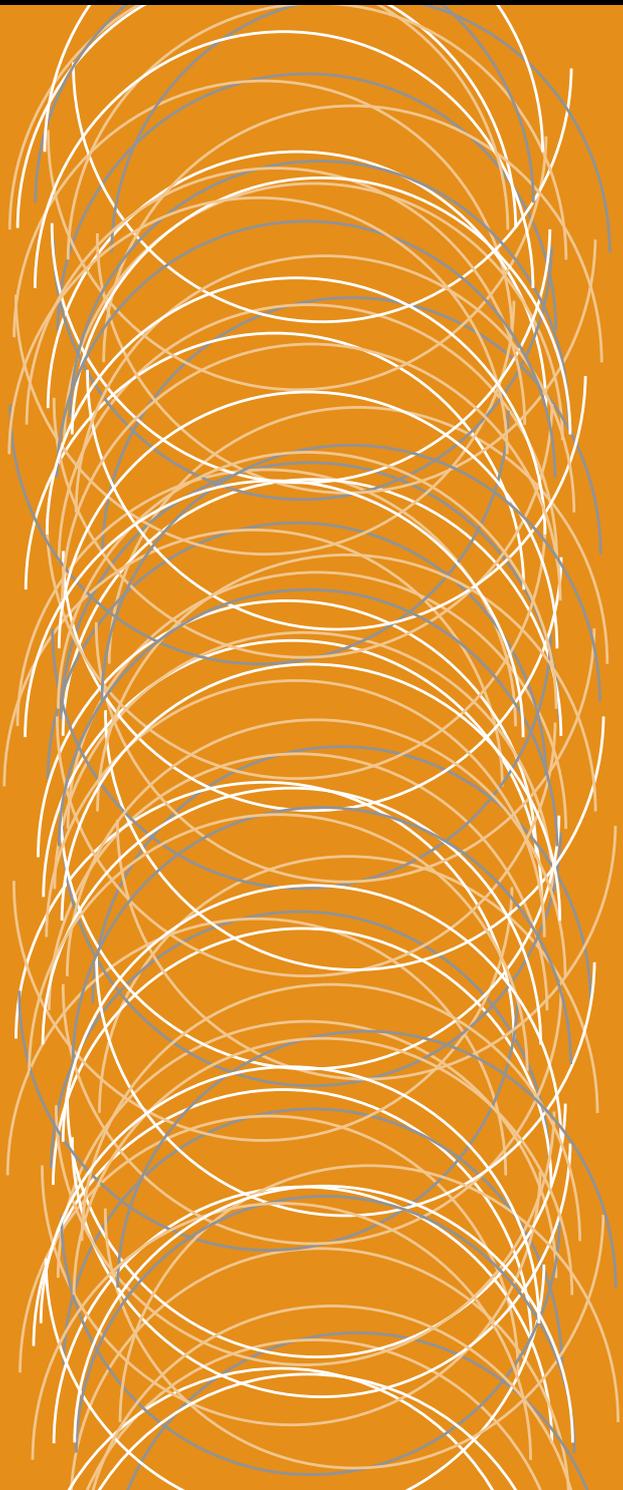


Australian Medical Council Limited

Accreditation of  
University of Wollongong  
Graduate School of Medicine medical program

AMC



Medical School Accreditation Committee  
November 2016

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## **Executive summary 2016**

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The University of Wollongong, Graduate School of Medicine is seeking reaccreditation of its medical program. The School delivers a four-year graduate entry Bachelor of Medicine / Bachelor of Surgery (MBBS) program. The School will transition its MBBS to a Doctor of Medicine (MD) program commencing January 2017. The MD program was included in the scope of the 2016 assessment. All students who commenced the MBBS in 2014 or later have the option to transfer to the MD.

### **Accreditation process**

According to the AMC's *Procedures for Assessment and Accreditation of Medical Schools by the Australian Medical Council 2015*, accredited medical education providers may seek reaccreditation when their period of accreditation expires. Accreditation is based on the medical program demonstrating that it satisfies the accreditation standards for primary medical education. The provider prepares a submission for reaccreditation. An AMC team assesses the submission, and visits the provider and its clinical teaching sites.

The accreditation of the Graduate School of Medicine's medical program expires on 31 March 2017.

An AMC team completed the reaccreditation assessment. It reviewed the School's submission and the Wollongong University Medical Students Society's report, and visited the School and associated clinical teaching sites in the week of 8 – 12 August 2016.

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 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 on the approval 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.

## Reaccreditation of established education providers and programs of study

The accreditation options are:

- (i) Accreditation for a period of six years subject to satisfactory progress reports. 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 a maximum of four years, before a new accreditation review.
- (ii) Accreditation for six years subject to certain conditions being addressed within a specified period and to satisfactory progress reports. 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 a maximum of four years, before a new accreditation review.
- (iii) Accreditation for shorter periods of time. If significant deficiencies are identified or there is insufficient information to determine the program satisfies the accreditation standards, the AMC may award accreditation with conditions and for a period of less than six years.
- (iv) Accreditation may be withdrawn where the education provider has not satisfied the AMC that the complete program is or can be implemented and delivered at a level consistent with the accreditation standards.

### **The AMC is satisfied that the medical program of the University of Wollongong, Graduate School of Medicine meets the approved accreditation standards.**

The 19 December 2016 meeting of the AMC Directors agreed:

- (i) That the four-year graduate entry Bachelor of Medicine / Bachelor of Surgery (MBBS) medical program of the University of Wollongong, Graduate School of Medicine **be granted accreditation to 31 March 2023** (N.B. the MBBS will be phased out entirely by 2019); and
- (ii) That the four-year graduate entry Doctor of Medicine (MD) medical program of the University of Wollongong, Graduate School of Medicine **be granted accreditation to 31 March 2023**.
- (iii) That the accreditation of both programs is subject to satisfactory progress reports; and to the following conditions:

#### *2017 conditions*

- Demonstrate that the Faculty's and School's revised governance structures and functions are operating effectively (Standard 1.1).
- Implement the proposed mechanism to consult relevant groups, including community members, on key issues relating to the purpose, curriculum, graduate outcomes and governance (Standard 1.1).
- Provide evidence there are appropriate senior discipline leads to deliver the medical program, specifically in surgery, pathology, clinical epidemiology, and metabolic medicine (Standard 1.8).

- Ensure that the purpose of the Graduate School of Medicine and the medical program addresses Aboriginal and Torres Strait Islander peoples and their health (Standard 2.1.2).

### **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 (meet/substantially meet) 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.

<b>1. The context of the medical program</b>	<b>MET</b>
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Standards 1.1 and 1.8 are substantially met.

#### *2017 conditions*

Demonstrate that the Faculty's and School's revised governance structures and functions are operating effectively (Standard 1.1).

Implement the proposed mechanism to consult relevant groups, including community members, on key issues relating to the purpose, curriculum, graduate outcomes and governance (Standard 1.1).

Provide evidence there are appropriate senior discipline leads to deliver the medical program, specifically in surgery, pathology, clinical epidemiology, and metabolic medicine (Standard 1.8).

#### *Commendations*

The leadership and collegiality of the curriculum team in its management and review of the curriculum (Standard 1.3).

The program's effective partnerships and relationships with the local communities and health related sectors in the Illawarra Shoalhaven region and communities that effectively support the clinical hubs (Standard 1.6).

### *Recommendations*

Develop a risk management strategy to ensure the program has the ongoing financial resources and capacity to sustain the program, specifically related to potential losses of revenue and additional costs related to clinical placements (Standard 1.5).

Investigate opportunities to enhance research and scholarship in the medical program generated through the University's investment in health and biomedical research (Standard 1.7).

Formalise a joint strategy with the Illawarra Shoalhaven Local Health District in order to secure the required clinical academics to deliver the medical program (Standard 1.8).

Develop a more robust induction process and ongoing professional development program for honorary clinical academics and preceptors (Standards 1.9 and 8.4).

<b>2. The outcomes of the medical program</b>	<b>MET</b>
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Standard 2.1.2 is substantially met.

### *2017 condition*

Ensure that the purpose of the Graduate School of Medicine and the medical program addresses Aboriginal and Torres Strait Islander peoples and their health (Standard 2.1.2).

### *Commendation*

The School's promotion of its shared vision and achievement of its stated goal of producing medical practitioners for all geographic settings, particularly regional, rural and remote communities (Standard 2.1).

<b>3. The medical curriculum</b>	<b>MET</b>
----------------------------------	------------

All standards are met.

### *Commendations*

The program design which incorporates comprehensive vertical and horizontal integration of the curriculum (Standard 3.3).

The articulation between all phases, and the design and delivery of Phases 3 and 4, which produce graduates who are ready to practise as interns (Standard 3.3).

The School's support of Indigenous health and the expanded Indigenous health curriculum, which includes the Phase 1 Indigenous Health Immersion Program (Standard 3.5).

<b>4. Teaching and learning</b>	<b>MET</b>
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All standards are met.

*Commendations*

The School's continued development of teaching and learning innovations to address the learning needs of students, and support them as independent learners in dispersed settings (Standard 4.1).

The increasing level of participation by students in clinical care through the program; the team specifically commends the inclusion of the parallel consulting sessions throughout Phase 3 (Standard 4.4).

The program offers students several clinical and academic role modelling opportunities in conjunction with the relevant Personal and Professional Development content (Standard 4.5).

<b>5. The curriculum - assessment of student learning</b>	<b>MET</b>
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All standards are met.

*Commendations*

The program's assessment approach which is consistent with international good practice (Standard 5.1).

The program's coherent and integrated approach to assessment demonstrates a program of assessment methods. (Standard 5.2)

*Recommendations*

Continue to explore ways to identify and address unprofessional behaviour that occurs outside timetabled sessions (Standard 5.2).

Reduce the tendency toward the identified leniency bias in workplace-based assessments (Standard 5.2).

Explore ways to enhance student engagement in formative assessment opportunities (Standard 5.3).

<b>6. The curriculum - monitoring</b>	<b>MET</b>
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All standards are met.

*Commendations*

The multiple methods of data collection (e.g., graduate survey, employer survey, stakeholder input, student opinion) used to monitor the curriculum (Standard 6.1).

The high levels of satisfaction with the program from students, staff and health service employers (Standard 6.2).

*Recommendations*

Strengthen the monitoring and review of the quality of teaching and supervision with more robust and formalised forms of evaluation (Standard 6.1).

Develop mechanisms to improve availability of evaluation results to stakeholders outside of key committees (Standard 6.3).

<b>7. Implementing the curriculum – students</b>	<b>MET</b>
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All standards are met.

*Commendations*

The systematic and comprehensive student support system provided across all program sites, including the dedicated role of Head of Students (Standard 7.3).

The wide representation of students on committees with evidence the student voice is considered throughout the program (Standard 7.5).

*Recommendation*

Address student perceptions regarding the University leave policy concerning requirements to make up days/hours should they miss more than five percent of a rotation (Standard 7.3).

<b>8. Implementing the curriculum- learning environment</b>	<b>MET</b>
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All standards are met.

*Commendations*

The outstanding, purpose-built facilities at a range of School sites, including the School's dispersed clinical hubs (Standard 8.1).

The well-structured and comprehensive clinical experience in a range of health settings across the breadth of the medical program, that prepares students well for clinical practice (Standard 8.3).

The longitudinal integrated clerkship model in Phase 3 that immerses all students in a regional, rural or remote community practice and hospital, while ensuring comparable access to all required clinical experiences (Standard 8.3).

The dedication and high level of support, both academically and socially, that is provided by preceptors and staff to students at the Phase 3 clinical hubs. The School is commended for building this strong clinical network (Standard 8.4).

## Introduction

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### 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, and a member with background in, and knowledge of, health consumer issues.

The AMC appoints an accreditation assessment team to complete a reaccreditation 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 2015*. 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 School**

The University of Wollongong was established in 1951 as a division of the New South Wales University of Technology. In 1975 the University of Wollongong became an independent institution.

The University employs approximately 1,200 academic and 1,600 professional and technical staff members, and has approximately 32,000 students.

The University conducted a major restructure of its faculties and schools in 2013. The organisation structure consists of the following faculties:

- Business
- Engineering and Information Sciences
- Law, Humanities and the Arts
- Science, Medicine and Health
- Social Sciences.

The Faculty of Science, Medicine and Health is comprised of five schools and one research entity:

- School of Biological Sciences
- School of Chemistry
- School of Earth and Environmental Sciences
- School of Medicine
- School of Nursing
- Illawarra Health and Medical Research Institute.

The School of Medicine includes four disciplines:

- Graduate Medicine (known as Graduate School of Medicine)
- Indigenous Health
- Medical and Exercise Science
- Dietetics and Nutrition.

Previously, the Graduate School of Medicine had been its own Faculty, and in 2013 amalgamated with three other disciplines to become the larger School of Medicine. The Head of the School of Medicine is also the Dean of the Graduate School of Medicine.

The Graduate School of Medicine admitted its first students in 2007. The School offers a four-year graduate entry Bachelor of Medicine / Bachelor of Surgery (MBBS) program and from 2017 will offer a Doctor of Medicine (MD) program in place of the MBBS. All students who commenced the MBBS after 2014 will be offered the option to transition to the MD.

The primary organisational units for teaching and research within the Graduate School of Medicine are:

- Teaching Hospitals
- Community, Primary, and Remote and Rural
- Learning and Teaching.

The medical program is organised into four phases which are underpinned by four curriculum themes: Medical Sciences, Clinical Competencies, Personal and Professional Development, and Research and Critical Analysis.

Phase 1, the first eighteen months of the program, is an integrated, case-based learning program of seven system-based teaching blocks. It is delivered at the Wollongong and Shoalhaven campuses. Phase 1 also includes clinical placement sessions in general practice, allied health/community health, Indigenous health and hospitals.

Phase 2 is a year-long placement in the hospital environment with one day per week on campus. There are seven clinical rotations of five weeks duration in Phase 2.

Phase 3 is a year-long, longitudinal clinical placement in a regional or rural hub in NSW where students are based at a general practice, spend time at a regional hospital setting, and participate in case-based learning and tutorials with School staff one day per week.

Phase 4 is a six-month clinical placement of three, six-week rotations, including an elective, a selective and a pre-internship term.

In each of the four years of the program, there are approximately 76 students in domestic Commonwealth supported places and approximately 12 international student places. The student society is the Wollongong University Medical Students Society (WUMSS).

### **Accreditation history**

The AMC first assessed the University of Wollongong's proposed medical program in 2006. The AMC's 2006 report stated that the School adopted its curriculum from three sources: the University of Sheffield, the Plymouth University's Peninsula Medical School, and the Flinders University Rural Parallel Community Curriculum, and merged these to create a curriculum suited to the Wollongong context. Following the 2006 assessment, the School received accreditation until 31 December 2012. A follow-up visit was conducted in 2008 to review the implementation of the clinical years.

The AMC confirmed its 2006 accreditation decision to accredit the program until 31 December 2012, subject to conditions and progress reporting.

In 2009 and 2010 the School submitted satisfactory progress reports to the AMC.

In 2011, the School submitted a comprehensive report and a request for extension of accreditation to the AMC. The AMC accepted the comprehensive report, and extended accreditation until 31 December 2016. The School's 2012 – 2015 annual progress reports were accepted by the AMC.

In May 2015 the School informed the AMC Medical School Accreditation Committee of its intention to transition the MBBS program to a Masters degree from 2017. Students who commenced the MBBS in 2014 or later may transfer to the MD. The Committee considered the

proposal, agreed that the change did not constitute a major change and this was endorsed by the AMC Directors.

The AMC began planning the reaccreditation assessment of the medical program in 2015. It appointed an accreditation team to complete the assessment. The AMC team reviewed the School's submission and the Wollongong University Medical Students Society's report, and visited the School and associated clinical teaching sites in the week of 8 August 2016.

### **This report**

This report details the findings of the 2016 accreditation assessment.

Each section of the accreditation report begins with the relevant AMC accreditation standards.

The members of the 2016 AMC team are at **Appendix 1**.

The groups met by the AMC team in 2016 are at **Appendix 2**.

### **Appreciation**

The AMC thanks the University, the Faculty of Science, Medicine and Health, the School of Medicine, and the Graduate School of Medicine 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**

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### **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.*

The University of Wollongong's Graduate School of Medicine admitted its first cohort of students in 2007.

In 2013 the University conducted a major restructure, resulting in a reduction in the number of faculties from eleven to five. All faculties report to the Vice-Chancellor via their faculty executive deans and through the Vice-Chancellor's Advisory Group.

