will enter Stage 2 of the Program in 2020. The MD Program aims for multiple episodes of observation and feedback based around Direct Observed Procedural Skills (DOPS) and Mini Clinical Evaluation Exercise (mini-CEX), which should be combined with bedside tutor observation and in-training assessment (ITA) reports. The EPA framework sits "above" the formative assessments and can be applied within the clinical unit rotations, which may also have specific learning outcomes related to the discipline – at the time of accreditation visit, detail was lacking for many clinical terms. Observer training and rubrics should assist with formative assessments. Training has been provided in both Australia and India. Major integrated examinations have not yet been held.

Progression requirements are comprehensively documented and are accessible by students. The Fitness-to-Practice professionalism policy and procedures complement the academic progression policy. Student progression requires satisfactory academic and professionalism performance.

## 5.2 Assessment methods

- 5.2.1 The medical education provider assesses students throughout the medical program, using fit for purpose assessment methods and formats to assess the intended learning outcomes.
- 5.2.2 The medical education provider has a blueprint to guide the assessment of students for each year or phase of the medical program.
- 5.2.3 The medical education provider uses validated methods of standard setting.

## 2017 team findings

The Faculty will use a broad range of assessment tools across the curriculum, including written examinations, practical examinations, Objective Structured Clinical Examinations (OSCEs),

clinical assessments including case reports, MiniCEX and Direct Observed Procedural Skills (DOPS), as well as a portfolio and Entrustable Professional Activities (EPAs).

The Faculty plans to modify and adapt existing EPA frameworks from the Association of American Medical Colleges (AAMC) to suit the Australian context, and the level of the medical program. It is anticipated that the Chen et al. *Developing EPAs for entry into clerkship* and the AAMC's *Core EPAs for Entering Residency* will be adapted, creating mid-program and graduate EPAs respectively. The Faculty intends to incorporate the EPAs into the medical program's assessment scheme. The final assessments in the program will focus on entrustment decisions in relation to the EPAs, to provide assurance that graduates are ready to contribute effectively as hospital interns in Australia, while the assessment of the capabilities will assure that they are ready to direct their own development as ethical, culturally responsive and reflective professionals in whatever field of medicine they choose, and in whatever global context they practice. The use of EPA's for capability-based assessment in a medical program is innovative and the team will be interested in further updates about their implementation and performance.

The Faculty has deliberately reduced reliance on single high stakes examinations. Key progression decision points are made mid program (i.e. at the end of Stage 1) and at the end of the program (i.e. at the end of Stage 2). The end of Stage 1 assessment will include a summative 12 station OSCE and a Portfolio examination.

While the Stage 1 assessment has been clearly articulated, more work is required on developing the strategy for Stage 2. The team requests evidence that work is progressing on the Stage 2 assessment strategy.

The team looks forward to a second update on the Stage 2 assessment blueprint as further development leads to completion of the blueprint.

The Faculty will use validated standard setting methods where they are indicated. This will depend on the type of assessment task. Consistency across sites will be important given the significant number of students based in India in Years 3 and 4. In particular, the training of OSCE examiners will be important given that this will be the major form of assessment in Year 3 clinical sites. This process will be facilitated by regular faculty exchange and calibration between Apollo and Macquarie University will occur by regular tele-/video-conferencing.

## 2019 team findings

Year 1 utilises examinations, OSCEs, MCQs, group work and logbook reflections with presentations for Evidence Based Healthcare and Interprofessional Learning units. These are numerically graded. DOPS and mini-CEX are to be satisfactorily completed. The Health and Wellbeing Collaboration (HAWC) program is assessed in Year 1 via a seminar presentation; reports and reflections; an infographic based on their experiences and a log book which details activities relating to their experiences. The four clinical blocks each use the same approach: case reports, oral examination, quiz and logbooks including learning plans. Mini-CEXs and DOPS are required. Preparation for the research project commences within this block. Year 2 concludes with formal portfolio assessment and integrated examinations. Students noted that the mid- and end- of semester summative medical knowledge examinations caused some distress as this content is only assessed once and that improvement related to areas of deficit may not be easily achieved.

Year 3 has allocated significant time to the Research Project. The Core Clinical Placement Units A and B have five clinical discipline projects, log books and learning plans, Teamwork Mini-Clinical

Evaluation Exercise (TMEX) and OSCEs, all numerically coarse graded. Five mini-CEX and DOPS are also required. While OSCEs are undertaken mid-year and at the end of the year, there is no summative end-of-year examination. The guides to Paediatrics, Obstetrics & Gynaecology and Primary Care (GP) detail the many assessments related to these rotations. In-training Assessments (ITAs) are also required and are given more significance in this immersive clinical year. The assessment load in Year 3 appeared to be demanding for students. It would be appropriate for the Faculty to review this load after the completion of one-cycle.

The Research Project is completed in Year 4. Assessment of the advanced clinical placements includes case reports, logbooks inclusive of learning plans, TMEX and capability and EPA assessments. The last of these assessments was not well defined. The Faculty indicates that details around the Year 4 assessments may change, subject to review of the first iteration of Year 3 in 2020, and the major Selective/Elective components of Year 4. Major integrated examinations, mini-CEXs and DOPS should be considered prior to Year 4 in order to relieve some of the emphasis on Year 4 assessment, and allow opportunities for remediation if required.

The connection between the results of mini-CEX, DOPS, OSCEs and other tasks to the graduate EPAs to be completed, are aligned at a level of having a 'supervisor available to assist', rather than completely independent activity. This conceptually facilitates MD graduate capability development through reflective practice.

There are modified EPA constructs for the end of Stage 1, including the derived rather than holistic assessment of EPAs. Stage 2, which is yet to be implemented, appears to be similar. Gaining further assessment expertise related to WBAs, including EPAs, would assist with this implementation. Assessment blueprinting could be further developed over the next two years as the first cohort completes the Program.

Only minimal use of validated standard setting was mentioned. Some modified Anghoff standard setting has been trialled, but not employed. There is benefit in gaining additional advice to support the development of rigorous standard setting. The appointment of an assessment lead, with expertise in assessment modalities would be beneficial.

#### 5.3 Assessment feedback

- 5.3.1 The medical education provider has processes for timely identification of underperforming students and implementing remediation.
- 5.3.2 The medical education provider facilitates regular feedback to students following assessments to guide their learning.
- 5.3.3 The medical education provider gives feedback to supervisors and teachers on student cohort performance.

## 2017 team findings

The Faculty has appropriate remediation and exclusion policies which align with Macquarie University policies and rules.

Plans are in place to appoint a clinical lead at the Apollo Hospital, and this role will be finalised once the details for Stage 2 of the program are more developed and the contract between Macquarie University and Apollo Hospital has been signed, as noted in Standard 1. The inclusion of Apollo Hospital clinical staff on key MD committees will also facilitate the exchange of information and help embed a successful assessment strategy in Years 3 and 4 at Apollo Hospital.

## 2019 team findings

The Faculty is confident that underperforming students will be identified given the small cohort size, student support provided, and the portfolio mentor reviews. As the number of students in the Program increases, there may be need for even more care with portfolio reviews and triangulation with student issues.

Remediation attempts and related supplementary examinations are available, with careful management thereafter. At this early course delivery, there have only been a few underperforming students requiring remediation. Students commented that there has been clear communication about review and remediation processes.

Within Stage 1, feedback is available in the moment and via the portfolio for mini-CEX and DOPS. Within Year 2, bedside tutors provide feedback and act as portfolio mentors. Logbook entries combined with ITAs should provide feedback opportunities in Stage 2. The nine graduate EPAs will support feedback approaches, towards becoming well prepared for internship. There is an intention to provide tailored feedback to students after examinations to complement the group feedback that is already provided. This will be welcomed by students. There are significant opportunities for feedback within the three stages of the MD Research Project, with project leads and teams across the 13 inaugural projects.

The demonstrated portfolio analytics (Scorion and PowerBi) are now starting to provide student cohort performance, supported by a skilful team. It is expected that this will eventually be fed back to supervisors and teachers. It should also allow dynamic monitoring and program delivery adjustments after careful expert review.

#### 5.4 Assessment quality

- 5.4.1 The medical education provider regularly reviews its program of assessment including assessment policies and practices such as blueprinting and standard setting, psychometric data, quality of data, and attrition rates.
- 5.4.2 The medical education provider ensures that the scope of the assessment practices, processes and standards is consistent across its teaching sites.

## 2017 team findings

An assessment policy outlines the principles and underpins the University's approach to assessment, including the requirement for regular reviews and the use of moderation as a quality review and assurance process across all stages of the assessment cycle.

Assessment processes are designed to engage students in the learning process and to encourage and support learning. The assessment policy aims to provide flexibility to staff and students, while ensuring that all assessment meets a common set of minimum standards as outlined in this policy.

The MD Evaluation and Improvement Committee (MEIC) will oversee the development and implementation of a regular quality assurance process which would include continuous evaluation and monitoring of the performance of the curricular and assessment frameworks, student outcomes, the admission and selection model, clinical placements and the student experiences. This committee will report to the MD Executive and Curriculum Committee.

## 2019 team findings

The medical course is in the early stages of implementation. Therefore, opportunities for review are limited. However, assessment blueprinting could be more detailed and concerns regarding the current approach to standard setting have been noted above. The Faculty has changed one of the assessments in the sciences assessment in Year 1, as it was not demonstrated to be fit-for-purpose. Additional assessment expertise will assist with the review of assessment practices as more data becomes available.

Whilst an overall assessment matrix was provided in the submission, the Year 3 guides would benefit from a summary of the consistent Year 3 assessments and the discipline-specific assessments. This information would then be utilised to populate an assessment blueprint for Year 3.

Faculty training has been provided both in Australia and in India. This will be delivered again for other supervisors, teachers and clinicians in the next few months. There are also plans to provide an eight-week program in teaching, feedback and assessment for the junior medical staff, trainees and Fellows at MQ Health. Already piloted once, this program will be available again in early 2020. Evaluation to explore how this training supports consistency in clinical education, particularly as the Stage 2 years are implemented, will be beneficial.

There may be differences in delivery of assessments between Australia and India, however the principles will be consistent and all students are expected to undertake both experiences, so all students are likely to have comparable experiences.

#### 6 The curriculum – monitoring

#### 6.1 Monitoring

- 6.1.1 The medical education provider regularly monitors and reviews its medical program including curriculum content, quality of teaching and supervision, assessment and student progress decisions. It manages quickly and effectively concerns about, or risks to, the quality of any aspect of medical program.
- 6.1.2 The medical education provider systematically seeks teacher and student feedback, and analyses and uses the results of this feedback for monitoring and program development.
- 6.1.3 The medical education provider collaborates with other education providers in monitoring its medical program outcomes, teaching and learning methods, and assessment.