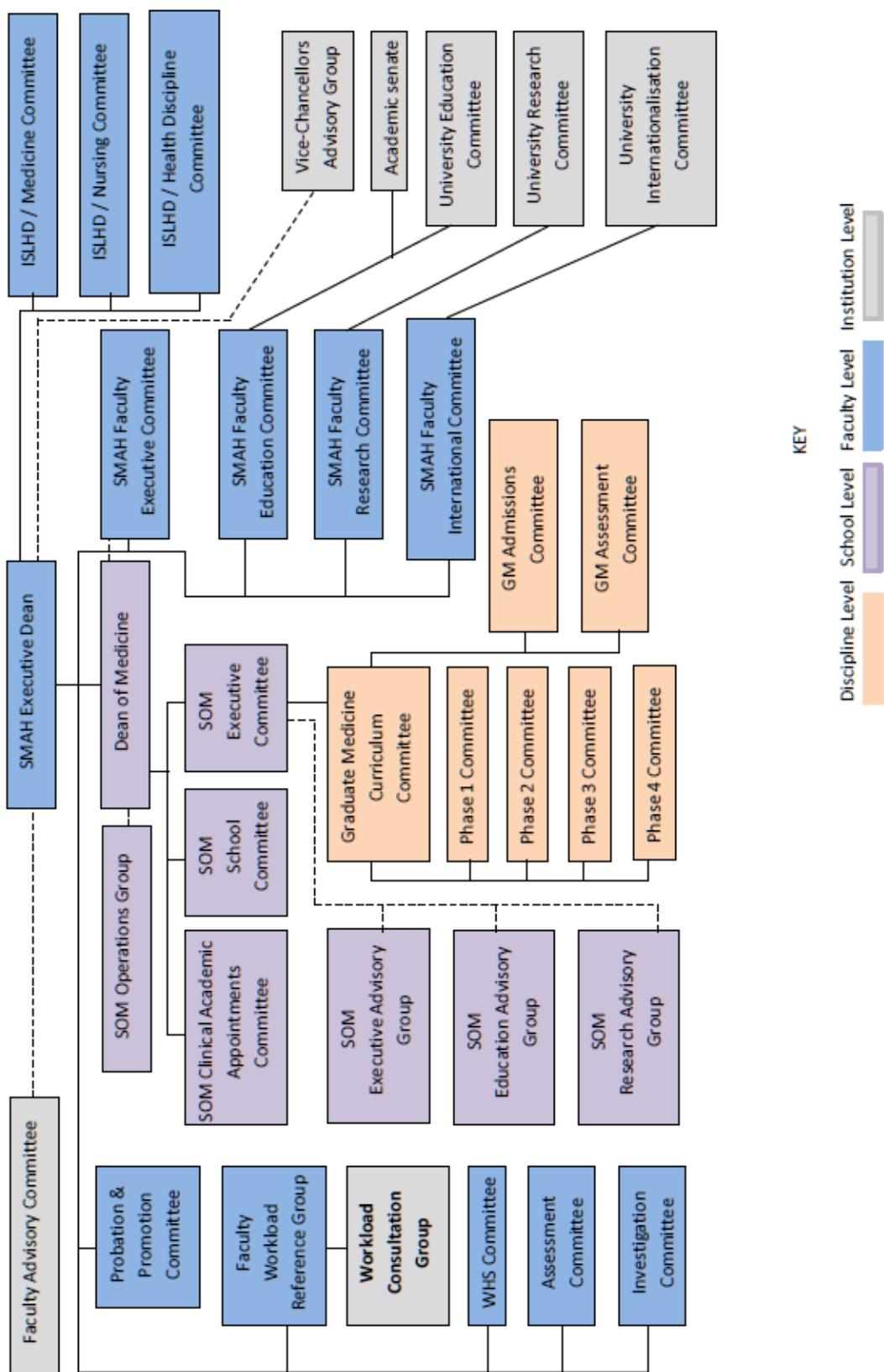
The Graduate School of Medicine, which prior to the restructure held the status of a faculty, was amalgamated with the disciplines of Dietetics and Nutrition, Indigenous Health and Medical and Exercise Science to form a broader School of Medicine that sits within the Faculty of Science, Medicine and Health.

The Graduate School of Medicine has retained its 'school' title despite no longer being a school in its own right. In this report, the term 'School' will be used to refer to the medical program's provider, except in circumstances where School of Medicine (SOM) or Graduate School of Medicine (GSM) require differentiation.

Following the 2013 restructure, the previous Dean of Medicine became Executive Dean of the new Faculty of Science, Medicine and Health and is now also Pro Vice-Chancellor (Health Strategy). The role of Dean of Medicine provides leadership to both the SOM and the GSM. The Dean sits on the Faculty Executive and members of the SOM sit on various other Faculty Committees.

The SOM governance structures were further revised in 2016 following an external review. There is support in the School for the new organisational structure, which is seen as being advantageous for the School and the medical program. Figure 1 illustrates the School of Medicine governance structure.

Figure 1: School of Medicine governance structure



At the School of Medicine level, the Executive Committee, the School Committee and Clinical Academic Appointments Committee report to the Dean of Medicine. There is a 'dotted line' relationship between the Dean and the SOM Operations Group. This structure, implemented in July 2016 following an external review, aims to improve cohesion between the four disciplines residing in the School of Medicine.

The Executive Committee is chaired by the Dean of Medicine and includes the four discipline leaders, the chairs of the Schools' Research Advisory and Education Advisory Groups, and professional managers. Replacing the former GSM Executive Committee and the Health Executive Committee, this Committee meets monthly and provides strategic advice and direction to the School. The GSM Curriculum Committee reports to this committee. Members were enthusiastic about the Committee's role and expected to see benefits from the collaboration, in areas such as teaching, clinical placements and accreditation.

The School Committee is a formally constituted committee of all SOM academic and professional staff that provides a forum for staff to have input into and understanding of the SOM's strategic directions. It receives reports from the School's disciplines, allows for discussion, and formulates recommendations for the Dean. It meets six times per year and requires a quorum of 50% of total members.

The role of the Clinical Academic Appointments Committee continued unchanged from the previous governance structure.

The Operations Group is a weekly forum to manage day to day School operations and make recommendations and decisions on operational School matters. Chaired by the Dean, it includes the four discipline leaders, the Director of Curriculum, Associate Dean: Teaching Hospitals, Associate Dean: Community, Primary, Rural and Remote, and two professional staff.

Three new school level advisory groups have been added to the governance structure.

The Executive Advisory Group has representation from the four SOM disciplines plus two community representatives (one of them an Indigenous person).

The Education Advisory Group, which includes internal members from the SOM, facilitates information sharing and innovation regarding the implementation, delivery and development of the courses and curriculum in the SOM. This Advisory Group was yet to meet at the time of the team's site visit.

The Research Advisory Group has representation from the SOM, research institutes and the local health district.

These modifications to the governance structure were not fully implemented at the time of the assessment visit. The School anticipated the new structure would be embedded by the end of 2016, acknowledging there may be modifications following commencement of the new Dean of Medicine in October 2016.

The team considered that there were opportunities for rationalisation of the committee structure to achieve clearer alignment of the School of Medicine Committees with Faculty committees, and encourages the School to explore how this could be achieved. The School is required to demonstrate that the Faculty's and School's revised governance structures and functions are operating effectively.

At a discipline level, as shown in Figure 1, the GSM committees governing the medical program are the Curriculum Committee, four phase committees, Assessment Committee and Admissions Committee.

The GSM Curriculum Committee is responsible for the structure and content of the medical program. Chaired by the Curriculum Director, this committee meets bi-monthly. This is a large committee with 32 members, including representatives from phases, themes, disciplines, associate deans, other academic leaders and the student society president. The phase committees, admission, and assessment committees all report into the Curriculum Committee.

The Phase Committees: The program has four phases, and each has a designated committee that makes recommendations to the Curriculum Committee. The phase committees are chaired by the designated academic leaders. The Director, Curriculum, the Head of Students (responsible for student welfare), theme leaders of Clinical Competency and Personal and Professional Development, and the Curriculum Manager are standing members on all phase committees. The theme leaders of Research and Critical Analysis, Indigenous Health and Medical Sciences are members of Phase 1, 2 and 3 committees. This allows for continuity between phases and vertical integration of the curriculum.

Chairs of the previous and next phases are members of committees. For example, the chairs of Phase 1 and Phase 3 are members of the Phase 2 Committee. This change was introduced in 2014 to further support the vertical integration of the program. Students are represented on all phase committees via the Wollongong University Medical Students Society (WUMSS).

The GSM has three primary organisational units for teaching and research, each led by an associate dean who reports to the Dean of Medicine. These units are Learning and Teaching, Teaching Hospitals, and Community, Primary, Remote and Rural. These units have representation in the SOM Operations Group, GSM Curriculum Committee, and relevant phase committees.

The School has a dispersed network of eleven clinical hubs at rural and regional sites across New South Wales (refer to Standard 8), each with its own regional academic leader. The regional academic leaders and the hub placement facilitators sit on the Phase 3 Committee. Those hubs that offer clinical placements in Phase 2 and Phase 4 also have representation on these phase committees.

The Assessment Committee was re-established in 2015 and has oversight of the development, implementation and delivery of assessment of the curriculum. The chair is the Associate Dean: Teaching Hospitals and its membership includes the Director of Curriculum, the phase chairs, associate deans, and assessment coordinators. It reports to the GSM Curriculum Committee. Assessment results are reviewed by the Board of Examiners, which is chaired by the Director of Curriculum.

The Admissions Committee was reconvened in 2015. This committee is chaired by the Academic Leader: Admissions and has broad representation. This committee also reports to the GSM Curriculum Committee.

Following review, the School has disbanded its Evaluation Committee in favour of a more dispersed model where responsibility for evaluation rests with each phase committee. The phase committees then report to the Curriculum Committee on evaluation.

Consultation with external health care stakeholders is obtained through the Illawarra Shoalhaven Local Health District (ISLHD) / Graduate School of Medicine Committee, and through the input of clinical representatives on the GSM Curriculum and Executive Committees.

In terms of broader community input, the School indicated that it plans to formalise a process for a Graduate School of Medicine community engagement program. The School is required to implement the proposed mechanism to consult relevant groups, including community members, on key issues relating to its purpose, the curriculum, graduate outcomes and governance.

## **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.*

The Graduate School of Medicine (GSM) has an appropriate level of autonomy to design the program and allow for its ongoing development

The academic head of the GSM is the Dean of Medicine. Prior to the assessment team's visit, in mid-2016 the Dean of Medicine indicated he would return to his previous role as Associate Dean, Learning and Teaching. Following a recruitment process the University has appointed a new Dean of Medicine who will commence the role in October 2016.

The School has a clear position description for the Dean of Medicine. These responsibilities provide the Dean with the autonomy to design and manage the program within the Faculty and broader School framework.

The Dean's reporting line is to the Faculty Executive Dean. The Executive Dean indicated that the incoming Dean's role would include integration of the four School disciplines, in order to foster collaboration in research and teaching.

## **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.*

The Graduate School of Medicine's (GSM) Curriculum Committee appears to be appropriately empowered and supported to plan, review and implement the curriculum. The phase committees report to the Curriculum Committee on the development, implementation and delivery of the phase, and are involved in curriculum development, review, assessment and evaluation.

Curriculum change is first considered at the phase committee level and developed by a phase working group. The phase committee would then make a recommendation to the Curriculum Committee. Executive staff indicated that as they met weekly, ideas for change were discussed informally and phase groups would receive advice on the likelihood of the change being approved. Staff commented that the case-based learning curriculum model, as opposed to a subject-based model, allowed for changes to be adapted easily in the blocks. The team was impressed with the leadership of the curriculum team, and commends the collegiality of the team in its management and review of the curriculum.

University policy guides the process of approval of course changes. Major curriculum or assessment changes must be approved by the Faculty Education Committee, however minor change decisions are delegated to the Curriculum Committee. The team was satisfied that the program has appropriate autonomy in this regard.

The School reported no significant or strategic plans for change to the curriculum over the coming period of accreditation. It expected to continue with its ongoing process of continual improvement to further refine the curriculum.

The GSM works closely with the University's Academic Qualities and Standards Unit (AQS Unit). The AQS Unit is responsible for ensuring all university courses meet the specifications of the Australian Qualifications Framework. The MBBS and the MD programs have both been assessed by the AQS Unit as meeting all requirements: the MBBS at Level 7 and the MD program at Level 9E. The School has undertaken a comprehensive mapping exercise to ensure compliance with AQF and University requirements. The MD program was approved by the Academic Senate's Strategic Course Development Committee in October 2015.

#### **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 Graduate School of Medicine (GSM) is a small school with a significant focus on medical education. Although there is no formal Medical Education Unit, several staff have a defined educational role. Several of the academic staff bring expertise in medical education to their role, and some are recipients of citations from the Office of Learning and Teaching. Most staff members are active in the scholarship of learning and teaching and have published in this area.

The program has three Indigenous-identified positions, Academic Leader: Indigenous Health, an Indigenous project officer, responsible for Indigenous health care education and an Indigenous administrative trainee based at Wollongong Hospital. These roles focus on Indigenous health curriculum development and delivery, student recruitment and retention, plus research and community development as well as providing an opportunity for upskilling and capacity building.

The Academic Leader: Indigenous Health is also the Head of the Indigenous Health Discipline of the School of Medicine (SOM), and sits on the SOM Senior Executive Committee and other key GSM committees, thus ensuring Indigenous input into the governance and Indigenous health curriculum of the program. The Project Officer provides advice to other professional staff on the operations of the GSM in relation to Indigenous health.

Indigenous staff members have developed good relationships in the Illawarra and Shoalhaven Aboriginal communities, enabling input from the community into student placements and projects. The School reported that the trust which the community has in the Aboriginal staff has enabled open discussions on how students can best engage in the community, which in turn empowers the Aboriginal community through self-determination and community control.

#### **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.*

The Dean of Medicine manages the budget for the entire School of Medicine. The University operates on an expenditure budget based on a combination of historical need and performance funding. The strategic direction of the School, Faculty and University also play a role in the funding arrangements for the School.

The overall Faculty budget is passed to the Faculty's Executive and submissions are received from each of the schools. The Faculty allocates the budget across its five schools and then the individual school manages the expenditure. Within the School, there are separate budgets for the Graduate School of Medicine (GSM) and other disciplines. The Dean of Medicine also manages the GSM budget.

The School indicated that its income was stable. Research block funding is distributed through a variety of programs designed to support the operational needs of research staff and students, and to grow the research profile of the School, Faculty and University. Teaching equipment is supported through an expenditure budget provided to the School, while research equipment is supported through a combination of Faculty and University schemes.

The GSM has the financial resources and management capacity to sustain its medical program, due to cross-subsidisation within the Faculty and reliance on government grants for student placements and the Rural Health Multidisciplinary Training (RHMT) fund. The School did not expect it would increase the medical student cohort size.

The School has identified future risks to the medical program's financial stability including the possible imposition of payments for clinical placements. It reported it has financially modelled and developed risk mitigation strategies for this scenario within the university, and it has the support of the Vice-Chancellor.

The resourcing of eleven clinical hubs for a cohort of this size (maximum of 85 students) was assessed in detail by the team. The medical program relies heavily on revenue from the RHMT fund, and the School indicated that these government funds adequately cover the hubs. The dispersal of funds to the hubs is determined annually by the School on a needs basis as opposed to by the number of students.

The School has negotiated varied arrangements with the local health districts and any co-located university partners at each hub, and these agreements differ in relation to funds, infrastructure and staffing. The team queried what might happen if one of the co-located university partners withdrew from a hub, and the School indicated it could maintain the hub for student placements, noting the good will and support of the program from clinical staff at the hubs.

The Vice-Chancellor and Executive Dean indicated that were strategies in place to grow support to the hubs via additional federal funding. The Vice-Chancellor demonstrated strong support for the medical program as a key component of overall institutional strategy and reported there was commitment from the University to continuing with a medical program despite such potential cost pressures. There was also strong support from the Faculty Heads of School for the medical program, who all accepted that the medical program would continue to require cross-subsidisation from other schools in the Faculty. The team was impressed with the Executive Dean's leadership of the Faculty and the support of the Faculty Heads of School for the program.

The team recognises that many medical schools face similar financial challenges. However, given the heavy reliance on RHMT funding the team encourages the program to investigate alternative funding sources. The team was reassured by the Vice-Chancellor and Executive Dean's commitment and activities to strengthen funding for the medical program. The team recommends the School develop a risk management strategy to ensure the program continues to have the financial resources required to sustain its medical program, specifically related to potential losses of revenue and additional costs related to clinical placements.

## **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 School has developed effective partnerships and has formal agreements, contracts and Memorandums of Understanding with numerous external agencies including NSW Local Health Districts and other state and territory health departments; private health care providers; community health organisations; local councils; Primary Health Networks (PHNs); and other educational institutions including universities, general practice training providers and specialist colleges and community groups.

The School has developed strong links with relevant partners in the local health sector, in particular the Illawarra Shoalhaven Local Health District (ISLHD). The program is commended for its positive influence on the local communities in the Illawarra Shoalhaven region and on those communities that support the clinical hubs.

There is School representation on a number of local, district and state committees. The Associate Dean, Teaching Hospitals sits on the joint NSW Committee of Medical Deans/ Health Education and Training Institute (HETI)/Australian Health Practitioner Regulation Authority (AHPRA). The Executive Dean sits on the Board of the not-for-profit organisation that was successful in its tender for the South Eastern NSW Primary Health Network. The School has requested membership on the governance council of GP Synergy, the new GP training provider in NSW. The Executive Dean chairs the Illawarra Shoalhaven Local Health District / Graduate School of Medicine Committee in the Faculty.

The School has developed strong partnerships with various Indigenous peoples, programs and organisations. These include Aboriginal Medical Services, Indigenous Community Controlled Organisations, Indigenous programs and services, Indigenous communities and community members. Students are engaged with these partnerships from the first day of the program and continue until the end of Phase 3 and on occasion into Phase 4, depending on electives and localities chosen by students (see Standard 3.5).

## **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.*

The Graduate School of Medicine's (GSM) research strategy is informed by the University and Faculty research plans. The University's Health and Medical Research Strategy 2013-2018 forms part of the institutional aim for it to join the top one percent of universities in the world. The Faculty's research strategy identifies research strengths in chemistry, biology, and some medical/health sciences, which can leverage research growth and partnership across the School of Medicine (SOM).

The purpose of the GSM research strategy is to promote a recognisable research identity and sustain a strong teaching-research nexus. The plan highlights the need for strategic investment in clinical academic positions and resources to build clinical research, and enable this to continue within a 44 – 46 week medicine teaching year.

While the GSM's initial focus has been on developing the curriculum, it is now aiming to increase research intensity. It has shown a modest growth in research outputs over the past three years, with research concentrated around four areas: regional, rural and remote primary care; population health and public health; clinical sciences and clinical trials; medical physiology and translational research; and medical education. Research active staff are heavily involved in teaching in the medical program. GSM staff are active in the scholarship of medical education, and five are undertaking doctorates in medical education.

The clinical hubs are focused around general practice research in conjunction with Commonwealth funding requirements, including capacity and skill-building for the rural and remote clinicians. The Illawarra and Southern Practice Research Network includes over 40 general practices and university research academics. It has led to engagement of general practitioners in research projects, resulting in a research-active environment for the students. Students are involved in research during their Phase 3 research project conducted while on their year-long general practice placement.

Medical students have the option to undertake an Honours program after Phase 4, however as no students have yet elected to do this, the School is considering whether to allow students to complete it after internship. The School is also planning a MD-PhD program in future and hopes to offer scholarships for this.

A new SOM Research Advisory Group has been formed (yet to meet at the time of the visit), which intends to propose research strategy aligned with the SOM, and identify synergies and build multidisciplinary research collaborations in the SOM and Faculty. The SOM plans to place emphasis on building and supporting research active capacity of more junior academics.

The interface between the Faculty, the Illawarra Health and Medical Research Institute (IHMRI), the Faculty of Social Sciences, and the Faculty's health partners is expected to grow under the overall University health and medical research strategy. The University is making significant investments to grow research base including the \$80M molecular horizons project with state of the art electron microscopy facilities and the 'Mind the Gap' initiative (mental health and wellbeing). IHMRI is also expanding its calibre and number of researchers. The Illawarra Shoalhaven Local Health District has a major strategic goal to fund staff to undertake research doctorates.

The team noted the ambitious research goals of the Faculty and University and recommends that the School investigate opportunities to enhance research and scholarship in the medical program generated through the University's investment in health and biomedical research.

## **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.*

In 2015, the Graduate School of Medicine's (GSM) academic FTE was 42.15, representing a reduction in academic posts from 2014 to the end of 2015 of 10.3 FTE. The School indicated that this in part reflected the maturity of the program with some posts that were needed during the developmental phase of the program no longer required. The team were informed that broader collaboration and efficiencies across the Faculty would help to alleviate the impact of the loss of FTE.

The program has a relatively small core pool of clinical academics, and there is a need to develop risk management and succession planning for these roles. Several critical clinical academic posts remain vacant, including the Chair of Surgery. The School had re-advertised this position at the time of the visit, and planned to advertise for a Professor: Clinical Epidemiology. A post previously advertised as a Foundation Chair in Rural Health Care to be based in Nowra could not be filled, and the School reported that this may now be advertised as a Professor: Metabolic Medicine. The Illawarra Shoalhaven Local Health District (ISLHD) and GSM were not successful in appointing an Associate Professor: Breast Surgery and instead ISLHD appointed staff specialists in this area.

The position of Professor: Pathology has been vacant since the foundation professor's resignation in 2010. Curriculum content and lectures have been provided as an interim measure by a local provider, Southern Pathology. This arrangement was under review with the aim of securing a fractional senior academic and clinical appointment in the discipline.

The School acknowledged the difficulties with recruiting clinical academics in some disciplines. It recognised that the University of Wollongong is a regional university with links with what has been a regional hospital. The School has some very fractional appointments in some specialties and uses mixed approaches to ensure coverage in the program, such as employing specialists for blocks of time. Clinical academics reported that they are a small team with multiple academic and clinical roles, and sustainability and succession planning is a key issue for both the GSM and ISLHD.

Until the recent appointment of a new ISHLD Chief Executive there had been little emphasis on research in the health service, which was viewed to be adversely impacting recruitment of clinical academics. As four of the vacant professorial posts rely on co-funding by, and alignment of

expectations with, the ISLHD, the School should formalise a joint strategy with ISLHD in order to secure the required clinical academics to deliver the medical program.

The School is required to provide evidence there are appropriate senior discipline leads to deliver the medical program, specifically in surgery, pathology, clinical epidemiology, and metabolic medicine.

The School had 34.71 FTE professional staff at the end of 2015, down from 45 FTE in 2011 and representing a drop of 7 FTE since the end of 2014. There had been a move to relocate some positions, including that of the Executive Manager: GSM to the broader faculty level, where roles continue to service the needs of the GSM as well as being able to take on faculty-based projects. Some of this change reflects the fact that GSM no longer operates as a separate Faculty within the University. The team was reassured that the changes in distribution of professional staff do not appear to have any negative impact on the organisation and administration of the program. Indeed there is evidence that this is bringing benefits in terms of achieving economies of scale, optimal use of resources and innovation and transformative practices.

For example, the educational technology needs of the GSM in delivering its MD program will be resourced through a centralised and coordinated faculty approach, led by the Manager: Educational Technology and the Director: Curriculum for the medical program under the direction of the Faculty Associate Dean Education (ADE). Centralising the educational technology support is designed to ensure that the most appropriate and efficient allocation of educational technology resources is afforded and that where faculty resources are not adequate, support from the university can be harnessed.

The team noted a heavy reliance on honorary clinical academics for teaching in the program including the provision of lectures. While there is a general sense of commitment by this group of staff, there has been some attrition. To encourage recruitment and retention of those providing essentially pro-bono teaching, the School is encouraged to further develop mentor and induction programs to support this cohort (refer to Standard 1.9).

The team noted however that in Phases 2 and 4 the primary contributions of the honorary clinical academics are teaching students informally and formally within the hospital setting. This type of teaching is compatible with their usual hospital work and is covered by the agreement that medical specialists (staff specialists and visiting medical officers) have with their Local Health District.

The School employs a senior lecturer in Indigenous health responsible for the Indigenous Health discipline that also plays a major role in the medical program and in developing relationships with the local Aboriginal community. While working with the School he has had support to complete his PhD. There are two additional Indigenous academics in the School, whose focus is the Bachelor and Masters of Indigenous Health programs.

The School is actively committed to the recruitment, training and support of Indigenous staff, and this is also a requirement under the Department of Health funded Rural Health Multidisciplinary Training program (previously Rural Clinical Training and Support program). As part of this commitment, the School employs an Indigenous administrative trainee based at Wollongong Hospital.

The School has developed a successful Simulated Patient (SP) Program to support teaching in the Clinical Skills program of Phases 1 and 2 at both Wollongong and Shoalhaven. The SP program is

volunteer-based and recruitment is an ongoing process with new SPs joining the program each year. SPs are recruited through the University website, community volunteer programs and groups, amateur theatrical groups, schools and aged care facilities, and include university students and staff; retirees; female and male Teaching Associates; school children; and mental health care professionals.

All SPs undergo a basic training program approximately eight hours in duration. Further advanced training sessions of two to four hours are also offered to all SPs; these deal with enhanced history taking, male and female Teaching Associate Training, mental illness scenarios, portraying signs and symptoms, OSCE and assessment.

The School reported that the University's arrangements for indemnification of staff involved in the development and delivery of the medical program had not changed, and all staff involved in clinical or educational activities are adequately indemnified with regard to their involvement in the program.

## **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.*

The School reported that teaching, research, curriculum development and service contributions are appropriately recognised and rewarded. Since 2014, there have been minor changes in probation and promotion processes, with probation criteria now individualised for each applicant. The University's Academic Performance Framework outlines the criteria for promotion. Applications are assessed by the Faculty Promotions Committee and put forward to the University Executive for further consideration.

The University has a well-developed program of academic career development reviews and interviews for its salaried staff, however there is a separate process for honorary clinical academics. The team recommends the School develop a more robust induction process and an ongoing professional development program for honorary clinical academics and preceptors (refer also to Standard 8.4).

All new salaried academic staff had previously been required to undertake the University Learning and Teaching (ULT) program. In order to better meet the specific needs of GSM staff, the School developed a series of modules specific to the medical program that replaced part of the ULT. For the GSM this has allowed staff to undertake a newly implemented Graduate Certificate in Medical Education. This training can be fully subsidised for tutors, who reported they found the training very useful. Tutors also reported opportunities to progress into delivery of lectures and involvement in examinations.

Formal awards and citations, in the areas of teaching, research, and curriculum development were highly valued by staff and are regularly recognised.

## **2 The outcomes of the medical program**

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### **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 Maori 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.*

The University of Wollongong medical program's mission statement is:

To produce excellent medical practitioners with a commitment to patient-centred, evidence-based, reflective and cost-effective medical practice who have the capacity and desire to contribute to the enhancement of health care for patients in all geographic settings, but particularly in regional, rural and remote communities.

The School of Medicine has also outlined its goals on its website:

The School of Medicine aims to be socially accountable by ensuring that our communities play a fundamental role in our activities. Staff and students seek and practice social justice and accountability by engaging in learning, teaching and research through community partnerships. These partnerships emphasise mutual benefit, social inclusion and community development.

Engagement and public participation is encouraged through four streams, including community engaged learning, health advocacy, community engaged research, and direct philanthropy. A unifying objective is the creation of healthier communities through increased health equity by working and learning with the communities we serve.

The medical program has a defined purpose, including learning, teaching, research, societal and community responsibilities. This purpose, which has been in place since the origin of the program in 2007, was developed in consultation with federal and state governments, health care providers, clinicians and the local communities.

The program's mission statement includes the goal to produce excellent medical practitioners who will contribute to the enhancement of health care for patients in all geographic settings, particularly regional, rural and remote communities. The curriculum, service and research activities of the School relate to this mission. The mission is clearly a source of great pride to all involved in the School, including students, staff, clinicians and community members, and underpins the culture of the School and the structure of the program. During the assessment visit, the mission was referenced repeatedly and consistently across different clinical sites, and the team's attention drawn to evidence of Wollongong medical program graduates staffing local hospitals and medical practices. The School is commended on the success in communicating and achieving its mission of producing medical practitioners for all geographic settings, particularly regional, rural and remote communities (Standard 2.1).

The team notes plans to develop a new, cohesive and overarching School of Medicine mission statement that will recognise teaching, research and community engagement. This will provide

an opportunity to address Aboriginal and Torres Strait Islander peoples and their health as part of the purpose of the School and medical program, as required by the AMC standards.

## **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.*

The program has seven course learning outcomes and sixty-seven subject learning outcomes. The seven course learning outcomes that a student will be able to demonstrate on successful completion of the program are:

- 1 Integrate knowledge of research and critical analysis principles cohesively within the practice of medicine.
- 2 Demonstrate coherent knowledge of the principles and concepts of medical science within the context of the medical profession.
- 3 Effectively employ evidence-based practice, use critical thinking, and perform as a collaborative, reflective practitioner and health advocate.
- 4 Demonstrate clinical competency at the level expected of an intern.
- 5 Display and practice professional and personal behaviour expected of a medical practitioner.
- 6 Integrate knowledge of medical science, clinical medicine, research and critical analysis and professional and personal behaviour into the practice of medicine.
- 7 Meet the qualification requirements to apply for an internship in Australia.

These course learning outcomes were developed since the last AMC accreditation to meet the requirements of a Masters program according to the specifications of the Australian Qualifications Framework. The subject learning outcomes are grouped by the four curriculum themes of the program. The Medical Sciences theme has 18 subject learning outcomes, the Clinical Competencies theme has 23, the Personal and Professional Development theme has 17, and the Research and Critical Analysis theme has nine learning outcomes (this theme was expanded from three for the MD that commences in 2017). The School has demonstrated that its course learning

outcomes and subject learning outcomes align with the AMC Graduate Outcome Statements, and are consistent with the goal of graduating work-ready interns.

The GSM's purpose is clearly evident in the design and delivery of the program, and is embraced by students, staff, clinicians and community members. Based on consultations with stakeholders, it appears that the program has been successful in delivering high quality medical graduates to its local communities. Graduates from the Wollongong medical program were described as sought-after interns with a good understanding of holistic patient care and excellent communication skills, and examples were provided of graduates who had demonstrated strong leadership skills. The graduates are well-represented in vocational training programs across a range of clinical disciplines. Evidence of evaluation of graduates is discussed further at Standard 6.2.

Delivery of the program across a range of clinical sites allows for variability in experiences, and the team is reassured that comparisons of outcomes, as evidenced by assessment, are equivalent.

### 3 The medical curriculum

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#### 3.1 Duration of the medical program

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

The medical program is a four-year graduate-entry program, divided into four phases, with increasing levels of clinical responsibility in each phase.

**Figure 2: Phases of the Wollongong medical program**

	Semester 1	Semester 2
Year 1	Phase 1	Phase 1
Year 2	Phase 1	Phase 2
Year 3	Phase 2	Phase 3
Year 4	Phase 3	Phase 4

Phase 1 has a campus-based, integrated, case-based learning program, which consists of an introduction to medicine and then teaching blocks dedicated to body systems. Delivery of teaching is via fortnightly case-based learning tutorials, lectures, symposia, online learning activities, clinical skills practical sessions and clinical placements.

Phase 2 is a year-long placement based in the hospital environment with students returning to campus approximately one day per week. Phase 2 is divided into seven rotations each of five-week duration: two surgery rotations, two medicine, one maternal and women's health, one child and adolescent health, and one mental health rotation.

Phase 3 is a year-long, longitudinal integrated placement where students spend approximately two days per week in general practice (including child and adolescent health, women's and maternal health and mental health), two days per week in a regional hospital setting (focusing on emergency medicine, anaesthetics and intensive care and specialty services) and one day per week on campus in their rural hubs.

Phase 4 is a six-month clinical placement that includes three six-week rotations including an elective, a selective and a pre-internship (PRINT) term. The PRINT term has been designed to allow students to experience life as an intern. Where possible students undertake their PRINT term in the hospital where they will be undertaking their internship.

The structure of the program has not changed significantly since the last accreditation exercise and there are no plans for major changes to the structure. The duration of the program is sufficient to ensure that the graduate outcomes can be achieved.

The School will enrol its medical students in the MD program from 2017. There is no overall change to the structure of the program, however the subject learning outcomes in the Research and Critical Analysis theme were expanded from three to nine.