#### 2017 team findings

The proposed monitoring and quality assurance framework is an impressive combination of University and Faculty approaches and includes specific considerations for offshore components. The leadership of the medical program demonstrates a strong commitment to monitoring and evaluation, and there is considerable evaluation expertise within the Faculty. Plans appear suitable for monitoring and evaluation of the program, and the team looks forward to future updates, particularly on the operational aspects of monitoring and evaluation at off-campus sites as well as the first year cohort.

The University has a range of frameworks, policies and procedures focusing on the quality improvement of curriculum, teaching, assessment and progression. In order to encourage continuous improvement in University outcomes and effectiveness of its structures and activities, a Quality Enhancement (QE) Framework ensures the alignment of planning, resources and effort behind the achievement of its goals.

A University Quality Enhancement Committee undertakes organisation unit reviews which examine the quality of academic programs, research, learning and teaching. These reviews form part of the evaluation element of the University's QE Framework.

A Quality Assurance Framework for Program and Unit Reviews is currently being developed and will establish both cyclical review of programs and units based on threshold standards, and out of sequence reviews are based on risk indicators. The Framework will identify risk profiles of programs which will indicate the review requirements, including the schedule of review and the level and type of detail required. Macquarie considers a program with offshore provision, such as the medical program, a higher risk category and as such it is anticipated that the medical program would be subject to more regular and detailed review within the University's Quality Assurance Framework for Program and Unit Reviews.

The Quality Assurance Framework also seeks feedback from peers, students, industry and the community. Academic programs are continually evaluated for relevance and sustainability; program learning outcomes are reviewed and academic standards are assured.

Specific to the medical program, the MD Evaluation and Improvement Committee (MEIC) will oversee the development and implementation of a regular quality assurance process. This would include continuous evaluation and monitoring of the performance of the curricular and assessment frameworks, student outcomes, the admission and selection model, clinical placements and the student experiences. This committee will report to the MD Executive and Curriculum Committee.

The policy and procedures together provide a foundation for embedding student evaluation and feedback processes into a continuous cycle of quality enhancement at individual, unit, program, department, Faculty and University levels. Student experiences and student feedback will form a major source of data towards quality assurance and will form a strong component for the evaluation of the program. The planned Student Experience Committee will meet quarterly (or more regularly, if required) and review student feedback, and connect with the MD Evaluation and Improvement Committee.

There is a proposal to ensure monitoring of the offshore training at Apollo Hospital through affiliation agreements that will reflect the responsibilities for quality assurance, including monitoring, reviewing and reporting. Early and continuing evaluation of the students' experience during their India rotation will be beneficial, with modifications to the program as required.

Key performance indicators will be identified related to the India clinical placements, and a process for evaluating the performance against these will form the basis of cyclical audits. In India, the team's interaction with the executive of the Apollo Hospital and the clinicians reflected a strong commitment to teaching and maintaining quality of training. Clinicians look forward to regular online interactions and faculty exchanges with their peers at Macquarie. It is planned that all clinicians involved in training students will engage in staff development.

In addition to engaging students, the medical program intends to use a broader range of feedback mechanisms for the evaluation of teaching and curriculum. The Faculty will collaborate with other Australian and New Zealand medical schools through the Medical Deans and monitor the medical program outcomes through the Medical Schools Outcome Database (MSOD).

The Faculty demonstrates its commitment to learning, teaching and curriculum enhancement by informing students about changes made in response to feedback from previous students. The team had an opportunity to meet Bachelor of Clinical Science (BClinSci) students who confirmed the Faculty promptly addressed student feedback.

Overall, the plans appear suitable for monitoring and evaluation of the program, but translation to practice will need to be reviewed once the program is in place. There are also plans to conduct research through longitudinal studies, expanding into the postgraduate years.

## 2019 team findings

The monitoring and evaluation of the MD Program uses a variety of methods during Stage 1. The Faculty demonstrates a strong commitment to monitoring and evaluation and act quickly and effectively on the resultant feedback.

The formal method of student evaluation utilises an appropriately modified version of the University's end of unit feedback, the Learner Experience of Unit (LEU) survey, as well as a course-based evaluation instrument administered biannually.

The implementation of the four quality aspects of monitoring via MQ Medicine Student Experience Questionnaire, which clearly aims to embed a culture of evidence-based curriculum improvement and enhancement, is commendable.

Informal (non-survey based) feedback is exemplified through the Faculty Student Experience Committee (FSEC) chaired by the Lead, Student Professionalism. This committee also considers improvements for student support. Year and Stage Leads encourage and welcome student feedback and staff and teacher feedback is sought through unit review sessions and membership of relevant committees. Key recommendations from the MD Evaluation and Enhancement Committee are reported to the MDECC. The MD Program's inaugural course evaluation had an 80% response rate. Improvements made following the inaugural Year 1 evaluation included the addition of more real patients to masterclasses, increased integration, increased tutor numbers in anatomy, and revision of the HAWC program. It was noted that many operational aspects of delivering a new program are reviewed by informal discussions. This includes discussions with colleagues in India.

During the AMC team visit both staff and students indicated that they felt listened to and were updated of changes by the Year or Stage Lead and that they were kept informed of program initiatives during 'town hall' gatherings with the Executive Dean.

The Faculty should be mindful of 'survey fatigue' of their students, and to be careful when considering Program or cohort changes made in response to low survey response rates.

The chair of the MDEEC acknowledged that they intend to use the LEUs for Stage 2 to support evaluation of clinical placement but will need to consider how they are implemented within offshore clinical settings.

The Quality indicators for Learning and Teaching (QiLT) data for 2017-2018 highlighted that the MD Program placed second in all categories and first for 'skills development'. These are positive early indications of a new program.

The Program has limited cross-institutional collaboration with other medical educational providers and is utilising the expertise of their recent appointments as expertise in medical education and best practice from other institutions. Efforts have been made to have representation on the sub-committee of the Medical Deans (MECC) and that staff have attended an OSCE at a local University. Despite this, the Faculty has limited cross-institutional collaboration with other medical educational providers. Joining other national collaborative initiatives may be beneficial and will further enhance the perspectives available to the Faculty.

## 6.2 Outcome evaluation

- 6.2.1 The medical education provider analyses the performance of cohorts of students and graduates in relation to the outcomes of the medical program.
- 6.2.2 The medical education provider evaluates the outcomes of the medical program.
- 6.2.3 The medical education provider examines performance in relation to student characteristics and feeds this data back to the committees responsible for student selection, curriculum and student support.

#### 2017 team findings

The University and the Faculty propose to have quality assurance frameworks that measure outcomes against pre-defined standards of assessment. Any quality issues pertaining to student outcomes will be identified, discussed and resolved to promote continuous quality improvement.

There is a committee structure at the Faculty level that will monitor assessment and student outcomes. There is a plan to appoint an experienced evaluation and improvement officer to coordinate evaluation activities and support the academic staff to undertake evaluation activities. There are also plans to study the performance of cohorts of students and graduates in relation to the outcomes of the program, including a focus on the performance of students across the Australian sites and in India.

The Faculty is aware that students admitted through some access schemes may need additional support to achieve the required outcomes, and will plan specific student support activities.

There are plans to capture and evaluate the graduate outcomes using established university surveys and analyses, and through participation in MSOD. The program also aims to collaborate with the University's Analytics, and Career and Employment Services teams to capture quantitative and qualitative data about graduate outcomes and the graduates' preparedness to practise as interns in Australia.

## 2019 team findings

The Faculty has acquired software to support learning analytics, and the next project for the MDEEC is to prioritise the management of assessment data from the Faculty Assessment Committee that will indicate reliability of examinations, and allow analysis of cohort and educator performances across units. The learning technology team work closely with academic staff, under the guidance of the Associate Dean (Learning and Teaching), to refine the needs of the portfolio to ensure functionality and usability. The MD Program's MD Admission and Selection Development Committee (MDASDC) will work closely with the MDEEC with data from each intake informing future selection criteria. An appointment with expertise in assessment will be crucial in effectively driving this work.

The longitudinal emotional intelligence study associated with the Multiple Mini Interview (MMI) during selection will be very interesting and may feed student characteristics data back to the MDASDC.

The Program plans to measure the outcomes of their graduates by utilising the University central services. The University has identified that they need to review their current data collection methods and follow up on alumni strategically. The Doctor of Physiotherapy program is piloting this initiative and its application to the Program will be beneficial.

The learning and teaching methods meet the requirements of the Program to date. Evaluation and monitoring of this will be required as Stage 2 progresses.

## 6.3 Feedback and reporting

- 6.3.1 The results of outcome evaluation are reported through the governance and administration of the medical education provider and to academic staff and students.
- 6.3.2 The medical education provider makes evaluation results available to stakeholders with an interest in graduate outcomes, and considers their views in continuous renewal of the medical program.

## 2017 team findings

The program plans to regularly share evaluation data with the program executive, faculty and students. The results of the various evaluation mechanisms including curriculum and assessment frameworks, student support services, quality and adequacy of clinical experiences and graduate outcomes will be considered by the MD Evaluation and Improvement Committee and would be used to inform continuous cycles of improvement. The program also proposes to make the feedback and evaluation results available to relevant stakeholders such as the MD External Advisory Board.

The Faculty also plans to develop an annual student and staff communication strategy to convey the changes and improvements made to the program in response to the evaluation feedback. The program will be required to provide evidence of this in future.

## 2019 team findings

The appointment of a senior lecturer to chair MDEEC has contributed significantly to formalising the evaluation process. The evaluation data is reviewed initially and independently by the University, via the centrally administered Teaching Evaluation and Development Service (TEDS), before consideration by the unit convenor, Year Lead and Stage Lead. The MDEEC reviews the feedback and forwards recommendations to MDECC. Unit convenors may disseminate evaluation to key staff with year and stage leads along with student representatives responsible for reporting outcomes to the student body.

The Faculty is encouraged to utilise annual surveys to seek systematic feedback from their clinical colleagues across all sites. The establishment of a joint placement committee to ensure that sites with shared placements are collaborative may be beneficial.

An external advisory board meets twice a year and feedback is relayed to MDECC, of note is that MQ Health has a consumer advisory committee that has given feedback on the Program and that informal feedback is commonly received from stakeholders and is always considered.

The Faculty will need to consider mechanisms for actively reporting on the performance of the Program to its partner organisations.

# 7 Implementing the curriculum - students

## 7.1 Student intake

- 7.1.1 The medical education provider has defined the size of the student intake in relation to its capacity to adequately resource the medical program at all stages.
- 7.1.2 The medical education provider has defined the nature of the student cohort, including targets for Aboriginal and Torres Strait Islander peoples and/or Māori students, rural origin students and students from under-represented groups, and international students.
- 7.1.3 The medical education provider complements targeted access schemes with appropriate infrastructure and support.