## **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.*

*The curriculum includes the scientific foundations of medicine to equip graduates for evidence-based practice and the scholarly development of medical knowledge.*

### *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.*

The curriculum content is defined by seven course learning outcomes and 67 subject learning outcomes, and organised via curriculum themes: Medical Sciences, Clinical Skills, Personal and Professional Development, and Research and Critical Analysis. As noted in Standard 2, the curriculum content has been mapped against the AMC graduate outcome statements. The program has 93 core clinical presentations that are used throughout the program.

The School presented in detail its curriculum mapping to the AMC Graduate Outcome Statements, including information on each outcome statement as to how and where the integrated curriculum covers each area.

The AMC's Science and Scholarship domain is covered by learning outcomes from the program's Medical Sciences theme and Research and Critical Analysis theme. The Medical Sciences theme integrates science disciplines with the other themes in the program. The Introduction to Medicine block at the commencement of Phase 1 allows students to learn discipline-based terminology and principles and includes introductory anatomy, embryology, cell biology, microbiology, and pharmacokinetics. As the Phase 1 body system blocks progress, the majority of science concepts and principles in body function, health and disease are introduced. In later phases, the clinical aspects of the theme's content are emphasised, such as in pathology and radiology. The integrated nature of the curriculum ensures that the medical and scientific knowledge is applied to clinical presentations at all stages of life, and across populations and health systems in accordance with evidence-based practice.

The Research and Critical Analysis theme commences in Phase 1 with research integrated into the body system blocks via skills in literature searching, critical analysis, and interpretation of statistics, research methods, ethics and evidence-based medicine. A student 'Journal Club' is chaired by Research and Critical Analysis (RCA) staff. In Phase 2, students participate in Journal Clubs with their clinical team, and identify the use of evidence-based guidelines.

In Phase 3, students undertake a personal research project applying research skills learned incorporating a proposal, ethics, data collection and analysis, writing of a journal-style report, an abstract and presentation of a conference-style poster to academics and students. As students are on their year-long clinical placement at this time, each student is aligned with a research-active staff member during this year. These staff reported they have around four students each to mentor, which they found manageable and considered to be sustainable. The team found that the School had sufficient capacity to deliver the research components of the new MD given their largely primary care nature. Phase 4 then requires students to work independently on a critical report of their elective with an oral presentation.

The AMC's Clinical Practice domain is covered by the program's Clinical Competencies theme, which integrates clinical skills such as history taking, physical examination and investigations, with the underpinning sciences across the program. Clinical skills teaching is discussed in further detail at Standard 4. A strength of Phase 1 is the continuous integration between the sciences and clinical skills which continues as students' progress into the clinical attachments in subsequent phases.

The AMC's Health and Society domain is suitably covered by aspects of the program's Medical Sciences theme (eight learning outcomes), Research and Critical Analysis theme (four learning outcomes), Personal and Professional Development (two learning outcomes) and one learning outcome from the Clinical Competencies theme. The program has a strong emphasis on health and society concepts that are integrated in CBL cases, the Phase 3 longitudinal community immersion and research project, and the close mentorship of general practitioners in demonstrating health promotion, health advocacy and the responsibility of the health of individuals and communities.

The AMC's Professionalism and Leadership domain is well-mapped to the program's Personal and Professional Development (PPD) theme, and to three outcomes from the Clinical Competencies theme around working as a team member and working to one's own limitations. The School has demonstrated in detail for AMC Graduate Outcome Statement 4.1 how the PPD subject learning outcomes reflect *Good Medical Practice: A Code of Conduct for Doctors in Australia*.

The PPD content had been informed by the use of patient focus groups for review of student materials. This feedback led to changes in content based on the patients' experiences, such as the language that doctors should use with patients, which staff then had the focus group review further.

The team found there to be impressive attention to detail regarding content development and the regular cycle of content review and improvement throughout the phases by the Academic leads, Phase Committees and Curriculum Committee. While the structure of the program has not changed extensively since commencement and no significant changes are planned, it is evident that the program undergoes constant review and updates in response to continual reflection and feedback from staff, including clinical supervisors, and students.

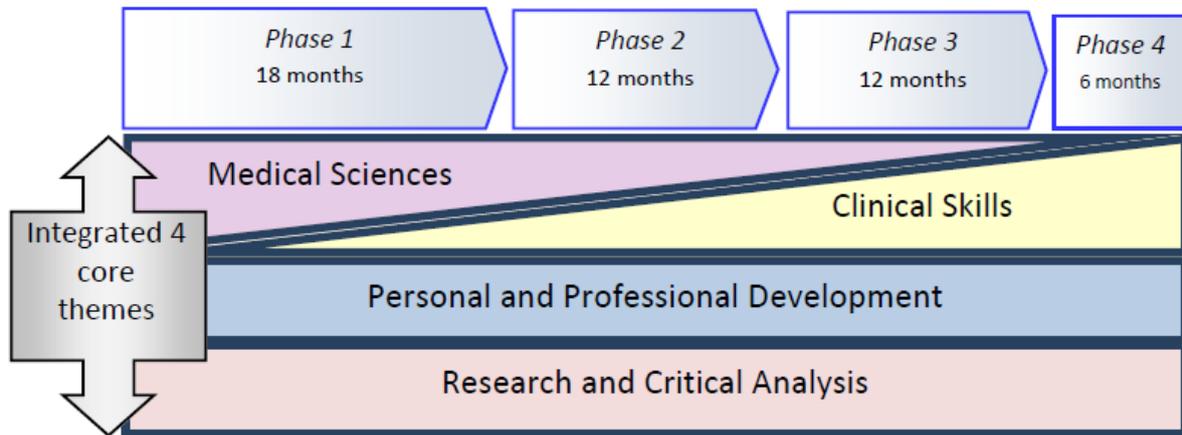
### **3.3 Curriculum design**

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

The program is a spiral, integrated, case-based learning curriculum. There is evidence of purposeful design demonstrating horizontal and vertical integration, including articulation with

subsequent stages of training. The four phases of the program allow graded staging of learning, with increasing levels of clinical responsibility. Vertical integration is encouraged via the four curriculum themes: Medical Sciences, Clinical Skills, Personal and Professional Development, and Research and Critical Analysis.

**Figure 3: Program curriculum model**



As noted above, the curriculum is based on 93 core clinical presentations that are used throughout with some presentations re-visited in subsequent phases. The School has mapped these presentations to various locations in the curriculum, demonstrating vertical integration in how the focus and depth of the case develops as the program progresses (i.e. chest pain case). These presentations have been in use since the program commenced, are regularly reviewed and updated as required. Learning resources are attached to each presentation, and these continue to be reviewed and developed.

In Phase 3, CBL modules are delivered at the clinical hubs providing structure to the curriculum. Thirty-eight of the core clinical presentations are presented as full cases in the clinical hubs with the focus more on management. The remainder of presentations are available for review as students see similar patients. The Phase 3 case materials map the Phase 1 and 2 content as assumed knowledge for students, demonstrating the utility of the spiral design.

CBL continues in Phase 4 via e-learning, with six CBL cases designed for the pre-internship rotation targeted at the skills required of an intern. Cases comprise resuscitation, ward pharmacy, fluid management, aggression on the wards, acute pain, and death and dying.

The curriculum design is informed by, and effectively supports, the purpose of the medical program to create graduates who have the capacity to work in all settings, particularly rural and regional areas. The team commends the design of the program and the comprehensive vertical and horizontal integration of the curriculum.

Clinicians, staff and students reported that each phase provides a strong foundation which adequately prepares students for the next phase. Articulation from previous studies into the program is managed well. As a small cohort, students are monitored closely. The team heard reports that non-science undergraduate students were at the same level as science undergraduate students by end of Phase 1.

Staff reported students were well-prepared for Phase 2 having just completed their examinations in medicine and surgery. The School recognises that the change to a clinical environment in Phase

2 presents challenges for some students, and it has measures in place to support students as needed.

Articulation with internship is well-supported via the pre-internship (PRINT) program completed as a component of Phase 4. To add further value to the PRINT experience, the School aims for students to complete PRINT in the hospital where they will work as an intern. Students reported that the independent learning required of them in Phases 3 and 4 also prepares them for internship.

The team particularly commends the alignment and articulation between all phases, and the design and delivery of Phases 3 and 4 in preparing graduates who are ready to practise.

### **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.*

Communication regarding the course and subject learning objectives is delivered via phase handbooks for staff, students and clinical supervisors, and appears to be effective. Learning activity outlines and clinical rotational guides provide more detail for students, and have been well-received. All documents and outlines are available online via the learning management system on Moodle accessible to both students and academic staff.

The handbooks are well-presented and informative, and comprise information regarding the curriculum, available resources, assessment details and forms, student support and professionalism. The learning activity outlines state learning objectives for sessions, list required readings, state assumed knowledge from earlier in the program and identify links to the core presentations and scientific and clinical disciplines. The learning activity outlines are housed on the Equella content management system, which serves as an electronic method to ensure outcomes are adequately covered.

In response to student feedback that students in Phases 2 and 3 were unsure about what they should be learning and to what depth, the School strengthened its advice to students in Phases 2 and 3. It developed additional learning activity outlines, as used in Phase 1, for clinical modules in Phase 2, and is developing these for CBLs and core clinical presentations in Phase 3.

### **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).*

The Indigenous health curriculum has been expanded since 2013 with the addition of lectures, and community and Aboriginal Medical Service placements. The Academic Leader: Indigenous Health has led the development and implementation of the expanded Indigenous health curriculum in the program.

The Indigenous health content in Phase 1 includes a symposium on Aboriginal history from the perspective of the Yuin Nation peoples, and there is a series of four lectures on Indigenous health topics, with the assistance of Aboriginal lecturers from local communities. There is also cultural training in the cardiac block in clinical skills with a local Aboriginal patient.

From 2016, all Phase 1 students have four half-day placements over an eight week period with an Aboriginal organisation or service. These placements provide opportunities to gain insights

into the factors which affect Indigenous people, communities and services. These placements immerse students into Indigenous health, community and wellbeing settings and education is delivered by members of the Indigenous community. Research is also being conducted evaluating student knowledge in Indigenous culture and beliefs, initially as a baseline survey followed by an end-of-year survey to establish the impact of the Indigenous health content. This Indigenous health immersion program for Phase 1 students provides a solid foundation for further development later in the program.

Across the program, Indigenous health is integrated into lectures on clinical presentations of disease prevalent in Aboriginal populations. Additionally, in Phase 2, there is a lecture on Indigenous continuity of care and discharge planning from hospital. In Phase 3 orientation, all students complete a session on Aboriginal primary health care. Indigenous health is included in assessments such as OSCEs, phase written exams, and a written piece in social determinants of health.

Across Phase 3, there are now increased opportunities for students to be placed at an Aboriginal Medical Service or a practice with high Aboriginal patient numbers. The team heard from Illawarra Aboriginal Medical Service staff that students are reasonably well-prepared for the Aboriginal Medical Service placement. Students expressed they felt well-prepared due to comprehensive course information and the inclusion of Indigenous health content in examinations. While the School aims to ensure consistency around Aboriginal health at the clinical hubs, the team encourages increased communication between the School and hubs to ensure a shared understanding of the Indigenous health curriculum that is planned and delivered.

The team commends the School's support of Indigenous health and the expanded Indigenous health curriculum, which includes the Phase 1 Indigenous health immersion program. The place of Indigenous Health as a discipline in the School of Medicine is a valuable resource to the medical program.

The School has further enhancements planned for the Indigenous health curriculum, including more case integration in Phases 2 and 3, and more Phase 3 resources for students who may have varied exposure to Indigenous patients. The School has also identified a gap in the cultural awareness and competency training of existing and new staff, with plans to close this gap. Further development and delivery of Indigenous health and cultural capability curriculum and teaching for staff and students is recommended.

### **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.*

There are a number of opportunities for students during the program to pursue studies of their choice that promote breadth and diversity of experience.

In Phase 3, students select a research project of their choice, and during the Phase 4 selective and elective terms, students have the opportunity to select the geographical location and the area of medical interest to be pursued. Electives may be undertaken anywhere in the world, while selectives may be taken anywhere in Australia for domestic students. The School reported that around 60 – 70% of students complete their elective overseas. There are a range of established overseas elective partners in both developing countries and leading international hospitals.

Students can also secure their own placement, examples of which have included the European Space Agency's Space Medicine Division, and the Tour de France Green Edge Cycling Team.

The School has increased the number of Commonwealth funded scholarships available to support students with the cost of overseas electives: 32 scholarships of \$2000 were available in 2016, targeted to students from identified equity groups. Alternatively, students can apply for university travel grants of \$500. There are also scholarships to support rural placements in Phases 3 and 4.

International students are permitted to undertake the full eighteen weeks of Phase 4 in their home country in order to increase their competitiveness for intern/residency programs in their home countries upon graduation.

Clinicians and students have commended the value of Phase 4 as the final preparation for internship, and students have particularly appreciated the opportunity to fully immerse themselves in the clinical experiences without the pressures of external assessment. As noted at Standard 3.3, the School is commended on the flexible design of Phase 4 for promoting breadth and diversity while also preparing graduating students for internship.

## **4 Learning and teaching**

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### **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.*

The School utilises a range of learning and teaching methods across the four phases of the program to allow students to achieve the program outcomes. The methods used are selected based on collegial agreement and reflective feedback. The team noted examples of where student feedback or assessment results had led to the introduction of activities to address areas of need.

Throughout the Phase 1 body-system blocks, the case-based learning (CBL) integrated curriculum is delivered using a mixture of large and small-group teaching sessions, including clinical skills and CBL tutorials in groups of eight, anatomy laboratory classes and clinical placements. Individual learning is supported via online learning activities and guided independent learning, and students complete assignments requiring self-directed learning and searching of the literature.

The Phase 1 CBL format involves team teaching by a medical scientist and a clinician for the introduction and wrap-up sessions to the full cohorts at both Shoalhaven and Wollongong, with a live, simulated patient during the case introduction. This is an interesting initiative to integrate preclinical and clinical sciences and introduce students to clinical reasoning and history taking. Students were positive about the Phase 1 learning and teaching experience and were impressed by the commitment and enthusiasm shown by the academic staff. The six-monthly rotation of CBL tutors for the small-group tutorials was well-received among most students who reported that exposure to three different tutors from a variety of backgrounds, including clinical and scientific, enriched their time in Phase 1.

Phase 2 begins with a one-week orientation program to support student transition into the clinical phase. The induction program includes presentations from each discipline leader, transition and study tips, how to report bullying, theatre orientation and scrub, and electronic records management training. During Phase 2, students are given individualised timetables in their rotations, and in each week, at least 25 hours are allocated in the hospital to: bedside and clinical skills tutorials; CBD; student and hospital Grand Rounds; ward rounds and unstructured time to be on the wards seeing patients and practising their clinical skills. Students also spend time on-campus in lectures, clinical skills and online activities. This combination of clinical and campus-based activities facilitates the ongoing development of clinical skills while promoting increasing independence and self-reflection.

Student feedback on Phase 2 was positive. Students particularly commented on the scheduled on-site clinical tutorials run by the hospital staff and considered these learning opportunities were directly applicable to their clinical learning and future practice. Students also appreciated the value of engaging in after-hours clinical experience during Phase 2.

In Phase 3, students are based in one of eleven hubs across the state under the supervision of the hub regional academic leader. The number of students in each hub varies from 4 to 26 (average 8). Each student again has an individualised weekly program which includes:

- 16 hours based in a community general practice seeing patients under the supervision of a GP preceptor. At least half of this is spent doing parallel consulting.
- 8 hours based in the Emergency Department of the local hospital engaging with the management of acutely ill or injured patients and practising their procedural skills.
- One regional academic day per week where they work in small groups in their hubs to discuss the CBL case, present and discuss patients they have seen, and practise clinical skills with both real and simulated patients. Lectures are streamed online to the hubs from the School and live interactive case-based webinars are held six-times a year.
- One day per week for self-directed learning to complete Guided Online Assessable Learning modules and quizzes. Students must also complete their online Clinical Log demonstrating their record of patient encounters and learning points.

During Phase 3, most students also have opportunities to spend a day in the rooms with a number of the specialist practitioners in the local area. Weekly CBLs enable students to consider clinical presentations that are less common in the clinical setting. Student Clinical Logs are reviewed each quarter to identify areas a student may not be getting appropriate exposure to. The relevant preceptor then helps the student gain experience in that area. In practice, staff reported that the experiences that students do not come across are small. The School reported that student feedback indicated that almost 50% of students disagreed that the clinical log helped them develop as medical professionals which has led the School to look at ways the log can be developed electronically. A decision on redevelopment of the log is expected in 2016, and an update should be included in the School's next progress report to the AMC.

Students undertake the individual Phase 3 research project in an area of individual interest with many selecting projects relevant to the community they are working in. The projects are supervised by the RCA team and research qualified School academics from the Wollongong campus. The students commended the RCA for their continual hard work in assisting students with their research endeavours.

Overall, students felt well-supported throughout Phase 3 and believe that the autonomy and increased responsibility given to them equips them for medical internship. Students also felt that the strong focus on rural health has deepened their interest in rural medical practice.

In Phase 4 (the final six-months) students undertake three six-week terms and are expected to be part of the clinical team to which they are attached. The terms include an elective, a selective and a pre-internship (PRINT) term (details at Standard 3.6 and 8.3). Learning is primarily self-directed. Students shadow/act as a junior doctor under the supervision of more senior medical staff, and are fully immersed in the clinical setting in which they will be expected to perform as junior doctors.

Feedback on Phase 4 from students was that they appreciated the opportunity to tailor their clinical experience to their interests and future career aspirations. They also enjoyed the freedom to engage in diverse learning environments without the pressure of upcoming exams and felt they excelled because of this. This phase allows students to develop their own personal style of practice and enables them to build confidence going into their internship year.

The School is developing technology-enhanced learning where appropriate, and reported development of electronic learning resources to supplement Phase 3 learning for example. It has dedicated staff with expertise in this area.

Overall, it was apparent to the team that each of the teaching and learning methods employed during the program has a rationale. The School is commended on its teaching and learning innovations and for developing these to address the learning needs of the students, including supporting students as independent learners in dispersed settings.

#### **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.*

The program promotes a culture of reflective practice and supports students to take increasing responsibility for their own learning as they progress.

In Phase 1, guided independent learning methods provide students with indications of what is expected. Over the eighteen months of Phase 1, the learning becomes more student-led with greater autonomy over how they use their time. Unstructured time increases as the program progresses. In Phase 2 each discipline has clearly defined the subject material to be covered and the expected outcomes, and students are expected to determine their own learning needs and take advantage of the opportunities available to them to practise and learn skills.

In the final eighteen months of the program, students are expected to undertake self-directed learning, with almost all Phase 4 learning being self-directed, therefore preparing students for lifelong learning in their careers. Students reported as a result that by the end of the program they were strong independent learners.

There are opportunities throughout the program for students to develop skills in self-reflection, for example in Personal and Professional Development lectures, tutorial groups and reflective essays, and in Clinical Skills when students are required to reflect on their own performance of various skills and work on improvements. The School has identified the need to support the development of this aspect of self-reflection and has introduced activities to address this.

#### **4.3 Clinical skill development**

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

The team was impressed with the well-developed clinical skills component of the program which promotes the progressive accumulation of the students' clinical and technical skills in a safe environment prior to use in clinical practice.

In Phase 1 and 2, each student has approximately two hours per week of small-group clinical skills lessons. This teaches students graded levels of skills in the simulated setting first before they practise and implement these skills in the clinical setting in Phases 2, 3 and 4.

The major emphasis in Phase 1 is on acquiring the basic skills of communication, history taking and examination. History taking and clinical reasoning are modelled in the CBL case introductions, and sessions with simulated patients enable students to acquire and practise these skills in a safe and supervised environment. The Clinical Skills laboratories located at each campus are suitably equipped for this teaching. Communication skills are reinforced within the

spiral curriculum with constant assessment and feedback on these. Staff indicated that they may also deliver clinical skills teaching via OSCE format to allow OSCE practice.

From Phase 2, clinical skills are taught and practised predominantly in the clinical setting in the hospital with patients. Phase 2 students also have campus based clinical skills lessons using advanced models and manikins to practise procedural skills such as IV cannulation, catheterisation, and pap smears. The range of specialised, volunteer simulated patients was impressive, including Teaching Associates for intimate examinations, children/teenagers for advanced communication skills; and mental health professionals and actors to enable students to develop skills in managing the challenging patient.

The Emergency Medicine simulation program provides each student with eight, two-hour sessions from Phases 2 to 4 to practise resuscitation skills and management of medical emergencies.

The clinical skills component of the Phase 3 regional academic day varies by hub depending on available resources and interest areas of that hub. Hubs are provided with a suggested list of subjects they should aim to cover. Many of the hubs have access to Clinical Skills teaching centres at their local hospitals and utilise those facilities and equipment.

#### **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.*

Students interact with real patients in the clinical setting from the first month of the program and the level of interaction increases as they move through the program. All patient interaction is supervised, but the intensity of supervision decreases as students gain confidence and competence.

In addition to the real, simulated patient exposure described at Standard 4.3, from Week 4 of Phase 1, students spend a series of three-hour clinical placements in general practice, hospital or community health settings, and in Indigenous and other community settings. Of these placements, there are eight in general practice, eight in hospitals, four in Indigenous health and four in allied health/aged care. Students are mostly observers of patient/clinician interactions, and have some opportunity to practise their basic clinical skills of communication, history taking and examination under direct supervision of a clinician. The team was impressed with the involvement of real patients in these sessions.

As the students move into the clinical years (Phases 2, 3 and 4), interaction with patients increases. In Phase 2 students spend at least 25 hours each week in the clinical setting interacting with patients. Students attend ward rounds with senior clinicians, observe individual patient management and clinical decision making, and have time to talk with and examine patients.

In Phase 3, students progress to taking on some responsibility for patient care. Students are expected to see patients on their own first, taking a history and performing the relevant examination, before presenting the case, diagnosis and management plan to their preceptor, who reviews the patient and supervises management. Students have an increasing level of participation in clinical care through the program, and the team specifically commends the inclusion of the parallel consulting sessions throughout Phase 3.

By Phase 4, students are full-time in the clinical environment. They are capable of directly taking responsibility for some aspects of patient care and being fully involved with the team management of that patient. While they are still under supervision, they are expected to be performing close to the level of an intern. The value of the Phase 4 program, including the pre-internship term, was recognised by comments from senior students and recent graduates who reported being well-prepared for internship. This was echoed by clinicians at sites the team visited.

#### **4.5 Role modelling**

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

The School promotes role modelling as a learning tool. From Phase 1, students have the opportunity to observe experienced clinicians in CBL case introductions and in clinical practice. Communication, history taking and examination skills are role-modelled in clinical skills by medical practitioners. An emphasis is placed on appropriate attire, language and behaviour in the clinical skills laboratories from the first week of the program and staff and casual academics are also expected to adhere to and model these aspects of professionalism.

Role modelling occurs during the clinical phases when students are able to observe more senior clinicians at work. While the School acknowledged it cannot always control the behaviour of role models, a focus in the Personal and Professional Development theme is to provide students with the knowledge and skills to deal with inappropriate behaviour and attitudes in themselves, their peers or their role models. Students reported that the majority of teaching clinicians were of outstanding quality. The team commends the School on the many clinical and academic role modelling opportunities provided to students combined with the relevant Personal and Professional Development content.

Those involved in teaching the research aspects of the program are themselves active researchers and are able to advise and guide the students in the research.

The team was impressed by the enthusiasm and collaborative interaction between discipline and academic leaders, clinical teaching staff and placement coordinators. The collegiate approach offers exemplary role modelling to students in the way they work together effectively and create a positive learning and working environment.

#### **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.*

There are many formal aspects of teaching within the program which promote the concepts of patient centred care and collaborative engagement. In the clinical phases, the students observe patient centred care being modelled by clinical staff. During their placements, students see allied health staff, medical staff of different specialist areas, the patient's family, friends, carers and the patient themselves, collaborate to decide on the most suitable management for the patient

The School's successful longitudinal integrated clerkship model in Phase 3 promotes patient centred care as it allows students to engage with patients and their family in the general practice setting over a year, including home visits with their preceptors.

#### **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.*

The School has created opportunities for students to work with, and learn from a diverse range of health professionals throughout all phases of the program. This allows them to build on the experience of many of the students who have previously worked as qualified allied health professionals.

In Phase 1, students are taught by doctors, medical scientists, and professionals from other health professions relevant to the appropriate topic (registered nurses, physiotherapists, psychologists, radiographers and diabetic educators). Health professionals teaching into Phase 1 are invited to explain their work as well as teach to their specialty. During Phase 1, the implementation of the clinical placements in community health facilities, including Indigenous health facilities, provides an opportunity for students to better appreciate the role and work of allied health colleagues.

In the clinical phases, students work within interprofessional teams for the care of patients. The longitudinal placements in Phase 3 provide opportunities to witness allied health professionals at work in the community and many of the practices in which students are placed employ allied health staff as part of the care team. Students work closely with these staff. Chronic disease management forms a major part of the provision of primary health care, and all students have multiple opportunities to participate in the development of management plans and case conferences with other health professionals. During Phase 3 placements, all students participate in activities like nursing home visits and visits to community nursing and community allied health services.

Phase 4 includes interprofessional team training in a range of simulation exercises, health team building communication courses, and pharmaco-therapeutic tutorials.

The School plans to continue to enhance opportunities for interprofessional learning, particularly as the School of Nursing is now within the same Faculty. An update would be of interest in the School's next AMC progress report.

## 5 The curriculum – assessment of student learning

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### 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.*

The Graduate School of Medicine (GSM) *Assessment Handbook* defines the methods used for assessment including the criteria for progression in the program. The GSM's assessment philosophy is to use methods that are contemporary and international best-practice in medical education. The philosophy is underpinned by a range of principles that include closely matching assessments to learning outcomes, fairness in encouraging co-operative behaviour while also rewarding excellence, and transparency in clearly defining the assessment schedule and rules well in advance. Students are informed of the relevant university policies for assessment and of the mechanisms for appeals and complaints.

The GSM has its own Assessment Committee which has oversight of the program of assessment and its review, and its own Exam Board for consideration of results. A summary of the Exam Board findings is reported to the Associate Dean: Education. Other schools in the Faculty rely on the Faculty Assessment Committee to confirm results. Examinations are generated by the phase committees.

The team commends the program's assessment approach, which is consistent with international good practice.

Students must pass all assessments and failure on a first attempt is followed by opportunities for remediation that are targeted to the areas of deficit. For each summative assessment task the student is awarded a grade of 'unsatisfactory', 'satisfactory' or 'excellent'. The grade of 'excellent' is given to students who have shown exceptional achievement in the task being assessed or the phase overall.

The *Assessment Handbook* contains the GSM's policies and procedures on assessment and outlines the progression and remediation pathways for all assessment types. It is available online and links are provided in the individual subject outlines. The assessment schedule and process is made known to students at the commencement of each phase, and is readily available in phase handbooks and online. This information includes the timing and mode of each assessment, the learning outcomes to be assessed and the level of achievement(s) required to earn 'satisfactory' or 'excellent' grades.

Students must pass all assessments and therefore there is no compensation across domains, including professionalism.

The GSM assessment philosophy states that it uses both formative and summative assessment. The program aims to have a formative assessment preceding each summative assessment and the team found that there is an appropriate balance of formative and summative assessment throughout the program. Students can complete written formative assessments such as essays, reflections and formulary assignments, have clinical formative assessments such as clinical

examinations, clinical clerking, case discussions/write-ups, and self-reflection on their history taking. However, as discussed at Standard 5.3, student completion of formative assessments could be enhanced.

## **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.*

The overall assessment approach is well-thought through. A range of written and clinical assessment methods are used across the program and these are blueprinted to outcomes and domains. Summative assessments are preceded by formative assessments of a similar nature.

The assessment tasks have been mapped to the course and subject learning outcomes. This mapping process was conducted in 2015 as part of the University's Australian Quality Framework reporting. As well as mapping the course learning outcomes, the School has mapped the subject learning outcomes to assessment items across the four phases, and has mapped assessment tasks to the four vertical curriculum themes.

In addition to the mapping of course and subject learning outcomes to the assessment tasks, the School has blueprinted end-of-Year 1 and all end-of-phase summative assessments (integrated written papers and OSCEs). This blueprinting is undertaken by the Phase Chair and forms the basis for the collation of the examination papers. The aim of this blueprinting is to ensure appropriate representation of discipline specific content and to match the exam content to the students' experience of the curriculum.

As students progress through the program the complexity and clinical focus of the assessment tasks increases. Phase 1 assessment processes are aimed at demonstrating a grasp of the underpinning medical sciences and developing the characteristics which are important to make a good doctor. Assessment methods in Phase 1 comprise 'clinical competencies' where students must demonstrate mastery of designated clinical skills, written assignments and end-of-year and end-of-phase written exams and OSCE. Two PPD judgments are provided by clinical skills and the CBL tutors.

Phase 2 assessment processes aim to provide students with the opportunity to demonstrate their developing clinical capacity together with their ability to correlate the underpinning medical sciences with clinical presentations and treatments. Assessment methods used in Phase 2 are the same as Phase 1 but also include Mini-CEX. The Phase 2 WBA includes five formative and two summative assessments each rotation. Across Phases 2 to 4, Student Performance Reviews are used by preceptors in hospital and general practice settings to provide an integrated assessment combining clinical competency and personal professional development assessment appropriate to the phase.

In Phase 3, students develop extended clinical competencies in a range of settings and also progress in terms of applying their scientific knowledge to the practice of medicine, their research and critical analysis skills and their personal and professional development. Assessment methods used in Phase 3 are the same as Phase 2 but also include oral presentation. In 2016, the School

introduced five situational judgement tests (SJTs) to improve assessment of professionalism and how students apply the Medical Board of Australia's Code of Conduct. The School plans to train more staff in writing SJTs and expects to double the SJT questions in 2017.

In Phase 4 the majority of the assessment tasks are workplace-based, allowing students to demonstrate clinical competency in a real-life setting. The School indicated that there has been debate in recent years regarding the introduction of a Phase 4 barrier exam, however it confirmed this would not happen as it would detract from the learning benefits of Phase 4. Assessment methods used in Phase 4 are Mini-CEX, Student Performance Reviews, written assignments and oral presentation.

The Phase 4 workplace-based assessments continue to result in a higher than expected proportion of 'Excellent' grades. The School acknowledges that while this is the nature of workplace-based assessments, it has led to discussion and planning regarding ways to alleviate this leniency bias. There is consideration to make more use of narrative and text descriptors of levels of achievement. This is a work in progress for the School and the team supports these efforts.

Assessment policies, processes for blueprinting and progression rules have been documented in a policy document, and are available to staff and students. Standard setting on end-of-year examinations is consistent with best practice and is used to set the pass-fail threshold as well as the pass-excellent threshold. The School uses a modified Angoff method to determine the standards for satisfactory and excellent in integrated written examinations, and uses the Borderline Regression method for the OSCE.

Assessment of professionalism is integrated into many assessment tasks and supplemented by judgments from CBL tutors and clinical skills tutors. The School indicated that it would like to draw on other observations of students' professional behaviours and is developing a policy around this, but will also need to meet any relevant university regulations relating to assessment. This work is on-going, and is supported by the team.

The team commends the program on the coherent and integrated approach to assessment that demonstrates a program of assessment methods.

It is recommended that the School continue in its efforts to identify and address unprofessional behaviour that may occur outside timetabled sessions. The program should also explore ways to reduce leniency bias in some workplace-based assessments.

### **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.*

Students who perform poorly in any assessment during the year or in end-of-year examinations meet with the theme leader. If the theme leader is concerned that the poor performance reflects a student who is struggling with the program then the student is referred to the phase chair for academic support. If the theme leader determines that the student is struggling with a personal

issue then the student is referred to the Head of Students for support. Students are allowed a further re-sit of in-course assessments, and failure of a re-sit results in failure of that phase. For the clinical competencies, students are allowed two re-sits. Students failing end-of-year examinations are offered remediation and an opportunity for a further re-sit two weeks later. Failure on re-sit results in failure of that phase.

The learning needs of the small number of students experiencing academic difficulties during Phase 1 but who are successful in the end of Phase 1 assessments are discussed at the Academic Progress Group on commencement of Phase 2. Students in Phase 2 move across geographical sites (Wollongong, Shoalhaven, Shellharbour and Bowral Hospitals) during their rotations and student progress tracking is undertaken by the phase chair with the assistance of the relevant professional staff, Head of Students, relevant clinical academic leads and preceptors.