#### 2017 team findings

The program plans to enrol up to 60 full-fee paying students. Macquarie University will not have Commonwealth Supported medical places. The intended cohort size is well defined with assessment of capacity across all stages and proposed clinical contexts evident.

There is a target for 20 international students, drawn from a variety of backgrounds. While there are no specific targets for rural students there is a planned inclusion of bonus points and scholarships to attract rural applicants. There is a target of enrolling two Indigenous students per year.

A particular strength is the input of the Walanga Muru unit, overseeing the development of support arrangements for future Indigenous students. Given the full-fee nature of the program, a key area of focus is financial support, with the intent to provide significant scholarship support for Indigenous students. The team acknowledges ongoing work around further equity merit scholarships/support for other student groups.

## 2019 team findings

While International student targets have not yet been met, the Faculty advised that this is no major concern and has no impact on the delivery of the Program.

As the Program offers no Commonwealth Supported Places, rural origin students are not mandated. However, there are current students who are interested in rural placements and the Faculty is exploring options for a rural placement in Coffs Harbour. Formal arrangements are yet to be confirmed for this experience.

The Program also supports Aboriginal and Torres Strait Islander students, with the option of entry via the Bachelor of Clinical Sciences pathway, which includes targeted academic and social supports from both the Program and Walanga Muru. Students also have access to scholarships. It is hoped that this pathway will promote the further recruitment of Aboriginal and Torres Strait Islander students into the Program.

## 7.2 Admission policy and selection

- 7.2.1 The medical education provider has clear selection policy and processes that can be implemented and sustained in practice, that are consistently applied and that prevent discrimination and bias, other than explicit affirmative action.
- 7.2.2 The medical education provider has policies on the admission of students with disabilities and students with infectious diseases, including blood-borne viruses.

- 7.2.3 The medical education provider has specific admission, recruitment and retention policies for Aboriginal and Torres Strait Islander peoples and/or Māori.
- 7.2.4 Information about the selection process, including the mechanism for appeals is publicly available.

## 2017 team findings

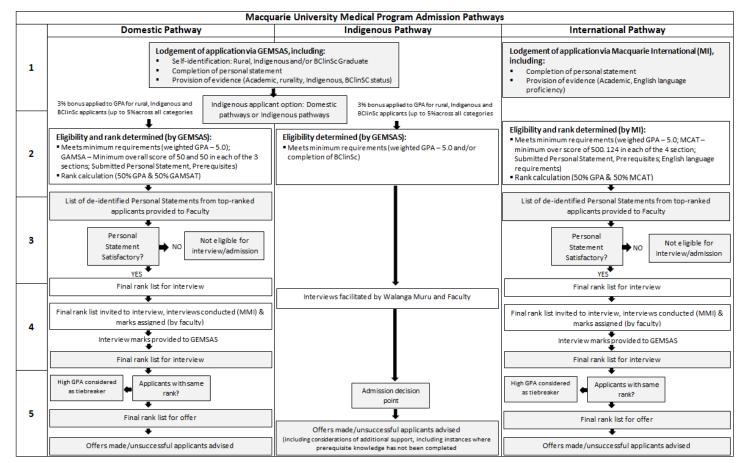
The program has provided detailed selection policy and processes, describing three pathways to admission:

- 1 Domestic Pathway
- 2 Indigenous Pathway
- 3 International Pathway.

All applicants will be required to have successfully completed prerequisite study of one tertiarylevel unit in human anatomy and one tertiary-level unit in human physiology.

Figure 3 outlines the detail of the proposed admissions pathways including related bonuses. Significant interaction with GEMSAS regarding implementation of admissions and selection processes is evident.

Figure 2 – Macquarie Medical Program Admission Pathways



The University's Academic Appeals Policy indicates a written appeal will be considered on procedural grounds. The program proposes to amend the policy slightly to reflect the unique features of the medical program admission process. Under the policy, an Academic Appeals Panel composed of a chair and two other members will be appointed by the Deputy Vice-Chancellor

(Students and Registrar) from an established pool of staff. This is well defined, and will be published on the website.

The team commends the Faculty's significant level of expertise and experience in the area of admissions, and the significant evidence-based, quality focused approach throughout the proposed policy and processes.

The clinical experience in Hyderabad is an essential component of the program, and the Faculty has clearly articulated that partaking in the Apollo Hospital rotation is a compulsory requirement for completion of the medical program and will require applicants to acknowledge and agree to this requirement at admission. The Faculty is however aware that exceptional circumstances may arise for a student during the course which will not allow the student to undertake the Apollo Hospital rotation and the Faculty will arrange an alternative clinical placement, as appropriate.

The team notes the inclusion of a personal statement in the admission process, which will be used to assess the alignment of students with the unique features and demands of the program, and the multiple mini interviews. Significant existing quality control and assurance processes will be implemented, including external agency involvement in international student recruitment.

## 2019 team findings

Clear information about selection processes is accessible for all prospective students on the Faculty website. This includes the relevant suite of policies, and the specific requirements for registration with AHPRA upon graduation. The Faculty is not concerned with the low numbers of International students who applied for the second intake of the Program. There is a belief that as the reputation of the Program grows, then so too the numbers of International students will grow.

Aboriginal and Torres Strait Islander students are able to complete a modified program of Bachelor of Clinical Science for entry into the MD. Aboriginal students are also able to enter the Program via the standard Graduate entry pathway with the option for a moderated interview and removal of GAMSAT requirements. Currently there are two Aboriginal students in the Program, each entering via a different pathway. Further development of selection policy and procedures for Aboriginal and Torres Strait Islander students, and other equity-based students to ensure robust and rigorous entry pathways, may be beneficial.

The Faculty must ensure that students entering medicine through alternative entry pathways be provided with adequate academic supports to meet their individual needs, given that these students do not always have the same educational background as their peers.

## 7.3 Student support

- 7.3.1 The medical education provider offers a range of student support services including counselling, health, and academic advisory services to address students' financial, social, cultural, personal, physical and mental health needs.
- 7.3.2 The medical education provider has mechanisms to identify and support students who require health and academic advisory services, including:
  - students with disabilities and students with infectious diseases, including blood-borne viruses
  - students with mental health needs
  - students at risk of not completing the medical program.

- 7.3.3 The medical education provider offers appropriate learning support for students with special needs including those coming from under-represented groups or admitted through schemes for increasing diversity.
- 7.3.4 The medical education provider separates student support and academic progression decision making.

# 2017 team findings

A broad range of support mechanisms are in place, administered at both University and Faculty levels. The services are organised in a highly cohesive and collaborative approach encompassing Counselling and Psychological Services (CAPS), Disability Services, the MindSpot Clinic Wellbeing Program, MQ Health Services, and central and student support services.

Additionally, there is support offered for teaching and learning skills, and specific internationalstudent focused services.

Students from the Bachelor of Clinical Science and Doctor of Physiotherapy programs submitted a written response in support of the medical program's accreditation, and the team met several students currently enrolled in the Faculty. The students expressed a high degree of satisfaction with the manner in which the Faculty responded to issues, both in terms of the speed and resolution of issues.

At-risk students will be identified through a range of measures including mid-year assessment, low stakes summative assessment and formative assessment tasks. The Faculty has identified a broad range of mechanisms to support at-risk students throughout the program, including the innovative use of the MindSpot Wellbeing Program. In addition, there is a reliance on portfolio advisors and clinical mentors who will engage with students longitudinally. This process will necessitate specific training of advisors/mentors.

Support of students during offshore placements is an essential requirement of the program, and plans are in place to provide support at Apollo Hospital. Macquarie has clear links to consular and local services in India, as well as University support services centrally and in-country.

There is an existing broad range of engagement options used in support of the University's offshore students which will be made available to the medical program. There is a clear intent to assess needs and augment local support systems as required on an ongoing basis. The Faculty will also develop a comprehensive Pre-Departure Preparation Program for completion prior to commencement of rotations in India in Stage 2, and an on-arrival orientation/induction program. Additional local support will be provided by a Clinical Experience Officer in India.

The team notes the separation of the Assistant Dean (Students), responsible for student support, from committees overseeing progression decision making. The team notes that the Assistant Dean (Students) role remains to be appointed.

## 2019 team findings

The Faculty has developed a student support network, which includes both Faculty and University student support services. All staff are available to support students, including Stage Leads, unit convenors and student services staff. Students have identified the Lead, Student Professionalism as the key person for student support. This role plays a key part in student support, remediation and monitoring, and is also responsible for the student experience, fitness to practice and professionalism matters. The Faculty provide very good learning supports with the remedial action plan and supports available for students at risk.

The Faculty's relationship with Walanga Muru and its staff and the support they have built with Walanga Muru are commendable. The Pro Vice Chancellor, Indigenous Strategy, and the University are committed to ensuring that the Indigenous program across the University will grow and provide support to the Faculty and Indigenous students.

The broad local Indigenous community experience and knowledge of local Indigenous stakeholders that is held by the new Senior Lecturer appointment is valuable and important. The time allocated to this role might need to be revised in light of the ambitious and important work on establishing the Indigenous Health curriculum, and providing support for students.

Extending the connection to the Leaders in Indigenous Medical Education (LIME) Secretariat will provide resources and access to expertise to assist with teaching, student support, curriculum development and clinical placements processes and procedures. The LIME Secretariat is also a network of Indigenous Health academics Australia wide who work in medical schools and health faculties. AIDA have likewise, developed great resources for Indigenous students.

The Faculty has provided adequate support to meet any student mental health needs. MindSpot have provided lectures and workshops, and students are aware of counselling services available across the University. The Lead, Student Professionalism is the recognised person within the Faculty for students to approach regarding their support needs.

While student support is available in India, the range of needs for students undertaking this placement is yet to be known. Student support will need to be appropriate and targeted to meet the diverse socio-cultural needs that students might experience in a developing country.

There may be some conflict in the role of the Lead, Student Professionalism in terms of reporting breaches. This role is responsible for student support, but is also a member of the committee where progression decisions are made. A formal review of the current role, to remove any perception of a conflict in support and progression will be beneficial.

## 7.4 Professionalism and fitness to practise

- 7.4.1 The medical education provider has policies and procedures for managing medical students whose impairment raises concerns about their fitness to practise medicine.
- 7.4.2 The medical education provider has policies and procedures for identifying and supporting medical students whose professional behaviour raises concerns about their fitness to practise medicine or ability to interact with patients.

## 2017 team findings

The team reviewed a draft Fitness to Practice Policy. The policy indicates the expectations for students in the program, and specifies compliance with the codes of conduct and policies for professional practice as outlined by the New South Wales Ministry of Health's Code of Conduct, Good Medical Practice: Code of Conduct for Doctors in Australia, and Macquarie University's Student Code of Conduct.