When the Phase 2 or 3 examinations have indicated an academic or professional issue of concern, the Board of Examiners can recommend that students undertake a 'Directive' during Phase 4.

Students do not receive their completed examinations or mark sheets as feedback. While students are keen to receive feedback on their performance after summative assessment tasks, not all take advantage of the feedback offered from formative tasks. Approximately 33% of students undertake the weekly formative quizzes throughout Phase 1; 10% of students complete the formative written assessments for RCA and PPD themes; and 80% of students complete clinical formative assessments such as clinical examination (CEX) or clerking. The lack of engagement with clinical formatives such as CEX led to the School altering the assessment program to introduce two summative CEX for each Phase 2 rotation. The team recommends the School continues to explore ways to enhance student engagement in formative assessment opportunities.

End-of-phase feedback provides information on a student's performance in broad subject areas and relates this to the expected pass standard, but not to the expected excellent standard. It also provides information in relation to class performance. Although the latter could be seen as a form of norm-referencing, overall the criterion-referenced approach is sound. Although students may prefer more feedback after end-of-phase assessments, the feedback that is provided makes good use of available data and relates student performance to the relevant pass standards. The School does not release OSCE mark sheets but is considering releasing more contemporary examples of the generic marking schedules.

Assessment performance data, particularly for end-of-phase assessments, are routinely collated and reported to the Assessment Committee and phase groups. While data on assessment performance of individual students is not made available routinely, academic staff and academic leaders for the individual clinical disciplines are represented at the Exam Board and as such have access to individual data on student performance.

#### **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.*

The quality of assessment is overseen by the re-formed Assessment Committee and also the Graduate School of Medicine Exam Board. The team supports the re-establishment of the Assessment Committee as it provides mechanisms for ongoing improvement and monitoring.

Question items in written exams and OSCEs are reviewed by relevant teaching staff involved in teaching that discipline (e.g. surgeons review the surgical questions). The questions are then reviewed by peers (e.g. the surgical questions are reviewed by paediatricians) to ensure that the questions are clear and at an acceptable knowledge level. Integrated written examination papers from Phase 1 are reviewed by clinicians from the CBL team, who teach into Phase 1, to ensure that the clinical relevance is appropriate and the integrated written examination papers from the clinical phases (Phase 2 and 3) are reviewed by members of the medical science team to ensure that the wording of the items is clear and that there is consistency in the expectations of the assessment items. Following this review of the papers, academics have a final opportunity to review the written examination paper during the standard-setting process.

Item statistics are provided soon after each sitting as a quality assurance process. Any poor item performance is flagged. In addition, reliability calculations are undertaken after end-of-phase examinations and these are satisfactory. Evaluation has revealed that OSCE data correlates with admission scores.

The School held a two-day workshop on assessment with invited experts in 2014 to consider assessment processes and identify any areas for improvement. Recommendations adopted included the introduction of a Phase 1 OSCE from 2016, and the introduction in Phase 3 of situational judgement tests and key-features problems. The team supports activities to explore use of situational judgement tests. The Assessment Committee indicated that it expects to conduct a review of assessment in a few years.

The School participates in benchmarking activities where assessment performance of students is compared with other medical schools. Student performance compares favourably.

As a School with widely dispersed teaching sites, the School monitors assessment processes and results across sites to ensure consistency. Preceptors in rural and regional hubs have been trained in the School and program assessment practices. In Phase 2, preceptors also receive reference information regarding how to conduct WBA. The Phase 3 leader also reported that the School holds an annual workshop with regional academic leaders which includes comparisons of hub timetables, assessments and outcomes. Comments by some clinical preceptors indicated that professional development of assessors who conduct summative clinical examinations is a challenge, with some finding it difficult to fail a student they did not know well. It was suggested that ongoing training and calibration of supervisors in WBA is an area the School could continue to improve. This is also consistent with the identified problem of leniency bias that has been observed in many workplace-based assessments; an area the GSM has already identified as needing attention

In Phase 1, the School compares Wollongong and Shoalhaven cohort results in end-of-year and end-of-phase examinations, and in Phase 3, evaluates written examinations and OSCE results across the eleven hubs. Student assessment results have shown no significant differences across sites.

## **6 The curriculum – monitoring**

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### **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.*

The School demonstrates a strong commitment to monitoring and evaluation and acting on the resultant feedback. A variety of methods, including formal university subject evaluations and extensive use of student feedback through questionnaires at the end of phase placements and blocks, are used to monitor the curriculum.

The University's formal subject evaluations show good Phase 1 and 4 results, with Phases 2 and 3 in 2014-15 indicating that students struggle to understand learning objectives and did not feel fully supported. The transition to independent learning required in Phases 2 and 3 has led to the School implementing more student supports, including a longer Phase 2 orientation, and new clinical module learning activity outlines. School surveys conducted since that time have shown improvement with students' perceptions of support.

An end of Phase 2 feedback session is conducted each year, and at the end of Phase 3 the majority of students participate in voluntary individual, semi-structured interviews. Phase 3 results indicate that students have exposure to a diversity of clinical presentations and found the opportunistic learning environment useful. Results are considered by the respective Phase Committee, and reported to the Curriculum Committee. Overall, students reported that they felt well listened to and were informed of the improvements made by the School in response to their feedback.

Student feedback about preceptors and clinical supervisors is less formalised, relying more on word of mouth. Any reports of underperformance by tutors are managed personally by staff. Although staff and students reported that this mechanism appears to be effective, the team recommends monitoring, and review of the quality of teaching and supervision could be strengthened with more robust and formalised forms of evaluation.

The School reported that curriculum based cases are reviewed by content experts, tutors and students. An external review of Phase 1 teaching blocks has occurred on a rolling basis, and this phase consistently receives positive feedback.

Evaluation of student experience has been measured using the Australian Government University Experience Survey. The Quality indicators for Learning and Teaching (QiLT) data show favourable comparisons with other medical schools.

The School's evaluation program in the last ten years was instrumental in shaping the new medical program. The team note the evaluation program is now transitioning to one which is required to monitor quality within an established medical program. The team encourage the School to continue to build an ongoing, robust program of evaluation that is not restricted to

student feedback, so that any concerns or risks to the quality of the program are identified and managed effectively.

The School participates in several benchmarking exercises with other medical schools. It has been part of the Australian Medical Schools Assessment Consortium (AMSAC) since 2013. This consortium provides up to 50 anatomy/physiology best-of-five questions which can be used in each summative examination at the end of the preclinical years. The School has incorporated approximately 35 AMSAC questions into the end of Phase 1 examination blueprints for the last three years.

The School has participated in the Australian Collaboration for Clinical Assessment in Medicine (ACCLAiM) consortium since 2011 in order to benchmark performance on OSCE stations. Analysis of results of shared stations shows that students are performing at or near the top level in all disciplines.

The School has been a member of the Australian Medical Assessment Collaboration (AMAC) since its inception. The School was the first site to administer the pilot assessment to its students in 2012 which was done as a stand-alone online 100-item MCQ. Final year students performed well and, although there was no statistical difference, it ranked first when compared with the six other schools involved.

A review of the School's evaluation committee determined that it had limited effectiveness and as a result the committee was discontinued. The Director of Curriculum (who is also Chair of the Curriculum Committee) oversees the evaluation program, and evaluation activities are reported to the Curriculum Committee. Phase committees are involved in monitoring the program.

The team note a potential risk when members involved in curriculum development could overlook some aspects of evaluation data, or areas to evaluate, although there is little evidence that this risk is manifest. The team recommends the school continue to explore the most effective processes to operationalise the program of evaluation.

The Academic Quality and Standards unit has course oversight across the Faculty of Science, Medicine and Health, and the university reviews courses every five years. The University also conducts student voice surveys. Sessional paid staff at a preclinical level in the program were surveyed recently, and the Faculty Associate Dean: Education reported that there were no quality concerns regarding the program.

## **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.*

The School analyses cohort performance against previous cohorts across subjects and assessment tasks. Results from 2008 to 2015 show a pattern of a similar number of students receiving similar grades. Trends in final subject grades show 11% of students are awarded excellent, 87% satisfactory, and 2% are graded unsatisfactory. The most unsatisfactory grades are awarded across the ends of Year 1 and Phase 2, with few at end of Phase 3 and none at the

end of Phase 4. The School regularly monitors the performance of student cohorts across sites and finds no significant variances.

The School monitors the outcomes of the medical program in a number of ways. The School has conducted telephone surveys with a sample size of twenty randomly selected graduates over five completed cohorts, finding that the majority consider they were well-prepared for internship. In 2016 the School commenced an alumni tracking project to provide data on its graduates in the coming years.

Regular monitoring of internship placements indicate that on average 61% of the graduates complete their internships in a regional or rural area. The School has also sought employer feedback for the last four years from the six health networks that employ 40% of Wollongong graduates, with responses indicating that graduates are performing at or above the expected level.

There is good analysis of end-of-year exam psychometrics that includes data on item performance as well as overall reliabilities for each exam. These data are reassuring.

The School tracks characteristics of students in the program. It has found that prior performance predicts success, with the best predictor being weighted average GPA and GAMSAT 3 (reasoning in biological and physical sciences). This has informed admissions process with GAMSAT 3 being double-weighted.

There are plans to evaluate the impact of the Indigenous health curriculum through performance on examinations and students' attitudinal shifts as measured by questionnaires.

These activities provide robust and comprehensive information on the program outcomes. The School is commended on the high levels of satisfaction with the program from students, staff and health service employers.

### **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.*

Evaluation data are considered by phase committees, the Curriculum Committee and the School Executive. School committee members from the phases and clinical sites may disseminate evaluation results as appropriate to their staff and stakeholders. Student representatives are responsible for reporting outcomes to the student body; staff also inform students regarding changes made to the program as a result of evaluation.

While results of evaluations are reviewed by relevant committees with student representation, there was less evidence of provision of any synthesis of evaluation results, or their interpretation, to stakeholders outside some key committees and the team recommend this is an area that could be developed.

The School reported that it receives comments and feedback from stakeholders outside the formal committee structure, such as from clinicians who teach students, and it considers all feedback as appropriate.

## 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 Maori 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.*

The School aims to enrol approximately 72 to 76 domestic students and up to 12 international students each year. Enrolment figures for Commonwealth supported places, bonded medical places, medical rural bonded scholarship numbers and fee-paying international students are displayed from 2012 – 2017 in Table 1.

**Table 1: Enrolment figures 2012 - 2017**

<b>Cohort</b>	<b>Year</b>	<b>CSP</b>	<b>Bonded Medical Place</b>	<b>Medical Rural Bonded Scholarship Scheme</b>	<b>Fee-paying international</b>	<b>TOTAL</b>
2012		54	18	3	10	85
2013	4	43	24	3	7	77
2014	3	52	16	2	6	76
2015	2	48	20	3	6	77
2016	1	50	20	0	13	83
<b>TOTAL</b>		<b>193</b>	<b>80</b>	<b>8</b>	<b>32</b>	<b>313</b>
<i>2017 offers</i>	<i>1</i>	<i>74</i>			<i>16</i>	<i>90</i>

The attrition rate in the medical program is comparable with other medical programs (see Table 2), with attrition rates ranging from 1.5-3.0% per cohort. The number of new offers now better reflect attrition and graduating numbers and in 2017 the starting cohort will be 90. The School indicated it does not over-offer places, preferring to make second-round offers to back-fill. Table 2 indicates the attrition rates for intakes 2012 – 2015.

**Table 2: Attrition rates 2012 - 2015**

	<b>Cohort 2015</b>	<b>Cohort 2014</b>	<b>Cohort 2013</b>	<b>Cohort 2012</b>
Commencing number of students	81	85	85	85
Joined from other cohort		3	2	6
Transfer	0	0	0	0
Total	86	87	87	85
Fail and repeat	3	5	3	3
Fail and defer	1	2	3	
Withdraw from program (without academic fail)	5	2	4	1
Withdraw due to fail		1	1	1
Leave of absence			4	1
Pass and Progress at end of year	81	76	77	85
Total attrition for commencing Cohort	4	2	4	1

The School stated that its physical and clinical resources would make it difficult to accommodate any significant increases in student numbers. The team considers that the School has the capacity to manage the existing cohort size and has appropriate infrastructure and clinical placements.

There is a small increase in the number of international student offers in 2017, from 13 to 16. However, the School has no plans to further increase international student numbers given the rural and regional nature of the program. It has success with Canadian rural students who fit well with the program's purpose, and also finds that a small cohort of international students allows for a global perspective which benefits the School. The Vice-Chancellor and Executive Dean indicated that a larger international cohort in this regionally-focused program may not be ideal for either the international students or the communities they are placed in.

Regional, rural and remote students are targeted, although there is no School quota. The percentage of applicants from rural and regional areas has increased from an average of 30% in the first few cohorts to 71% in recent years. The Commonwealth's Rural Health Multidisciplinary Training Program requires the School to recruit a minimum of 56% rural and remote students to maintain funding. Applicants from regional and rural areas are targeted from high school. The University Admissions and Marketing department is involved with attending remote and rural high schools, and career fairs. The University Marketing and Admissions group works with the School to communicate and target students who may be suitable for the medical program.

The School has a target of three Indigenous students per cohort as part of its domestic student numbers. It will accommodate more Indigenous students as able, and in 2014 admitted five Indigenous applicants.

In 2016, seven Indigenous students are enrolled across the program. The team acknowledges the significant efforts of the Indigenous Health team in engaging local Indigenous communities and secondary schools to increase Indigenous enrolments. The School has recently developed a number of additional targeted Indigenous recruitment strategies, including attendance at career open days, developing pathways from high school to university, and a range of community engagement strategies to increase the number of Indigenous students in the program. Support is provided to Indigenous applicants via the Admissions team and the Academic Leader: Indigenous Health and staff.

The attrition of Indigenous students in the program is at a higher rate than other domestic and international students. The School attributes this to students deciding early in the program they did not want to study medicine and to the complex range of socio-cultural and academic issues that Indigenous students face. To reduce attrition, the School provides additional free tutorial and financial support for Indigenous students across the program (see Standard 7.2).

## **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 Maori.*

*7.2.4 Information about the selection process, including the mechanism for appeals is publicly available.*

The School of Medicine abides with the University's mandated admission rules and processes, which are clearly documented and transparent. The admissions processes were last updated in April 2015 and approved by the University Council. The Graduate School of Medicine has its own Admissions Committee, with members from University Admissions to ensure the School's policies comply with University rules.

The introduction of the MD program in 2017 will not create any changes to the current admission requirements or processes.

The School is a member of the Graduate Australian Medical School Admissions Test (GAMSAT) consortium, and selection is undertaken via the Graduate Entry Medical School Admissions System (GEMSAS). The components of the selection criteria include: grade point average, GAMSAT score, an online portfolio and an interview via a ten-station Multi Mini Interview. The program does not have any prescribed pre-requisites. Table 3 summarises the selection instruments and weightings for domestic students.

**Table 3: Domestic admissions instruments and weightings**

<b>Instrument</b>	<b>Method</b>	<b>Weighting</b>
Grade Point Average	Data collected electronically via ARTS system from participating universities. GPA Calculated by QTAC staff.	Weighted GPA from most recently completed Bachelor's degree accounts for 30% of aggregate score for interview ranking. Not considered after interview.
GAMSAT score	Data uploaded to QTAC system electronically by ACER.	GAMSAT score from last two years of Australian or UK GAMSAT accounts for 30% of aggregate score for interview ranking. Not considered after interview.
*Portfolio score *Rural score (including rural residency, education and experience)	Portfolio completed electronically by applicant and uploaded to GEMSAS system. Portfolios scored by trained scorers at UOW via scoring rubric. Activities verified by UOW. Rural residency and education data collected and verified by GEMSAS staff.	Total portfolio score (including rurality score) accounts for 40% of aggregate score for interview ranking. After interview, total portfolio score accounts for 50% of aggregate score for final place ranking.
MMI Interview	MMI interviews undertaken by UOW by trained interviewers. Scores uploaded to QTAC by GSM staff.	Interview score accounts for 50% of aggregate score for final place ranking.

The portfolio is a written description of the applicant's experiences and achievements providing examples of leadership, teamwork, and service ethics. The online portfolio in use is based on the British Columbia theoretical framework, which has predicted a 'rural resilience index'. The goal is that graduates will chose to work in a regional and remote setting in accordance with the program's purpose. Applicants must demonstrate any ties to regional, rural and remote communities and will be scored against their rurality using the Australian Standard Geographical Classification - Remoteness Area. The rurality score is weighted in the application process.