This policy also articulates with an Inherent Requirements policy outlining expectations for students in four domains: physical, cognition, communication and behavioural.

There is a process in place to deal with fitness to practice issues based on the severity of the issue. The team will be interested in receiving confirmation that this draft policy has been approved through the appropriate University processes. Students experiencing fitness to practice issues will be provided with guidance and support while taking due account of any risks to patient safety, and risks to students, staff and the public.

There will be a code of conduct which applies to both Australian and Indian placements.

## 2019 team findings

The Faculty has adequate policies processes and roles for identifying and managing matters of fitness to practise, and professionalism.

#### 7.5 Student representation

7.5.1 The medical education provider has formal processes and structures that facilitate and support student representation in the governance of their program.

#### 2017 team findings

The Faculty has outlined a commitment to student representation in program governance. The key pillars of this strategy are:

**MD Student Experience Committee (MSEC)**: composed of peer nominated student representatives, Assistant Dean (Students), Academic Program Lead, Program Manager, Education and Faculty Initiatives, Stage 1 and 2 Leads. This committee will meet quarterly or more often if required, and be responsible for representation regarding communication channels between students and staff, academic matters including curriculum design and assessment, learning resources and pastoral and other forms of student support. The MSEC will report to the MD Executive and Curriculum Committee and MD Evaluation and Improvement Committee, as appropriate.

**Faculty Board Representative**: The Faculty Board incorporates at least two student members.

**Medical Society**: a medical student society will be set up, with funding support by Campus Life and the Faculty.

The Faculty's proposed student representation strategy appears appropriate for this stage of program development, and includes scope for flexibility in the composition and frequency of committees to provide appropriate representation of evolving program.

#### 2019 team findings

The Student Society is developing well, and are very engaged with the Program. There is strong student representation on a number of Faculty and MD specific committees and students are able to provide feedback on the Program through a variety of means. Consideration should be given to adding student representation to the MDEEC and the Faculty Executive Group.

#### 7.6 Student indemnification and insurance

7.6.1 The medical education provider ensures that medical students are adequately indemnified and insured for all education activities.

## 2017 team findings

All enrolled students are covered by the University insurance and indemnity arrangements, as outlined in the University's Insurable Risk Guideline.

Medical students going to clinical placements at Apollo Hospital in Hyderabad will be covered by the University's Travel Insurance cover for up to six months.

It is anticipated that medical students on clinical placements, including selective and elective placements in Year 4 of the program, will be required to submit a Risk Assessment developed by the University's Work Health Safety (WHS) unit. The Faculty will communicate information on travel-related and clinical placement WHS issues as well as International SOS guidance information.

The team requires further detail on student indemnification and insurance agreements particularly for Apollo and elective rotations.

# 2019 team findings

All students are adequately insured and indemnified for all education activities.

# 8 Implementing the curriculum – learning environment

### 8.1 Physical facilities

8.1.1 The medical education provider ensures students and staff have access to safe and wellmaintained physical facilities in all its teaching and learning sites in order to achieve the outcomes of the medical program.

#### 2017 team findings

There are adequate physical facilities to accommodate delivery of Stage 1 of the medical program (Years 1 and 2) in modern ICT-enabled learning and teaching rooms within the Faculty, Macquarie University Hospital (MUH) and the University. The flexible configuration of the rooms can be augmented to facilitate medium-sized seminars, small-group tutorials and interactive groups as well as informal learning opportunities.

The implementation of the University's Master Plan will deliver additional facilities to support the delivery of the medical program. The planned modification of the ground floor of the Clinic building as a student learning centre, made possible by a relocation of faculty administration, should cater well for the required teaching infrastructure for students in Stage 1 of the medical program. Completion of these modifications will be in time for the planned commencement of the first student cohort in early 2018.

This learning centre will be complemented by other teaching areas at the Faculty site, within MindSpot Clinic, and MQ Health, and within both the spacious hospital and MQ Health outpatient clinics. Facilities to support student research are readily available within the Faculty's Departments or MQ Health Outpatient Clinics and MUH, for clinical research. The team supports the Faculty's aspiration for space for interprofessional learning and for a dedicated education building.

MQ Health is planning a renovation of the GP Clinic which will encompass the latest design principles for primary care and include dedicated teaching facilities and technology to support a modern academic practice. MQ Health is looking at options to provide clinical experience in childhood development/developmental paediatrics by 2020 and has appointed a lead in paediatrics. The Royal Institute for Deaf and Blind Children will also be relocating to the Macquarie campus.

The team was impressed by the resources for teaching anatomy. The Faculty is to be commended for its anatomy teaching laboratory and patient simulation centre.

In Stage 2 of the medical program (Years 3 and 4) clinical experience and teaching will be provided at MUH and MQ Health Outpatient Clinics, (Medicine, Surgery and Primary Care), health care facilities of Northern Sydney Local Health District (Paediatrics, O&G, Mental Health and Emergency Medicine) and at Apollo Hospital in Hyderabad.

### Apollo Hospital

A sub-team travelled to Hyderabad to conduct a site visit at the Apollo Hospital, the Apollo Cradle (maternity hospital) and new teaching facilities including libraries, tutorial rooms, and computer rooms. It was obvious that clinicians the team met on the tour were highly engaged and interested in the potential for the Macquarie partnership.

The main hospital has a range of specialist facilities including several Centres of Excellence. The patient rooms range from large private suites for primarily international patients to general wards.

Teaching space and student common areas at Apollo has yet to be planned and will be needed by January 2020. The team commends the Faculty for the plans to provide excellent student accommodation in the residential area of Banjara Hills, 10-15 minutes from Apollo. The team toured the proposed accommodation and was impressed with the high standard of accommodation and services which would be available to the students. The team looks forward to confirmation of these facilities.

# NSLHD and Royal North Shore

Macquarie students attending Royal North Shore Hospital for rotations in Paediatrics, Mental Health and O&G, in Year 3 and Emergency Medicine in Year 4 will utilise teaching space and student common areas of the Northern Clinical School of the University of Sydney. Royal North Shore Hospital has extensive teaching spaces and meeting rooms, a large library, pathology museum, and Clinical Skills and Simulation Centre within the hospital and adjacent Kolling building. Hospitals and other health facilities of Northern Sydney Local Health District, other than Royal North Shore Hospital, to be used for clinical experience and teaching of Macquarie students, are yet to be determined.

### Year 4 Selectives and Electives

In Year 4 of the program, students will spend 28 weeks of the 32 weeks of the medical program undertaking selective and elective placements. Whilst many of these placements will be within the clinical facilities of MQ Health, Northern Sydney Local Health District and Apollo, some could also be completed in other countries, including North America.

Overall the AMC team is confident that the clinical sites to be used for teaching and learning in Years 3 and 4 of the medical program are of high quality with very good physical teaching facilities. The physical facilities at Apollo have yet to be confirmed, and the AMC will require an update on this.

# 2019 team findings

As found in previous visits, the physical facilities provided for medical students are all at least adequate, with some excellent. The main campus facilities are mostly very new and purpose built for the small group teaching model. The tutorial rooms and clinical skills suite are spacious and well-equipped. The education space is shared with the junior doctors and is embedded within MQHealth, supporting the integrated approach to medical education and clinical practice. The facilities in Hyderabad were visited in 2018 and found to be adequate and ready for use in 2020, with the accommodation facilities ready for occupation. Students will have access to teaching and library resources within NSHLD facilities.

There are some concerns about the requirement for students to share bedrooms in the leased accommodation in Hyderabad. Students may be together for 24 hours a day and may need space for 'quiet time'. While the Faculty believe that most students are happy to share bedrooms, student feedback reported that at least some had strong reservations about doing this for 22 weeks. There are limited options for dealing with a situation where students did not want to share, particularly for the first cohort in 2020, when there will be more rooms than required if all students share. However, students are required to provide medical evidence to support a need for a separate

bedroom, which risks making such requests a stressful process. Other options include returning students to Australia. This issue will need careful monitoring and should be reported on after the first cohort has completed the Hyderabad placement. The University needs to consider the potential for conflict of interests arising from being the landlord, the provider of student support and the academic progress decision-maker.

#### 8.2 Information Resources and Library Services

- 8.2.1 The medical education provider has sufficient information communication technology infrastructure and support systems to achieve the learning objectives of the medical program.
- 8.2.2 The medical education provider ensures students have access to the information communication technology applications required to facilitate their learning in the clinical environment.
- 8.2.3 Library resources available to staff and students include access to computer-based reference systems, support staff and a reference collection adequate to meet curriculum and research need.

### 2017 team findings

The University uses iLearn as its learning management system which integrates with other learning technologies including iTeach, Echo 360 (recorded lectures) TurnitIn, iShare and Zoom. The Faculty has access to all centrally provided ICT services and in addition has access to an e-portfolio Tool (PebblePad), an Adaptive Learning Platform, Anatomage Table and a Faculty-based media production team. These technologies have been used for the Faculty's Bachelor of Clinical Science and Doctor of Physiotherapy programs and seem very fit for purpose. Access to all these ICT resources will be available at off campus sites such as the Apollo Hospital site in Hyderabad and Northern Sydney Local Health District. Students at Apollo Hospital will have access to available Wi-Fi through which they can access their Learning Management System and e-portfolio System. Computer terminals are readily available in Years 3 and 4 in Sydney providing direct connection to the NSW Health Clinical Information Access Portal.

The Faculty also plans to explore innovative initiatives to advance the online support for Stage 2 of the program, "WeChat" and Examity. The University provides central ICT support through its Central IT Services and Learning Innovation Hub. Students have access to a set of online guides and resources related to the Learning Management System.

The University Library is a single central facility with a focus on providing a central collaborative learning and teaching space. The library building has the first Australian automated book storage and retrieval system (ASRS). The library includes 2,800 client seats, 300 computers, training rooms, dedicated laptop areas, areas for group study and practice presentations, and quiet study-space, including Indigenous student study space. The library will be largely utilised by students in Stage 1 of the Medical Program. The library has extensive resources to support online and off-shore study which will be critical for Stage 2 students who will also have access to hospital libraries at all clinical locations and the Macquarie University Hospital has been included within the University's licence agreement with publishers.

The enthusiastic clinical librarians will support the growth and development of all the Faculty's programs and services.

## 2019 team findings

The library and information resources are more than adequate for the provision of the medical Program. Macquarie University has extensive library resources, including substantial online resources potentially available anywhere there is internet access.

Library resources in Hyderabad are extensive. MD students will have access to a large traditional library at Apollo Medical College adjacent to the Apollo private hospital. Apollo Hospital also has a small library that is open to students. Private study spaces are also available. Library resources in at NSHLD facilities are shared with the staff and medical students from other universities.

The Macquarie University iLearn site contains a wide range of University policy documents and details of the curriculum content. It is easily accessible and the format appears user-friendly. The e-portfolio site lists all assessments and maps them to the Capability framework. Summaries are available by EPA and Capability. The Faculty has a substantial digital technology team that supports the platforms and ensures that curriculum materials are loaded on schedule. Portfolios, iLearn, and all programs used by the university are accessible in Hyderabad as well as NSHLD facilities. The availability of bandwidth between Sydney and Hyderabad appears satisfactory. The time zone difference between the two clinical campuses (4.5 hours during our summer, 5.5 hours during our winter) may be more of a barrier than the technology. Student workload may need careful monitoring to reduce the impact of the potential need to work outside of normal work hours to meet expectations in both clinical and research endeavours.

Macquarie University provides access to an extensive range of both hard copy and electronic journals, textbooks, reference databases and other resources. Library resources, including substantial online resources potentially available anywhere there is internet access.

### 8.3 Clinical Learning Environment

- 8.3.1 The medical education provider ensures that the clinical learning environment offers students sufficient patient contact, is appropriate to achieve the outcomes of the medical program and to prepare students for clinical practice.
- 8.3.2 The medical education provider has sufficient clinical teaching facilities to provide clinical experiences in a range of models of care and across metropolitan and rural health.
- 8.3.3 The medical education provider ensures the clinical learning environment provides students with experience in the provision of culturally competent health care to Aboriginal and Torres Strait Islander peoples and/or Māori.
- 8.3.4 The medical education provider actively engages with other health professional education providers whose activities may impact on the delivery of the curriculum to ensure its medical program has adequate clinical facilities and teaching capacity.

### 2017 team findings

Clinical placements will be largely at MQ Health, the Apollo Hospital, the MindSpot Clinic, and facilities of the North Sydney Local Health District (NSLHD). Table 5 provides a summary of the medical program's clinical sites.

	MQ Health	MindSpot Clinic	NSLHD	Apollo Health City	Other
	AUSTRALIA	AUSTRALIA	AUSTRALIA	HYDERABAD, INDIA	VARIOUS
Medicine					
Surgery					
Primary Care					
Obstetrics and Gynaecology					
Paediatrics					
Mental Health					
Emergency Medicine					
Selectives					
Electives					

## Table 4 - Summary of the Program's Clinical Learning Environment

Plans to develop	Delivered in combination/across setting	Delivered entirely within setting	Student-initiated

**MindSpot Clinic** provides telephone and online mental health information, referral and recommendations about local mental health services as well as treatment for patients with a wide variety of complex psychiatric disorders. MindSpot will also be available for any students who have concerns about their own mental health.

The clinic can accommodate up to three students for a two week placement, over a period of 40 weeks per year. The team met clinicians at MindSpot, which is located on the Macquarie campus. The team was deeply impressed with the service delivery model and outcomes, and the learning opportunities in mental health.

MindSpot is a comprehensive ambulatory mental health service, apart from child mental health, neurocognitive disorders and acute psychoses. The Faculty recognises the limited experience that will be available within MindSpot and have arranged further mental health placements within NSLHD.

**Northern Sydney Local Health District (NSLHD)** Following discussions with NSLHD and the Northern Clinical School of the University of Sydney, School of Medicine, clinical training placements have been obtained in Mental Health, O&G, Paediatrics and Emergency Medicine. These placements are supported by a Student Placement Agreement (SPA), letters of intent and statements of support from NSLHD and RNSH. Clinical training/teaching areas and student accommodation in Sydney have also been identified.

**Apollo Hospital, Hyderabad, India** The Faculty has undertaken considerable work with Apollo Hospital in the development of the Macquarie training program in India. An Associate Dean, Clinical Partnerships has been hired to engage with the executive and more specifically the clinicians at Apollo to build the Apollo/Macquarie relationship. The Associate Dean, a surgeon with extensive medical education expertise and previous experience in India, will spend an extended period of time in India to develop the medical program.

While in India the team toured the Apollo Hospital and maternity hospital, Apollo Cradle. Although Apollo Hospital is a private facility, the team as informed there should be no reluctance from patients to involve students in patient care. There may be some language barriers, however more than half of the patients speak English, and all medical staff members at Apollo Hospital speak

English. The team notes that Apollo can provide a very wide mix of patients and volume of clinical cases to students.

The team viewed an outstanding facility providing direct care to patients in other Apollo hospitals in India using direct video monitoring of patients. This will be an excellent learning opportunity for students with application to care of Australian patients in rural and remote areas.

The team was impressed by the clinical learning opportunities available at Apollo Hospital and the commitment of the hospital's clinicians and administrators to facilitate the student experience during their rotation. As referenced at Standard 6, given the different health system in India, the private nature of Apollo Hospital, and cultural and language differences between Australia and India, early and continuing evaluation of the students' experience during their India rotation will be beneficial, with modifications to the program as required. The Faculty plans to facilitate the exchange of clinical academic staff between Macquarie University and Apollo Hospital.

The Apollo Hospital clinicians have considerable experience in teaching postgraduate specialist trainees across a number of specialties and subspecialties in medicine. The team was impressed by the commitment of Apollo-based clinicians to teach the students and assist in their learning. The clinicians are eager to receive information and resources to facilitate their teaching and assessment of the students. The team understands this process will be rolled out over the next 12-18 months.

**MQ Health** will provide students with exposure to clinical experiences and learning opportunities across a broad range of clinical settings. As noted at Standard 4, students will be able to follow the journey of patients from consultation in the specialist clinic, through to diagnostics and imaging at Macquarie Medical Imaging, through to their inpatient stay and/or surgery or procedure.

The students will also be provided with opportunities to work with, and learn from, interprofessional teams. MQ Health engages interns, fellows and registrars in a number of specialties, providing further teaching and learning opportunities. A number of the MQ Health salaried GPs have extensive experience in clinical education of medical students.

As the Apollo primary care experience will be very different to primary care in an Australian general practice context, the Faculty are looking at ways in which these differences can be leveraged to enhance student learning. To ensure all students have ready access to a range of models of care and placements in various clinical settings, the Faculty is considering developing general practice placements outside MQ Health, including general practices serving socially disadvantaged areas. It will be important that any such expansion occurs with minimal disruption to the general practice placements that may be in place with the University of Sydney or Western Sydney University. The team encourages the Faculty to explore opportunities for general practice experience and provide an update to the AMC on progress.

While there is no fixed rural placement, the Faculty is considering developing clinical experience opportunities in rural areas of Australia. The team acknowledges that similar to general practice placements, there is a significant demand for rural clinical placements. The team suggests the Faculty continue to explore opportunities for rural experiences for their students and report to the AMC on these placements.

The Faculty has yet to develop clinical learning opportunities for students to experience the provision of culturally competent health care to the Aboriginal and Torres Strait Islander peoples. As noted at Standard 3.5, the team would like to see the plan to provide students with experience in the provision of culturally competent health care to the Aboriginal and Torres Strait Islander peoples and an Indigenous curriculum to underpin the learning experience.

The team commends the Faculty for its extensive engagement with its clinical partners, including Apollo Hospital, Northern Sydney Local Health District, and the University of Sydney Faculty of Medicine in the development of memoranda of understanding so that the Macquarie students can receive clinical training in their respective health facilities. It is clear that a high degree of mutual respect, and cooperation characterises this endeavour. In Year 4 of the program it is planned to have a number of student selectives/electives, some of which will be international placements. As noted at Standard 4, the AMC would anticipate that the Faculty would finalise these international selective arrangements within the next two years.

#### 2019 team findings

Macquarie University is aware that it is operating with a crowded, competitive environment and has, therefore, followed a multi-pronged approach to expanding clinical capacity.

MQ Health has expanded its role in junior doctor training over the last three years and has achieved a strong position that is more of a hybrid of the traditional public hospital and private hospital models. The inclusion of general practice within the service and learning environment is a strong positive feature. There is a Director of Clinical Training, who is part of the HETI postgraduate training system and is the base for five interns, six junior house officers and 4-5 specialty training registrars or postgraduate fellows. The junior medical officer program includes rotations to Coffs Harbour Hospital, for terms in emergency medicine, and some other metropolitan hospitals. The number of junior doctors is set to increase over time. These junior doctors participate in teaching and assessment of Year 1 and 2 students and will contribute to Years 3 and 4 of the MD Program.

Extensive negotiations have been held with NSHLD clinicians and leaders. An agreement has now been signed, guaranteeing access to patients, clinicians, facilities and other learning resources. There is a local verbal agreement, but still some residual resistance, to share NSHLD resources with the University of Sydney Medical School. The key weaknesses have previously been paediatrics, obstetrics and gynaecology and mental health/psychiatry. Concerns in paediatrics and obstetrics and gynaecology have largely resolved, with recent senior appointments in both specialties. Students from Macquarie University will follow a separate curriculum to University of Sydney students and this curriculum is delivered synchronously across NSHLD and Apollo sites. There will be separate tutorials for Macquarie students, some linked to the Apollo site, although there is potential to merge tutorials for common content as the program evolves. For paediatrics, the hospital experience includes an ambulatory clinic, emergency department and inpatient contexts, with students attending either Monday-Wednesday or Thursday-Saturday. Macquarie University is funding consultant, Fellow and midwifery appointments to share both clinical and educational services. Substantial concern remains about the delays in confirming arrangements for clinical experience and teaching in mental health/psychiatry, although this is less urgent because it is a Year 4 placement. While MindSpot is an excellent resource, the focus on primary care assessment and psychological therapies for ambulatory patients with anxiety and depression, may restrict exposure to acute psychoses, drug and alcohol problems and many chronic mental health problems.

The partnership with Apollo Hospital in Hyderabad is a major achievement. Although there may be issues with cultural adaptation and the involvement of family members as interpreters, the clinical experiences are potentially rich and the Apollo team appears well prepared. The acute and general specialty nature of Apollo may complement well the narrower elective adult medical and surgical specialty exposure at the Macquarie University Hospital. This will need close monitoring to determine the comparative strengths and weaknesses of core clinical placements in both offshore and on-shore facilities.

Overall, while the Year 3 clinical placement arrangements are now in place, the student schedules indicate a heavy workload and are spread across a wide range of days and times. Consideration needs to be given to how students with illness, family constraints and part-time employment will manage the requirements. There are many early starts, evening and weekend shifts and attendance at hospital theatre lists. The latter may not be as useful for learning as some think, as observation of a lot of procedures is less important than following patients through clinical pathways.