The School has a rubric for scoring the portfolios which it reviews yearly. It has a team of portfolio scorers comprised of academics and professional staff who are retrained annually. Many of the portfolios are randomly double-blind scored. A challenge faced is the high number of applications (n=2000), and the sustainability of scoring this many portfolios. As a result, the School is considering changing the use of the portfolio in the admissions process. Any changes implemented should be included in future AMC progress reports.

The Academic Lead: Admissions is undertaking a PhD on the relationship between the portfolio project and the number of graduates who work in a rural or remote setting. Preliminary findings presented at the Ottawa 2016 conference indicated that the portfolio does predict internship in a rural and regional setting.

The Multi Mini Interview accounts for 50% of aggregate score for final place ranking. The interviewers are also retrained annually, and there is a mix of community and academic members.

On completion, the School submits its selection scores to GEMSAS. The final ranking and matching for medical school offers is undertaken centrally for graduate schools participating in the GAMSAT consortium. The School uses this ranked list to make offers.

The team encourages the School to complete the evaluation of the selection processes, and their alignment with achieving the mission of the School.

Commencing in 2016, the Faculty established a new undergraduate degree, the Bachelor of Pre-Medicine, Science and Health. While this is not a pathway degree, its top twelve graduates will be offered an interview for entry into medicine from 2019 but are not guaranteed entry into the program.

International student numbers account for between nine to fifteen places per cohort (as noted in Standard 7.1). Recent initiatives in recruitment and selection for international students have led to increased interest and quality of applicants from across the world, however the majority of international students admitted to the School are from Canada. International students have a slightly varied selection process to domestic students. The weighting of GPA, GAMSAT / MCAT, and total portfolio score is the same. Interviews are conducted via Skype or in person overseas by Admissions staff. The final decision is based on a combination of scores with a significant focus on performance at interview as the final deciding factor.

Students who spoke to the team commended the School's admissions policies, and expressed they thought this was why the cohort was successful, suited to the program and with a low attrition rate.

The School has specific provisions and procedures in place for the admission and retention of Aboriginal and Torres Strait Islander students. An Indigenous applicant completes the same selection requirements as all other applicants, although the process will occur earlier, and with additional support. The Community Panel Interview is conducted by a community panel which offers students an opportunity to discuss their aspirations as an Indigenous student. The School does acknowledge the need for affirmative action to build the Indigenous medical workforce capacity and therefore allows some flexibility in the scores required for GAMSAT, the portfolio and the community panel interview. Indigenous students are eligible for tutoring and financial support to address the known barrier of the GAMSAT exam for Indigenous applicants. As noted in Standard 7.1 there is a protected sub-quota, and Indigenous applicants do not compete in the main domestic application pool.

The team is encouraged by the work and progress that has occurred in the recruitment of Indigenous students, and encourages the School to continue further development of this work.

The School has an active, comprehensive and clear policy on enrolment of students with disabilities and infectious diseases. The School uses the Medical Deans of Australia and New Zealand Inherent Requirement Guidelines, which are clearly linked on the School's website. Prospective students are informed of the University's and NSW Health documentation requirements to commence medical studies, and are expected to have read and understood the document prior to commencing medical studies as an entry requirement. The School does not have an age limit for students entering the graduate program.

Information about the selection process for all pathways was publically available on the University website, including the mechanism for appeals.

### **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.*

Students have access to a broad range of student support services on the main campus and across the clinical hubs, in addition to a dedicated support staff member in the medical program.

On the main campus, students have access to free counselling, health and dental services, subsidised exercise facilities, and wellness programs. At the Shoalhaven campus, a dedicated counsellor is available for sessions. Students are informed of these services on commencement of each new phase of their degree. Support details and links are provided online. All students are advised to register with a local doctor who is not associated with the teaching staff. Additionally, all staff and students are encouraged to take the Mental First Aid course at no cost, which adds to the supportive and safe environment the team observed at the School.

Students located in rural and remote clinical hubs are able to access face-to-face counselling services in a range of locations or have telephone consults with University-based counsellors. Students in Bowral are able to access counselling through the University centre at the Moss Vale TAFE campus. The School can also provide some financial assistance for international students on long-term longitudinal placement away from main campus if their medical cover does not include psychology services. At all sites, the team was impressed to hear many examples of staff assistance for students in personal and academic matters.

A strength of the student support system is the 0.5 FTE role of Head of Students. Students can seek support and guidance regarding academic, career or pastoral matters, leave allowances, deferral or access to support pathways from this dedicated resource. The Head of Students has a student advocacy and support role in program governance, ensuring the separation of student support and academic progress decision making. Students did not perceive any conflicts between student welfare and academic decision making. This role also represents the School and its students on the Students Awards Committee, the Mandatory Reporting and Inherent Requirements working group, allowing the School to advocate for the unique concerns of medical students across the wider institution.

The team commends the School on its systematic and comprehensive student support system across all program sites, including the dedicated role of Head of Students. The team heard

consistent and wide praise for the Head of Students from students and staff who complimented her leadership, availability, guidance and support provided to students across all sites.

The Head of Students role is a fixed-term two-year appointment. Medicine is the only discipline with a dedicated Head of Students position, as other Schools utilise a shared pool of staff to provide student support. Given the extensive workload and complexities demanded from this 0.5 FTE appointment, the team suggests that student support remains at the high level that is currently provided, particularly during any absence of the current Head of Students.

Many students indicated to the team that they were satisfied with personal, academic and general support, especially those students in the rural clinical hubs across NSW. This was largely attributed to the dedicated hub staff, local GP engagement and community support. The team were impressed with the various additional support services, personalised orientations and social activities that students have available to them at all dispersed hubs. The Head of Students also undertakes rural hub visits for Phase 3 students as required. Additionally, the team observed that clinical staff knew where to refer a student in difficulty. Students from all phases indicated that they were aware of where to find support, and felt comfortable requesting assistance when required.

Students are eligible to receive financial support through the University and the School. Additionally, during the longitudinal Phase 3, students are provided relocation, travel and accommodation subsidies while undertaking rural and remote placements. An internet subsidy is available to students if rural, residential internet connection is not adequate.

The School is dedicated to providing additional cultural support to the Indigenous students in the program. The School continues to fund the Indigenous Tutorial Assistance Scheme, has established Indigenous Scholarships (there is up to \$10,000 available annually), and facilitates a peer-tutor scheme. Indigenous students can access up to four hours of tutoring from the School. Additionally the University has academic services for Indigenous students across all programs.

The Academic Lead: Indigenous Health is responsible for overseeing academic and pastoral support for Indigenous students, with assistance from his team. The Academic Lead has established additional informal retention strategies, such as networking opportunities and social events to ensure the students feel supported. Broader university Indigenous student support and access to computer and study-space facilities is available via the University's Woolyungah Indigenous Centre. When placing Indigenous students in Phase 3 hubs, the School attempts to ensure students will receive good support, and will be near family if possible. The team met with a number of the Indigenous students enrolled across the four years of the program who praised the level of support provided to them by the School.

Students raised concerns regarding the University leave policy, which requires students to make up days missed. Students had issues with the attendance guidelines which require students must have a doctor's certificate for more than two days leave, and will need to make up any days lost if it is more than 5% of a rotation or teaching period. All make-up time must be completed before the end of a relevant block or phase, prior to a student being able to pass that phase. As a consequence, students commented it is easier to attend clinical placements when sick, rather than going through the perceived difficulties of leave application, with some reporting they would attend clinical duties even if infectious.

The team recommends that the School address student perceptions regarding these challenges to ensure a safe clinical environment for students, patients and clinicians.

As noted at Standard 7.2, the University has policies and supports students with disabilities, mental health needs and infectious diseases. Students with health concerns are encouraged to speak with the Head of Students early in their studies and to register with University Disability Services where appropriate. Disability Services is based at the Wollongong campus and can offer appointments at Shoalhaven, and telephone appointments or email correspondence for remotely-placed students. Disability Services manage the University Carers Register and are instrumental in the establishment of Reasonable Adjustment (RA) agreements for students with disabilities around working conditions and examinations. This service also has specialised equipment that can be loaned to students for the duration of their study. There are currently fifteen active RAs in place for medical students across the four phases. These are subject to review annually, or earlier if required.

#### **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.*

The University has clear student conduct rules for all students, including policies on academic integrity and academic misconduct. Its *Code of Practice – Student Professional Experience* sets out what is expected from students, the University and all associated teaching sites in providing student professional experience programs. The University Governance Unit has a procedure regarding mandatory reporting to AHPRA which the School reported it had not been required to act on to date. Students are encouraged to self-refer.

Currently, in the earlier phases of the program, breaches of professionalism are identified by tutors who are closely engaged with the students. During the clinical years, the School is reliant on reports from clinical teachers and the student cohort.

To enhance the University policies, the School has proposed a *Professional Behaviour and Conduct Intervention Guideline* and *Professional Behaviour and Conduct Intervention Agreement* which were awaiting University approval at the time of the visit. This process will be separate to the University academic misconduct process which may miss professionalism issues unique to medicine. The proposed policy encompasses a three step program for identifying, tracking and assisting students who raise professional behaviour concerns. The Student Performance Reviews already conducted by preceptors regularly during the program are reviewed by staff to identify professionalism issues. Students would be given three chances after any breach, including remediation. The team is encouraged by this development and supports the School in formalising the professionalism assessments of students. An update will be required in the School's next AMC progress report.

The School has developed additional policies to assist students with their professionalism, such as its social media policy, and asking students to sign an informal conduct agreement. Students are asked to pledge that they will maintain a high standard of behaviour, and the School is looking at formalising this pledge in a signed document as a component of the proposed professionalism policy.

## **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.*

The team commends the School for the inclusion of a wide representation of students on its committees, with evidence the student voice is considered throughout the program.

The Wollongong University Medical Student Society is the main student group of the School and they are represented on all School committees and across sites. The President has regular meetings with the Dean of Medicine and the Curriculum Manager.

The student body is consulted on all key decisions that impact them. Their feedback in the committee meetings is included in the reports. For example, in 2016 the School changed the level of subsidies offered to Phase 3 students in rural hubs. A benchmarking exercise had indicated that the School's subsidy model was among the most generous of all Australian medical schools and was unsustainable. Via the Student Society, the rationale and new proposal was presented to students for consultation prior to being formally confirmed and released.

The Student Society reported to the team that it felt well represented, listened to, and valued on the committee structure.

The Student Society also offers academic, community, and social based activities. There are special interest groups affiliated with WUMSS such as the Surgical Interest Group, Critical Care Interest Group, and the General Practice Student Network. The Student Society was observed to have strong engagement with the School staff, and to adequately communicate relevant information to students.

## **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.*

The University holds public liability and professional indemnity insurance for all enrolled students undertaking activities related to their studies, and advised that this has not changed since the last AMC assessment. Students are advised to seek their own insurance should they wish to undertake activities outside the curriculum.

## **8 Implementing the curriculum – learning environment**

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### **8.1 Physical facilities**

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

The physical facilities offered by the School are a strength of the medical program. The wide range of rural clinical teaching sites match the School's purpose to train generalist rural and remote practitioners. There are multiple student teaching and learning sites across a large geographical area, which are all of a high standard. Students can be assured of adequate facilities across the dispersed sites.

Phase 1 is based at the Wollongong and Shoalhaven campuses. Around two-thirds of Phase 1 students are based at Wollongong with the remainder at the Shoalhaven campus an hour's drive south of Wollongong.

The University of Wollongong School of Medicine building includes an impressive student learning centre which has CBL/tutorial rooms, computer access and is accessible 8.00am to midnight seven days a week. There is a student common room with lockers and kitchen, and a 92-seat lecture theatre which has microphone/camera access for each seat to increase interaction in videoconference lectures. It has a clinical skills laboratory with four multi-purpose rooms, each of which can be converted to a four-bed ward, two simulated general practice rooms, and a range of procedural skill models.

The School has indicated that it has adequate resources, noting however the facilities are almost at capacity with the number of students in the program. Upgrades in the medical school building in 2014 and 2015 have provided better equipment, and increased office space and desk capacity for both staff and students. The merging of the School into the larger Faculty has provided the School with access to the recently refurbished simulation suite within the School of Nursing for high-fidelity simulation training using the B-Line Medical SimCapture System.

Elsewhere on main campus, students have access to the anatomy laboratory and science laboratories. The Illawarra Health and Medical Research Institute on campus has capacity for medical academic and clinical researchers to access laboratories.

Facilities at the Shoalhaven campus in Nowra are also of a high standard, and mirror the facilities available at Wollongong. The Shoalhaven Medical School building includes three CBL rooms, a lecture theatre with videoconferencing facilities, and a clinical skills laboratory with two multipurpose rooms and two GP rooms, plus simulation manikins and pathology specimens. While there is no anatomy laboratory at Shoalhaven, students have free transport to Wollongong to coincide with attendance at the campus for other organised School activities, and priority booking access to the Wollongong anatomy laboratory. Students have access to the Student Resource Room with computers, and to the campus library. A jointly funded Commonwealth and University 'Mind the Gap' mental health and wellbeing program is being developed on campus to address mental health in the Shoalhaven and staff anticipate new clinical teaching and research opportunities for the Phase 1 students. Students who spoke with the team considered being at Shoalhaven was an advantage due to the small group teaching and high access to teaching staff.

Phase 2 teaching is based at the four sites: The Wollongong Hospital, Shellharbour Hospital, Shoalhaven Hospital, and Bowral and District Hospital.

The Wollongong Hospital is the largest clinical teaching site, being a major referral and teaching hospital with over 500 beds. The majority of clinical rotations (67%) are based here. Renovations in 2014 expanded office and desk space for both students and staff, with an additional meeting room featuring videoconferencing, and skills development rooms built.

Adjacent to Wollongong Hospital is the Illawarra Shoalhaven Health Education Centre, built in 2012, where students and staff can access high-fidelity simulation training and a clinical skills laboratory. In 2015, students commenced Phase 2 mental health rotations at the South Coast Private Hospital, a 70-bed private mental health hospital in Wollongong. Students are provided with a small learning space, however can easily travel to the Wollongong Hospital to access the full range of student facilities.

Bowral and District Hospital, a one hour drive west, is a 94-bed major rural hospital in the South Western Sydney Local Health District. Students have access to excellent shared town-house accommodation, with the creation of an adjacent learning centre equipped with amenities and video-conferencing. The School also has agreements with the Bowral and District Hospital for office space for School staff within hospital premises.

Shellharbour Hospital, a half-hour drive from main campus, has around 160 beds and was recently upgraded from a district hospital to a major metropolitan hospital. It places Phase 2 and 3 students in its Emergency Department, psychiatry and medicine rotations. It has adequate facilities for students, including study space in the Junior Medical Officer room. Shellharbour Hospital is due to be renovated in 2016, and there are plans to increase the number of clinical appointments which will enhance teaching opportunities.

Shoalhaven District Memorial Hospital, an acute care hospital, provides students access to tutorial, simulation training, study and kitchen amenities. The School staff are also provided office space in the executive building of the hospital. The Grand Pacific Health Centre, opened in 2015 and adjacent to the Hospital, has education and office facilities used by the School, with Phase 3 teaching here weekly, and student clinical placements.

During the Phase 3 longitudinal clinical placement, students are situated at a clinical hub in New South Wales. In addition to the Phase 2 sites detailed above, other clinical sites are listed in Table 4. Facilities across the dispersed rural and remote hubs vary due to the extent of the clinical placements involved, and span private practices, public hospitals, private hospitals, and Aboriginal Medical Services.

**Table 4: Other clinical sites**

<b>Region</b>	<b>Hospital</b>
Milton / Ulladulla	Milton Ulladulla Hospital
Mudgee	Mudgee District Hospital Gulgong Multipurpose Service
Murrumbidgee	Griffith Base Hospital Leeton District Hospital Narrandera Hospital
Broken Hill	Broken Hill Base Hospital
Forbes / Orange	Forbes District Hospital Orange Base Hospital

Grafton / Maclean	Grafton Base Hospital Maclean District Hospital
Byron / Ballina	Lismore Base Hospital Byron Bay District Hospital Ballina Hospital Kyogle Multipurpose Health Service
Murwillumbah	Murwillumbah District Hospital Mullumbimby Hospital Tweed Hospital

Facilities of note include the University of Sydney Lismore Simulation Centre; the Clinical Simulation Building at the Broken Hill University Department of Rural Health opened in 2012; and at Griffith, the building of a Clinical Teaching and Learning Centre with an eight-bedroom student accommodation facility to be completed in 2016. All these facilities are funded and operated in conjunction with other health, council, government and university stakeholders.