The majority of clinical placement experiences are in narrower specialty units in metropolitan teaching hospitals, with a mixture of private hospital (Macquarie University Hospital, on campus) and public hospital (North Sydney Local Health District) facilities. The MQ Health Hospital has 170 beds in a range of medical and surgical specialties and a MQ general practice is in an adjacent building, but there is little or no mental health, women's health and paediatrics on site. Placements in the latter specialties will take place in nearby NSHLD facilities, predominantly at the Royal North Shore Hospital (750 beds), a very busy place for medical education. Facilities are very good, although tutorial rooms will be shared via a central booking system with University of Sydney and other education providers. The hospital library is open to all students and clinicians. As yet, there is no agreement for Macquarie MD students to share student common rooms at the Northern Clinical School. Careful scheduling will be required to ensure appropriate clinical experience. Hyderabad placements are undertaken in a 470 bed, urban teaching hospital that is run by a large private health organisation (Apollo) and offers a wide range of clinical services that will not be shared with other medical programs.

Community-based general practice placements are provided in Year 2 as part of the Cancer and Primary Care unit. This combined, rather than integrated, unit places students for 4 days as an observer in a general practice. In Year 3, students will have a longitudinal, integrated general practice placement (1 day per week for 20 weeks). This will be a more participatory model with wave consulting and a separate room for the students, providing opportunities for continuing, more comprehensive care. At the time of the assessment, recruitment of general practices was in only a very early stage. While the Faculty seems confident that recruitment targets (21 practices in 2019) will be achieved by the end of November, the team felt that recruitment should be more advanced by this time, including having written agreements with teaching practices.

There are no mandatory rural placements, although opportunities for placements in a regional hospital (Coffs Harbour), and probably other regional locations, will be available as options in the Year 4 Selectives, and a rural general practice placement will be available for 4-8 weeks of Year 4 Electives. Some students are very interested in potential careers in rural medicine (some have John Flynn Scholarships) and would like more opportunities for rural practice experiences.

Currently there is little exposure to clinical Indigenous health. While all students have contact in Years 1 and 2 with Aboriginal health workers and visit briefly an Aboriginal community controlled health service, there are currently no clinical placements available in an Aboriginal Medical Service. The Faculty's approach of respectfully developing relationships with Aboriginal health services is valuable, and adequate resourcing must be made available to support this work.

Macquarie University has worked well with other providers to construct a medical program that should meet requirements. MQ Health is essentially the same organisation, making much of the clinical program very secure. The arrangements with Apollo Private Hospital appear to be secure.

An agreement with NSHLD has been signed and commitments to placements in paediatrics and obstetrics have been made. Negotiations in mental health/psychiatry are at an early stage. The latter is not required until 2021, but confirmation is required soon to provide confidence.

### 8.4 Clinical Supervision

- 8.4.1 The medical education provider ensures that there is an effective system of clinical supervision to ensure safe involvement of students in clinical practice.
- 8.4.2 The medical education provider supports clinical supervisors through orientation and training, and monitors their performance.
- 8.4.3 The medical education provider works with health care facilities to ensure staff have time allocated for teaching within clinical service requirements.
- 8.4.4 The medical education provider has defined the responsibilities of hospital and community practitioners who contribute to the delivery of the medical program and the responsibilities of the medical education provider to these practitioners.

#### 2017 team findings

The Faculty has developed processes to support clinical supervisors and teachers through orientation and training, for monitoring their performance and providing remediation if required. These processes are underway for MQ Health supervisors and teachers, and the program plans to implement these processes at Apollo Hospital in advance of delivery of Stage 2.

The Faculty has plans to engage closely with the clinicians at Apollo Hospital, to establish international staff transfers, and also link the institutions regularly via videoconference. Clinicians will be given staff development in the Macquarie way, focusing on WBA and Mini-CEX teaching. The clinical leads in Apollo, once appointed, will regularly engage with the clinical leads in Sydney via video-conference. There is a need to have well trained clinical teachers and supervisors in Apollo Hospital well before the first cohort of students in 2020.

As referenced at Standard 1, the Faculty acknowledges that further development work is required over the next two years to build a typical "clinical school" structure and processes within MQ Health and Apollo Hospital. This will be fundamental to an efficient process of teaching/learning between the two campuses.

Although the Apollo Hospital does not currently educate MBBS medical students, as only not for profit organisations in India can offer primary medical degrees, there is a culture of medical education in the organisation.

Apollo has approximately 90 specialty trainees completing the Diplomate of National Board (DNB) training at the hospital. The DNB program is three years, and offered by private institutions who are accredited by the National Board of Examinations. Those trainees who pass the DNB exam can then go on to undertake super specialty training (optional) or work as Registrars, then Consultants.

There are multiple PG trainees at the hospital now, and many consultants already teach specialist trainees, so are familiar with the assessment tools such as WBA and Mini-CEX.

### 2019 team findings

Macquarie Health has strong policies that govern roles that students can play in their facilities. First year students are not permitted in the Macquarie University Hospital. In Year 2, students may participate as observers, but must first learn about hand hygiene, scrubbing and gowning etc. All students will have been signed off as meeting clinical and communication skills expectations and so be prepared to enter Year 3 clinical placements at all sites. Those going to Apollo Hospital will participate in a pre-departure program that includes sessions on cultural awareness, communication, global health and wellbeing.

All students in Years 3 and 4 clinical placements will have clear schedules indicating how their learning weeks are structured, combining inpatient and ambulatory clinic experiences and tutorials, supported by contact with consultants, registrars and PGY 1/2 medical officers. Unlike most other private hospitals, many consultants at Macquarie University Hospital are employees, with clear educational roles and a greater physical presence on-site.

Clinical supervisors in all sites include many experienced clinical teachers in many specialties. Staff at MQ Health have had access to specific sessions on medical education topics. Clinical staff at Apollo Hospital attended a workshop on teaching skills in August 2019 as preparation for their roles.

Clinical teaching staff employed by MQ Health are on contracts that include requirements to provide an educational role that may include clinical skills teaching, clinical supervision, provision of lectures and tutorials, and student assessment. This means that paid time is allocated for medical education, potentially a stronger position than many other medical programs. Teaching within NSHLD facilities is covered by an explicit agreement that provides key appointments into clinical services in return for clinical teaching. Clinical leads have also been appointed at Apollo Hospital to ensure that teaching and supervision are provided as required.

There are clear guidelines that define roles and responsibilities for clinical titleholders and honorary clinical teachers. These are made available at appointment and remain available on the University intranet.

STAGE	OFFERED BY	QUALIFICATION AWARD	TIMEFRAME
Primary Medical Degree (MBBS)	Awarded by a College accredited by the Medical Council of India ( <i>must be not</i> <i>for profit</i> )	Bachelor of Medicine and Bachelor of Surgery (MBBS), and	4.5 years
		Compulsory Rotatory Residential Internship (CRRI)	1 year
Specialty Training (two pathways)	MCI accredited University Medical Colleges	Masters Degree [Doctor of Medicine (MD) or Master of Surgery (MS)], or	2-3 years
	Private institutions (e.g. Apollo) who are accredited by National Board of Examinations (NBE)	Diplomat of National Board (DNB) in a specialty	3 years
Super specialty training (Optional)			

Table 5 - Medical Education in India

The AMC team was informed that Macquarie students will be welcome to attend all clinical activities, and will be made part of the team. They will attend morning rounds and will work closely with the DNB trainees.

The MQ Health paradigm *Heal Learn Discover* has attracted many highly experienced clinicians who will contribute to teaching in the planned medical program. As noted at Standard 1.2, the team was impressed that clinicians employed by MUCA have clearly protected time to undertake their teaching commitments in addition to their clinical responsibilities. This commitment is specified in the employment contracts which stipulate that clinicians will participate in academic activities including teaching.

Apollo Hospital will recognise the teaching commitments of their clinicians with some monetary consideration given that Apollo clinicians are paid on a fee for service basis.

#### Appendix One Executive Summary 2017

#### **Executive Summary 2017**

Macquarie University's proposed medical program will reside in the Faculty of Medicine and Health Sciences. It will be a four-year graduate-entry Masters Degree (Extended) leading to a Doctor of Medicine (MD). The program proposes an intake of 60 fee-paying students (40 domestic and 20 international), commencing in 2018.

The medical program is distinctive in Australia as a significant component of learning occurs in a university-owned and operated teaching hospital and academic health sciences centre. The program aims to provide medical students with a quality assured international education, recognising the value of learning experiences outside Australia. To that end, the program plans to offer core clinical placements at the Apollo Hospital in Hyderabad, India.

#### Accreditation process

The AMC's *Procedures for Assessment and Accreditation of Medical Schools by the Australian Medical Council 2017* provide for education providers to seek assessment of proposed new medical programs.

The *Procedures* state at section 3.2.1 that institutions contemplating the establishment of a primary medical program should conduct independent negotiations with the appropriate state/territory and national authorities concerning student places and clinical facilities. If a decision is made by the relevant authorities to support the establishment of a new medical program, the AMC undertakes the assessment against the approved accreditation standards.

In establishing a new school, the education provider must submit a Stage 1 submission to the AMC. The AMC assesses the Stage 1 submission to determine if the planned program of study is likely to comply with the approved accreditation standards and if the education provider has demonstrated that it is able to implement the program.

The Macquarie University proposal is the first submission received by the AMC where the higher education provider proposing an offshore program component did not have an accredited medical program in Australia or New Zealand. Given the proposed program contains an offshore component, the AMC assessed the Stage 1 submission against the accreditation standards, along with the requirements for consideration of a medical program conducted offshore contained in the AMC policy *Primary medical programs provided offshore by Australian and/or New Zealand education providers*.

The AMC considered Macquarie's Stage 1 proposal in September 2016, and invited the Faculty to proceed to a Stage 2 assessment of the medical program.

When conducting a Stage 2 assessment, the AMC assesses the proposed program against the approved accreditation standards for primary medical education. An AMC team reviewed the Faculty's submission, and a written report from students enrolled in the Bachelor of Clinical Science and Doctor of Physiotherapy programs of the Faculty of Medicine and Health Sciences.

An AMC team visited Macquarie University and associated future clinical teaching sites the week of 3 April 2017.

A sub-team travelled to Apollo Hospital, Hyderabad, India to undertake a site visit from 20 – 23 March 2017.

This report presents the AMC's findings against the *Standards for Assessment and Accreditation of Primary Medical Programs by the Australian Medical Council 2012.* 

#### **Decision on accreditation**

Under the *Health Practitioner Regulation National Law*, the AMC may grant accreditation if it is reasonably satisfied that a program of study and the education provider meet the accreditation standards. The AMC may also grant accreditation if the program of study and the education provider substantially meet the accreditation standards, and imposing accreditation conditions will lead to the program meeting the standards within a reasonable time.

Having made a decision, the AMC reports its accreditation decision to the Medical Board of Australia to enable the Board to make a decision on the approval of the program of study for registration purposes.

#### Accreditation of new education providers and / or programs

In accordance with the *Procedures for Assessment and Accreditation of Medical Schools by the Australian Medical Council 2017*, section 5.2, the accreditation options are:

- (i) Accreditation for a period up to one year after the full program has been implemented, subject to conditions being addressed within a specific period and depending on satisfactory annual progress reports. The conditions may include a requirement for follow-up assessments to review progress in implementing the program. In the year the accreditation ends, the education provider will submit a comprehensive report for extension of accreditation. Subject to a satisfactory report, the AMC may grant a further period of accreditation, up to the maximum possible period, before a new accreditation assessment.
- (ii) Accreditation will be refused where the education provider has not satisfied the AMC that it can implement and deliver the study at a level consistent with the accreditation standards. The AMC will give the education provider written notice of the decision and its reasons, and the procedures available for review of the decision within the AMC.

The AMC Medical School Accreditation Committee considered the draft report at its meeting of 2 June 2017. The Committee requested further information from the Faculty, expressed as a response to the proposed conditions listed below, prior to making an accreditation recommendation to the AMC Directors. The Faculty provided information on the points below to the AMC on 13 June 2017.

- Provide a detailed agreement with Apollo Hospital which outlines respective roles and responsibilities concerning the delivery of the 20 week core clinical placement at Apollo Hospital, Hyderabad.
- Confirm a formal agreement with Northern Sydney Local Health District (NSLHD) to support effective partnerships for delivery of the program, specifically clinical placements. (Standard 1.6)
- Provide a curriculum map outlining the Indigenous Health content. (Standard 3.5)

The Committee considered the program's progress on these items, and integrated the information provided into the findings of the accreditation report. The Committee then finalised its accreditation recommendations and conditions.

# The AMC is satisfied that the medical program of Macquarie University, Faculty of Medicine and Health Sciences meets the approved accreditation standards.

The 23 June 2017 meeting of the AMC Directors agreed:

 That the four-year graduate-entry Masters Degree (Extended) (MD) medical program of the Macquarie University, Faculty of Medicine and Health Sciences be granted accreditation to 31 March 2023; and (ii) That accreditation of the program is subject to meeting the monitoring requirements of the AMC, including satisfactory progress reports; a follow-up assessment in 2019 to assess the implementation of Years 1 and 2 and plans for Years 3 to 4; and to the following conditions:

#### By 6 October 2017

- Provide the finalised MD Program Handbook. (Standard 3.4)
- Provide specific learning objectives for Year 1. (Standard 3.4)
- Provide an update on the implementation of Entrustable Professional Activities (EPAs) in capability-based assessment in the medical program. (Standard 5.2)
- Provide evidence that work is progressing on the Stage 2 assessment strategy. (Standard 5.2)
- Provide information on the implementation of monitoring and evaluation, specifically plans for the evaluation of the first year cohort. (Standard 6.1)
- Provide evidence that the draft fitness to practice policy has been approved through the appropriate University processes. (Standard 7.4)
- Provide further detail on student indemnification and insurance agreements, particularly for the Apollo Hospital and elective rotations. (Standard 7.6)

#### 2018 conditions

- Develop a structure for the Apollo clinical school which details the interface with the Australian-based governance structures, and specifies the teaching, training and assessment expectations, funding, student indemnification and services commitment. (Standard 1.1)
- Confirm a formal agreement with Northern Sydney Local Health District (NSLHD) to support effective partnerships for delivery of the program, specifically clinical placements. (Standard 1.6)
- Provide the structure of clinical leads for each discipline in the Apollo clinical school, as well as at Royal North Shore Hospital to illustrate the interaction of clinical school leads with Macquarie University. (Standard 1.8)
- Provide an update on Year 3 placements in Paediatrics, and Obstetrics and Gynaecology. (Standard 3.2)
- Provide specific learning objectives for Year 2. (Standard 3.4)
- Provide a curriculum map for the Indigenous Health content. (Standard 3.5)
- Provide further detail on the selective and elective terms in Year 4. (Standard 3.6)
- Provide the Stage 2 assessment blueprint. (Standard 5.2)
- Provide updates on the operational aspects of monitoring and evaluation of the program. (Standard 6.1)
- Confirm the availability of appropriate accommodation for students while undertaking placements at Apollo Hospital. (Standard 8.1)
- Confirm the physical facilities available to medical students at Apollo Hospital. (Standard 8.1)
- Develop opportunities beyond Macquarie University Health Sciences Centre (MQ Health) for general practice experience. (Standard 8.3)
- Confirm opportunities for rural clinical experiences. (Standard 8.3)
- Develop opportunities for students to have experience in the provision of culturally competent health care to Aboriginal and Torres Strait Islander peoples. (Standard 8.3)
- Provide the plans to ensure well trained clinical teachers and supervisors at Apollo Hospital for the first cohort of students in 2020. (Standard 8.4)

# Appendix TwoCollated Findings 2017 and 2019

Standard:	#:	Condition:	To be met:	Status:
_	1	Develop a structure for the Apollo clinical school which details the interface with the Australian based governance structures, and specifies the teaching, training and assessment expectations, funding, student indemnification and services commitment. (Standard 1.1)	2018	Satisfied 2018
	23	Demonstrate that the time allocation that is available to the Senior Lecturer, Indigenous Health Education is adequate to meet current and future program needs. (Standards 1.4, 1.8, 3.5 and 7.3)	2020	To be determined
1	2	Confirm a formal agreement with Northern Sydney Local Health District (NSLHD) to support effective partnerships for delivery of the program, specifically clinical placements. (Standard 1.6)	2018	Progressing (2019 To be determined)
	3	Provide the structure of clinical leads for each discipline in the Apollo clinical school, as well as at Royal North Shore Hospital to illustrate the interaction of clinical school leads with Macquarie University. (Standard 1.8)	2018	Progressing (2019 To be determined)
	24	Appoint clinical leads for Year 4 (Standard 1.8)	2020	To be determined
Standard 2		Nil		
	4	Provide specific learning objectives for Year 1. (Standard 3.4)	2017	Satisfied 2017
	5	Provide the finalised MD Program Handbook. (Standard 3.4)	2017	Satisfied 2017
Standard	6	Provide an update on Year 3 placements in Paediatrics, and Obstetrics and Gynaecology. (Standard 3.2)	2018	Progressing (2019 To be determined)
3	7	Provide specific learning objectives for Year 2. (Standard 3.4)	2018	Satisfied 2018
	8	Provide a curriculum map for the Indigenous Health content. (Standard 3.5)	2018	Satisfied 2018
	9	Provide further detail on the selective and elective terms in Year 4. (Standard 3.6)	2018	Progressing (2019 To be determined)
Standard 4	25	Embed opportunities for interprofessional learning in Stage 2 of the Program. (Standard 4.7)	2020	To be determined
	26	Provide the EPA framework for each clinical term. (Standard 5.1)	2020	To be determined
Standard 5	10	Provide an update on the implementation of Entrustable Professional Activities (EPAs) in capability based assessment in the medical program. (Standard 5.2)	2017	Satisfied 2018
	11	Provide evidence that work is progressing on the Stage 2 assessment strategy. (Standard 5.2)	2017	Satisfied 2017
12		Provide the Stage 2 assessment blueprint. (Standard 5.2)	2018	Satisfied 2018

Standard:	#:	Condition:	To be met:	Status:
	27	Employ validated methods of standard setting. (Standard 5.2)	2020	To be determined
Standard 6	13	Provide information on the implementation of monitoring and evaluation, specifically plans for the evaluation of the first year cohort. (Standard 6.1)	2017	Satisfied 2018
	14	Provide updates on the operational aspects of monitoring and evaluation of the program. (Standard 6.1)	2018	Satisfied 2018
Standard	15	Provide evidence that the draft fitness to practice policy has been approved through the appropriate University processes. (Standard 7.4)	2017	Satisfied March 2018
7	16	Provide further detail on student indemnification and insurance agreements, particularly for the Apollo Hospital and elective rotations. (Standard 7.6)	2017	Satisfied 2017
	17	Confirm the availability of appropriate accommodation for students while undertaking placements at Apollo Hospital. (Standard 8.1)	2018	Satisfied 2018
	18	Confirm the physical facilities available to medical students at Apollo Hospital. (Standard 8.1)	2018	Satisfied 2018
	28	Evaluate the student and Faculty experience of the accommodation in Hyderabad. (Standard 8.1)	2020	To be determined
	19	Develop opportunities beyond MQ Health for general practice experience. (Standard 8.3)	2018	Progressing (2019 To be determined)
	20	Confirm opportunities for rural clinical experiences. (Standard 8.3)	2018	Progressing (2019 To be determined)
Standard 8	21	Develop opportunities for students to have experience in the provision of culturally competent health care to Aboriginal and Torres Strait Islander peoples. (Standard 8.3)	2018	Progressing (2019 To be determined)
0	29	Confirm the arrangements to support mental health/psychiatry clinical learning. (Standard 8.3)	2020	To be determined
3	30	Confirm the arrangements to support emergency medicine clinical learning at Royal North Shore Hospital. (Standard 8.3)	2020	To be determined
	31	Confirm that an adequate number of appropriate general practices have been confirmed as a site for learning in primary care. (Standard 8.3)	2020	To be determined
	32	Confirm the availability of rural and regional selectives and electives for 2021. (Standard 8.3)	2020	To be determined
	33	Confirm that adequate resourcing is available to continue to develop relationships with Aboriginal health services. (Standard 8.3)	2020	To be determined
	22	Provide the plans to ensure well trained clinical teachers and supervisors at Apollo Hospital for the first cohort of students in 2020. (Standard 8.4)	2018	Progressing (2019 To be determined)

#### Appendix Three Membership of the 2017 assessment team

**\*Professor Wayne Hodgson (Chair),** BSc, PhD, GradCertHEd Deputy Dean (Education), Monash University, Faculty of Medicine, Nursing and Health Sciences

\*Emeritus Professor Napier Thomson (Deputy Chair), MBBS, MD, FRACP, FRCP, FACP, FRCPI Professor of Medicine, Monash Medical School, Alfred Hospital

**Dr Vandit Bhasin,** BE/BSci, MBBS Medical Intern, Caboolture Hospital, Queensland Health

**\*Professor Nicholas Glasgow,** BHB, MBChB, GradDipFamMed, MD, FRNZCGP, FRACGP, GradCertEdStudies, FAChPM

Acting Head, Department of Health Services Research and Policy, Research School of Population Health, Australian National University

**Professor Susan Elliott,** MBBS, MD, GradCertHigherEd, GradCertHealthEco, FRACP Deputy Vice-Chancellor and Vice-President (Education), Monash University

**Professor Sally Sandover,** BSc, MPH Associate Dean, Curtin University, Curtin Medical School

**\*Professor Rita Sood,** MD, MMEd, FAMS, FRCP Professor, Department of Medicine, All India Institute of Medical Sciences, New Delhi President, South East Asian Regional Association for Medical Education