The School invites requests for developments from its clinical sites to enhance student facilities, and benefits from Commonwealth funds to fund these projects, such as development of student study areas and equipment.

The team visited a number of sites across the state and video conferenced with staff at other sites and found that the facilities are of high quality. The School is commended on the outstanding purpose-built facilities at a range of School sites, including the School's dispersed clinical hubs.

## **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 needs.*

The School uses Moodle/Mahara as its learning management platform for online access to lecture materials, course handbooks and administrative documents, timetables, formative and some summative assessments. The School transferred to this learning management system in 2013. The system features a student collaboration tool used for group work and collaborative research tasks.

The educational technology needs of the School are managed by a centralised Educational Technology Team. This is represented on School committees in order to inform both educational technology infrastructure and application issues and strategy.

The School is investigating the use of student portfolios, while the development of interactive multimedia learning using Articulate Storyline software has been well received by students. Students commended the adoption of 'Echo 360 lecture capture' that allows greater flexibility for students to access lectures at their convenience.

Students reported some difficulties with videoconferencing live tutorial and lecture sessions in the past. The School has undertaken a major enhancement to video conferencing facilities with the adoption of interactive audience response technology, demonstrating an active response to student feedback related to communication difficulties between the Wollongong and Shoalhaven sites. The team spoke with students who reported that the videoconferencing facilities had vastly improved, particularly in the Phase 3 sessions, where students from the remote hubs participate in an all-hub link up.

Wireless internet access is provided to students at Wollongong and Shoalhaven campuses as well as at most hubs. There were some connection issues at the Shoalhaven District Memorial Hospital, as the School's learning management system clashed with the Hospital's network. The School was responsive to feedback, and have arranged a fix for this initial issue, and the team spoke with students and staff at this site, who reported they did not have difficulties connecting to online resources. Overall, the ability for students to access wireless internet, online resources and library services is admirable considering the dispersed student placements.

The School had previously considered use of the Planet Software Student Placement Management System (SONIA) as its clinical placement management system. The team observed that the paper-based allocation system in use was adequate.

Libraries at Wollongong and Shoalhaven campuses provide access to a comprehensive range of information resources and services. Many of these resources are available regardless of location, twenty-four hours a day, which include access to document delivery, online help and training guides, and web-based tutorials. Students at dispersed sites have access to the online library, and additionally all sites reported having physical library services for students.

### **8.3 Clinical learning environment**

*8.3.1 The medical education provider ensures that the clinical learning environment offers students sufficient patient contact, and 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 settings.*

*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 Maori.*

*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.*

The team was impressed by the well-structured and comprehensive clinical experience in a range of health settings across the breadth of the medical program, that prepares students well for clinical practice.

Placements commence in Week 4 of the program and students find this early exposure beneficial. In addition to general practice and hospital placements in Phase 1, in 2016 the School has expanded the clinical learning environments to encompass exposure to aged care, community/allied health, and Indigenous settings. Additionally, the 'rural taster' experience is an optional two-week subsidised placement for up to twenty Phase 1 students to gain early exposure

at one of the six rural hubs. Hospital placements in Year 2 of Phase 1 provide a smooth transition into Phase 2. Clinical preceptors assist small groups to develop clinical skills and facilitate case-based discussion.

Phase 2 incorporates seven, five-week rotations with structured clinical activities and ample opportunities for students to interact independently with patients on the wards. The team was advised of student placement timetabling pressures faced by administrative staff at Wollongong and Shellharbour Hospitals, and the need for a clinical academic at Shellharbour and suggests the School explore. The team observed no compromise to the quality of the student clinical experience.

The Phase 3, 38-week longitudinal integrated clerkship model allows students to experience patient continuity of care from general practice into the hospital context during each week of the placement. The team commends the longitudinal integrated clerkship model developed for Phase 3, and clear dedication and commitment of the clinical preceptors that create this enriching experience.

Phase 4 constitutes three, six-week placements: the pre-internship term, a selective and an elective term. Students can pursue an area of interest, further develop their skills in a particular area, or try something new. The students are able to complete their elective and selective at a site of their choice, and are encouraged to travel, and gain a global perspective in this rotation.

The program allows access to a range of learning environments and models of care (inpatient, outpatient, intensive care, emergency care, public and private facilities) and students have good access to patients throughout. The School ensures that all students have access to the required clinical experiences. In Phase 3, if gaps are detected, the hub arranges for students to attend a different clinical setting. Phase 4 students reported that they considered themselves of the same standard, as their Phase 3 experiences were fair and equal across the mixed sites with no gaps in learning.

Student allocation by facility is documented in Table 5.

**Table 5: Student numbers by phase at clinical sites**

Site: Student numbers	Phase 1	Phase 2	Phase 3	Phase 4
The Wollongong Hospital	56	57	22	PRINT: 51 Elective/selective: 26
Shoalhaven Hospital	32	15	8	
Bowral District Hospital		13	8	
Milton Hub			4	
Mudgee Hub			4	
Murrumbidgee Hub			7	
Forbes/Orange Hub			4	
Broken Hill Hub			4	
Grafton Hub			4	
Lismore Hub			9	PRINT: 7 Elective/selective: 3

<b>Site: Student numbers</b>	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>	<b>Phase 4</b>
Murwillumbah Hub			9	
<b>Total</b>	<b>88</b>	<b>85</b>	<b>83</b>	<b>82</b>

The School demonstrated that all students receive adequate cultural training prior to participating in Indigenous placements. The Phase 1 Indigenous health immersion program for students provides a solid foundation on which to develop culturally competent care skills (refer to Standard 3.5). The Wollongong and Illawarra region has a proportionately high Aboriginal population, and students reported sufficient opportunities to interact with Aboriginal patients and communities.

Most hubs can provide clinical experiences in Aboriginal medical services, although some students will have more opportunities than others. During Phase 3, six partner Aboriginal Medical Services take up to seven students for their year-long longitudinal placement. This provides a significant opportunity for students to gain an excellent understanding of Indigenous health in community-controlled organisations. The hubs which do not have a large Indigenous population or an attached Aboriginal health service have been successful in providing other teaching and placement opportunities for their students. Phase 4 students stated they felt confident in managing Aboriginal and Torres Strait Islander patients.

The School has joint clinical placement programs with the University of Sydney, Western Sydney University and the University of Adelaide, and also works collegially with the University of New South Wales and other universities in rural hubs. The School has worked closely with these institutions to ensure the shared clinical placements are collaborative and cohesive. The team observed that the coordination between the universities at the joint sites is most collegial and contributes to the student experience.

#### **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.*

The School has an established cohort of experienced clinical preceptors at the main hospital sites of Wollongong, Shellharbour, Shoalhaven and Bowral. New preceptors are invited by the hospital academic coordinator or a discipline academic leader to an orientation and a preceptor manual is provided. The School provides all preceptors with access to the curriculum, student handbooks, and assessment information. Preceptors are invited to undertake University funded teaching courses to enhance their supervisor skills. Most preceptors are hospital consultant staff that are not remunerated for their work, and there were some mixed reports regarding the induction process and some concerns raised around completing student assessments.

The team met with many enthusiastic dedicated clinical supervisors/preceptors, who were highly engaged with the medical program. Preceptors reported that they were well-supported by the School and had effective relationships with their School contact.

The School appoints regional academic leaders at each of the eleven clinical hubs in Phase 3. These leaders are responsible for student learning activities, act as student mentors, provide governance at the local level for the School, liaise with preceptors, conduct quarterly student performance reviews to assess progress through Phase 3, and contribute directly to tutorials and/or lectures to students during their formal learning days.

In Phase 3, more than 200 clinical preceptors from 69 general practices across NSW are involved in the teaching of students in rural and regional communities. The School has formal agreements with each general practice that stipulate the obligations of the practice regarding students. New practices receive a faculty development session with training in parallel consulting, providing feedback and use of Mini-CEX, and each GP preceptor is supplied with a preceptor handbook which details their responsibilities. Practices may have further development sessions, though many are well-trained by their specialist college.

The team visited a number of general practice facilities, and were impressed to see how Phase 3 students were well-integrated in the practice and treated as a team member. Some Phase 3 GP supervisors spoke of the ongoing mentor role they choose to maintain with their former students as these doctors progress in their careers, demonstrating the valuable relationships developed. The team commends the dedication and high level of support, both academically and socially, that is provided to students at the eleven Phase 3 sites of longitudinal integrated placements (hubs) by preceptors and staff.

The team noted that the medical program's executive team were engaged with all hubs and regularly visited the sites. There also appeared to be a high level of contact between the hubs. The team visited several sites and spoke with all regional academic leaders, who reported good School support, good communication, clear policies, regular meetings and visits from the Dean. The dispersed sites are well-integrated into the School due to this effective consultation and communication, and the School is commended for building this strong clinical network.

The School routinely monitors the quality of student experience and supervision through regular contact with preceptors and facilitators in hospital and community settings. Although the School does not formally monitor the individual performance of preceptors and those providing clinical supervision during placements, student satisfaction with clinical supervision is discussed during end-of-phase surveys and feedback sessions. Students stated that they were pleased with the level of supervision throughout the program, and felt confident to voice their opinions if concerns were to arise.

Issues with supervision are escalated to the regional academic leader who is responsible to manage this in the first instance. In instances where the students have given feedback regarding an unsatisfactory clinical supervisor, it was reported that the School was active in assessing the situation, remediating any issues, and working with clinical supervisors.

There was some variation in the degree of professional development that teaching clinicians engaged in. The team notes that the School is developing a 'Teaching on the Run' program in collaboration with the Illawarra Shoalhaven Local Health District, in order to develop junior medical staff teaching and supervision skills. Many clinical academics have asked for feedback on

their teaching and the School will be trialling a program where clinical academics can voluntarily request an evaluation of their teaching, which is a welcomed initiative.

As at Standard 1.9, the team recommend that a more consistent and robust induction process occur for honorary clinical academics and preceptors, as well as the development of an ongoing professional development program.

The School demonstrated through its regular meetings with the Illawarra Shoalhaven Local Health District that it works collaboratively to lobby for undergraduate and postgraduate education. The University and Health District are meeting to align their strategic direction, and plan to appoint joint-funded clinical positions (as referenced at Standard 1). The Wollongong Hospital is in the process of delineating work plans for clinicians to ensure teaching and research commitments are clear to both organisations and clinicians involved.

The team met or spoke with hospital executives from each region who were supportive of their clinicians contributing to the program, and who spoke favourably of their interactions with the School and commitment to the student experience. Overall, across sites it was apparent that preceptors have time allocated for teaching.

The team was confident that students are being appropriately supervised. It was clear that the high-quality clinical supervision provided and the excellent coordination of School staff to the students' clinical experiences is resulting in work-ready graduates able to contribute to health care for patients in all settings, particularly in regional, rural and remote communities.

## **Appendix One      Membership of the 2016 assessment team**

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**Professor Alastair Burt, (Chair)** BSc, MBChB, MD (Honours), FSB, FRCPATH, FRCP, FRCPA, FAcadMedEd, FAHMS

Executive Dean, Faculty of Health Sciences, University of Adelaide

**Dr Jennifer Schafer, (Deputy Chair)** MBBS, DRANZCOG, FRACGP, GCELead

Director of Student Affairs, School of Medicine, University of Queensland

**Dr Hwee Sin Chong,** MBChB, FRACMA, MHM, MIPH, GAICD

Executive Director of Medical Services, Darling Downs Hospital and Health Services, Toowoomba, Queensland

**Associate Professor Elizabeth Davis,** BSc (Hons), PhD, GradCertHigherEd

Deputy Head (Teaching), Department of Pharmacology, Faculty of Medicine, Nursing and Health Sciences, Monash University

**Professor Gail Garvey,** Bed, Med, PhD

Deputy Division Leader, Wellbeing and Preventable Chronic Diseases, and Principal Research Fellow, Menzies School of Health Research

**Professor Tim Wilkinson** MBChB, PhD, M ClinEd ,FRACP, MD, FRCP

Deputy Dean and Director, MBChB Programme, University of Otago, Christchurch, New Zealand

**Ms Stephanie Tozer**

Manager, Medical School Assessments, Australian Medical Council

**Ms Fiona van der Weide**

Accreditation Administrator, Australian Medical Council

## **Appendix Two      Groups met by the 2016 assessment team**

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### **University of Wollongong**

Vice-Chancellor

Director, University Academic Quality and Standards

Executive Dean, Faculty of Science, Medicine and Health

Executive Officer, Shoalhaven Campus

Head of Shoalhaven Campus

### **Faculty of Science, Medicine and Health staff**

Associate Dean (Education)

Associate Dean (Research)

Faculty Executive Manager

Faculty Management Accountant

Head of School of Biological Sciences

Head of School of Chemistry

Head of School of Earth and Environment Sciences

Head of School of Nursing

Manager: Education Technology

### **School of Medicine staff**

Academic Lead: Admissions

Academic Leader: Clinical Skills

Academic Leader: Medical Sciences theme and Professor of Physiology

Academic Leader: Research and Critical Analysis theme

Academic Leader: Personal and Professional Development theme

Associate Dean: Community, Primary and Remote and Rural

Associate Dean: Teaching Hospitals

Curriculum Manager, Medicine

Dean of Medicine

Director of Curriculum

Head of Discipline, Indigenous Health

Head of Discipline, Medical and Exercise Science

Head of Discipline, Nutrition and Dietetics

Head of Students, Medicine

Incoming Dean of Medicine

Manager: Community, Primary and Remote and Rural

Manager: Rural Clinical School

Roberta Williams Chair of General Practice

### **Groups and Committees**

Admissions Committee

Assessment Committee

Case-based Learning tutors

Curriculum Committee

Education technology staff

Evaluation staff

Indigenous Health Discipline staff

Phase 1 Committee

Phase 2 Committee

Phase 3 Committee

Phase 4 Committee

Preclinical teachers

Professional staff

Professionalism and Fitness to Practice Group

School of Medicine Advisory Group

School of Medicine Research Group

School of Medicine Senior Executive Group

Student welfare staff

### **Students**

Wollongong University Medical Students' Society

Students from all phases, clinical sites and hubs of the program

### **Clinical sites**

#### Bowral and District Hospital

Clinical teachers

Hospital management

School staff

Students

Broken Hill Hub

Placement Facilitator

Regional Academic Leader

Director, Broken Hill University Department of Rural Health

Forbes Hub

Placement Facilitator

Regional Academic Leader

Grafton Hub

Placement Facilitator

Regional Academic Leader

Illawarra Aboriginal Medical Service

Lismore Hub

Clinical teachers

Phase 3 Preceptor

Placement Facilitator

Regional Academic Leader

University Centre for Rural Health Management

Milton Hub

Placement Facilitator

Regional Academic Leader

Mudgee Hub

Clinical teachers

Mudgee Hospital management

Mudgee Medical Centre staff

Placement Facilitator

Regional Academic Leader

Murrumidgee Hub

Co-regional Academic Leader

Placement Facilitator

Murwillumbah Hub

Clinical teachers

GP Facilitators

Murwillumbah Hospital management

Placement Facilitator

Regional Academic Leader

Orange Hub

Placement Facilitator

Regional Academic Leader

Shellharbour Hospital

Clinical teachers

Shellharbour Hospital Management

Shoalhaven District Memorial Hospital

Clinical teachers

Hospital management

Placement Facilitator

Senior lecturer: Paediatrics

Shoalhaven Hub

Director: Coordinator, Chair Clinical Council for Primary Health Network

GP Preceptors

Placement Facilitator

Regional Community Academic Leader

South Coast Private Hospital

Clinical teachers

South Coast Private Hospital Management

The Wollongong Hospital

Clinical teachers

Hospital management

Placement Facilitator

School clinical staff

**Stakeholders**

Dean, School of Medicine, Western Sydney University

Deputy Dean of Education, Sydney Medical School

Northern NSW Local Health District Executive Staff

Director of Medical Services

Executive Director of Medical Services

Executive Director Richmond Clarence Health Service Group and General Manager Lismore Base Hospital

Illawarra and Shoalhaven Local Health District

Acting Executive Director of Medical Services

Chief Executive Officer

General Management, Shoalhaven Hospital Group / Southern Illawarra Hospital Group