\*Ms Fiona van der Weide Accreditation Administrator, Australian Medical Council

\*Ms Annette Wright Program Manager, Medical Education and Accreditation, Australian Medical Council

\*Indicates team members who participated in site visits to India

### Appendix Four Membership of the 2019 AMC Assessment Team

**Professor Wayne Hodgson (Chair)** BSc, PhD, GradCertHEd Deputy Dean (Education), Faculty of Medicine, Nursing and Health Sciences, Monash University

**Professor Sally Sandover (Deputy Chair)** BSc, MPH Associate Dean (Med Ed), Curtin University, Curtin Medical School

**Associate Professor Jo Bishop** BSc (Hons), PhD, PGCertEd Curriculum Lead, MD Program / Associate Dean, Student Affairs and Service Quality, Faculty of Health Sciences and Medicine, Bond University

**Ms Cheryl Davis** BHSC, MPH Director, Indigenous Engagement, Faculty of Health Sciences, Curtin University

**Professor Richard Hays** MBBS, PhD, MD, Dip RCOG, FRACGP, FACRRM, FRCGP, PFHEA, FAoME, FAMEE, FANZHPE Professor of Remote Health and Medicine- Adjunct Professor, James Cook University

**Professor Stephen Tobin** MBBS, GradCertClinEd, MSurgEd FRACS, FRCS, FRCS (Ed) ad hom. Associate Dean, Professor of Clinical Education, Western Sydney University, School of Medicine

**Mr Alan Merritt** Manager, Medical School Assessments, Australian Medical Council

**Ms Katie Khan** Program Administrator, Australian Medical Council

# Appendix FiveGroups met by the 2019 Assessment Team

Meeting	Attendees		
Monday, 16 September 2019			
Macquarie University			
Vice-Chancellor	President and Vice-Chancellor; Chair, MQ Health Board		
Senior Faculty and Macquarie University Health Sciences Centre Executive Group	President and Vice-Chancellor; Chair, MQ Health Board DVC, Medicine and Health Sciences; Executive Dean; Managing Director, MQ Health		
	Deputy Dean; Associate Dean, Learning and Teaching Faculty General Manager; Chief Operating Officer - MQ Health Director, Strategy and Planning – MQ Health		
	Associate Dean, Research		
	CEO, Macquarie University Hospital and Clinical Services		
Governance	DVC, Medicine and Health Sciences; Executive Dean; Managing Director, MQ Health		
	Deputy Dean; Associate Dean, Learning and Teaching Program Manager, Education & Faculty Initiatives Senior Education Program Officer Head of Governance Services		
Main Curriculum and Executive Committee	Executive Dean; Macquarie MD Course Director Stage 1 Lead Stage 2 Lead Deputy Stage 2 Lead Deputy Dean and Associate Dean, Learning and Teaching Faculty General Manager Program Manager, Education and Faculty Initiatives Student Services Manager Clinical Director of Primary Care Associate Dean, Clinical Partnerships Lead, Evaluation and Enhancement Apollo Campus Dean Lead, Student Professionalism		
Year and Domain Committees Stage 1 (Year 1 and Year 2)	Stage 1 Lead Deputy Dean; Associate Dean, Learning and Teaching Year 1 Lead, Year 1 Unit Convenor Year 2 Unit Convenor Year 2 Unit Convenor Year 2 Unit Convenor Year 2 Unit Convenor Stage 2 Lead		

Meeting	Attendees
	Stage 2 Deputy Lead
	Clinical Skills Coordinator
HETI Teleconference	Medical Director HETI
Year and Domain Committees	Chair, Stage 2 Lead & Surgery Discipline Lead
Stage 2 (Year 3 and 4)	Stage 2 Deputy Lead & Medicine Discipline Lead
	Stage 1 Lead
	Deputy Dean; Associate Dean, Learning and Teaching
	Research Lead
	Critical Care Discipline Lead
	Program Manager, Education & Faculty Initiatives
	Paediatrics Discipline Lead
	OBGYN Coordinator
	Primary Care Discipline Lead
	Associate Dean, Clinical Partnerships
	Campus Dean, Apollo
RNSH Clinical Leadership	Paediatrics / OBGYN
Teleconference	Emergency Medicine
Year and Domain Committees	Senior Research Fellow, Biochemistry and Genetics
Vertical Integration	Senior Lecturer, Anatomy, histology, cell biology and embryology
	Postdoctoral Research Fellow, Microbiology and Immunology
	Lecturer, Pharmacology
	Physiology, Interim Lead
	Professor, Research Skills and Project
	Clinical Practitioner
	Deputy Dean; Associate Dean, Learning and Teaching
	Head of Department, Health Systems and Populations
	Lecturer, Department of Biomedical Sciences
	Stage 1 Lead
	Professor, Patient Safety and Quality
	Professor, Ethical and Reflective Practice

Meeting	Attendees
Tuesday, 17 September 2019	
Macquarie University	
Learning and Teaching, and Innovation	Executive Dean; Macquarie MD Course Director Deputy Dean; Associate Dean, Learning and Teaching; Chair. Faculty Education Committee Stage 1 Lead Stage 2 Lead Stage 2 Deputy Lead Program Manager, Education & Faculty Initiative Senior Research Fellow, Application of Evaluation in Year 1
Assessment	Executive Dean; Macquarie MD Course Director Deputy Dean; Associate Dean, Learning and Teaching Stage 1 Lead Stage 2 Lead Program Manager, Education and Faculty Initiatives
Research	Lead, MD Research Deputy Lead, MD Research Deputy Dean; Associate Dean, Learning and Teaching Associate Dean, Research Faculty Research Manager Head of Department, Clinical Medicine Prof of Respiratory Medicine and HEAD Cardiovascular & Respiratory Clinical Program Stage 2 Lead
NSW Ministry of Health Teleconference	Medical Advisor, Workforce Planning & Talent Development
Students – Student Society Executive	President, MUMS Vice President, External Surgical Society Chair; Prior President MUMS Treasurer Year 1 Student Representative
Professional Staff	<ul> <li>Program Manager, Education &amp; Faculty Initiatives</li> <li>Governance Support Officer</li> <li>Faculty Operations Manager</li> <li>Director of Strategy &amp; Planning MQ Health</li> <li>Faculty Research Manager and Associate FGM</li> <li>Faculty Finance Manager, Shared Service Model with</li> <li>CFO Office</li> <li>Faculty HR Manager, Shared Service Model with HR</li> <li>FGM and COO MQ Health</li> <li>Faculty Reception</li> </ul>

Meeting	Attendees
	Senior Education Program Officer
	Student Placement Support Coordinator
	MD Program Support Officer
	Volunteers Coordinator
	Lead, Student Professionalism
	Senior Learning Designer
	Senior Learning Designer
	Technology Administration Assistant
	Departmental Administrator, Department of Clinical Medicine
	Research Laboratory Manager
	Clinical Education Coordinator
	MD Research Program and AIHI Institute Administrator
MQ Health Doctors In Training	Director of Clinical Training
	Director of Medical and Surgical Services
	Clinical Training Manager, MQ Health
	Director, Strategy and Planning, MQ Health
Clinical Sites / Clinical Teaching	Campus Dean, Apollo Hospitals
Team	General Manager, Department of Administration, Apollo Hospitals
	Clinical Experience Coordinator; Operations Executive, Apollo Hospitals
Facilities Tour	Executive Dean; Macquarie MD Course Director
	Director, Clinical Skills Training
	Clinical Skills Development Coordinator
	Clinical Director, Primary Care
	Professor of Anatomy
Facilities Tour	Executive Dean
MQ Health Facilities Tour	CEO MUH and Clinical Services
-	Director, Clinical Training
	Director, Doctor of Physiotherapy Program
	Executive Director, MindSpot
	General Manager, MindSpot
Facilities	Faculty General Manager and COO, MQ Health
	Faculty Operations Manager
	racuity operations manager

Meeting	Attendees
Wednesday, 18 September 2019	
Macquarie University	
Student Support	Student Services Manager
Administration, Course and	Lead, Student Professionalism
Wellbeing	Team Leader, Student Services
	Student Placement Support Coordinator
	MD Program Support Officer
	Apollo Clinical Experience Coordinator
	Program Manager, Education and Faculty Initiatives
	Clinical Director of Primary Care
	Director, MindSpot
Clinical Sites / Clinical Teaching	Medicine Discipline Lead
Team	Surgery Discipline Lead
MQ Health	Primary Care Discipline Lead
	Stage 1 Lead
	Senior Lecturer, Department of Clinical Medicine
	Professor, Respiratory Medicine; Clinical Program Head- Cardiovascular & Respiratory Program
	Senior Lecture, Department of Clinical Medicine
	Associate Dean, Clinical, Faculty of Medicine and Health Sciences; Professor, Surgery, Department of Clinical Medicine
	Clinical Senior Lecturer; Associate Professor, Neurosurgery, Department of Clinical Medicine
Monitoring and Evaluation	Lead, Evaluation and Enhancement and Chair, MDEEC
	Deputy Dean; Associate Dean, Learning and Teaching; Chair, Faculty Education Committee
	Stage 1 Lead
	Stage 2 Lead
	Lead, Student Professionalism
	Year 1 Lead, Year 1 Unit Convenor
Clinical Sites / Clinical Teaching	Primary Care Discipline Lead
Team	Hunters Hill Medical Practice GP
	MQ Health GP
	Year 2 Unit Convenor – Primary Care and MQ Health GP
University of Sydney	Dean, Sydney Medical School
Teleconference	Head, Northern Clinical School

Meeting	Attendees		
Wednesday, 18 September 2019			
Royal North Shore Hospital			
Clinical Sites / Clinical Teaching Team – NSLHD / RNSH Executive	Chief Executive, NSLHD Director, Medical Services		
RNSH Executive with Tour	Director, Medical Services		
RNSH Clinical Leadership	Paediatrician; Conjoint Senior Lecturer OBGYN Paediatrics (Zoom)		
Northern Clinical School	Head Northern Clinical School Executive Officer, Northern Clinical School		
Thursday, 19 September 2019			
Macquarie University			
Admissions	Deputy Dean; Associate Dean, Learning and Teaching Director of Organisational Psychology Programs Faculty of Human Sciences Lead, Student Professionalism Student Services Manager Clinician and Teaching Tutor (Oncology) Program Manager, Education and Faculty Initiatives		
Indigenous Health	Pro Vice-Chancellor, Indigenous Strategy and Director, Walanga Muru Deputy Dean; Associate Dean, Learning and Teaching Program Manager, Education and Faculty Initiatives Senior Lecturer in Indigenous Health Education		
Learning Innovation and Professional Development	Deputy Dean; Associate Dean, Learning and Teaching Senior Teaching Fellow Senior Learning Designer Senior Learning Designer Technology Administration Assistant		