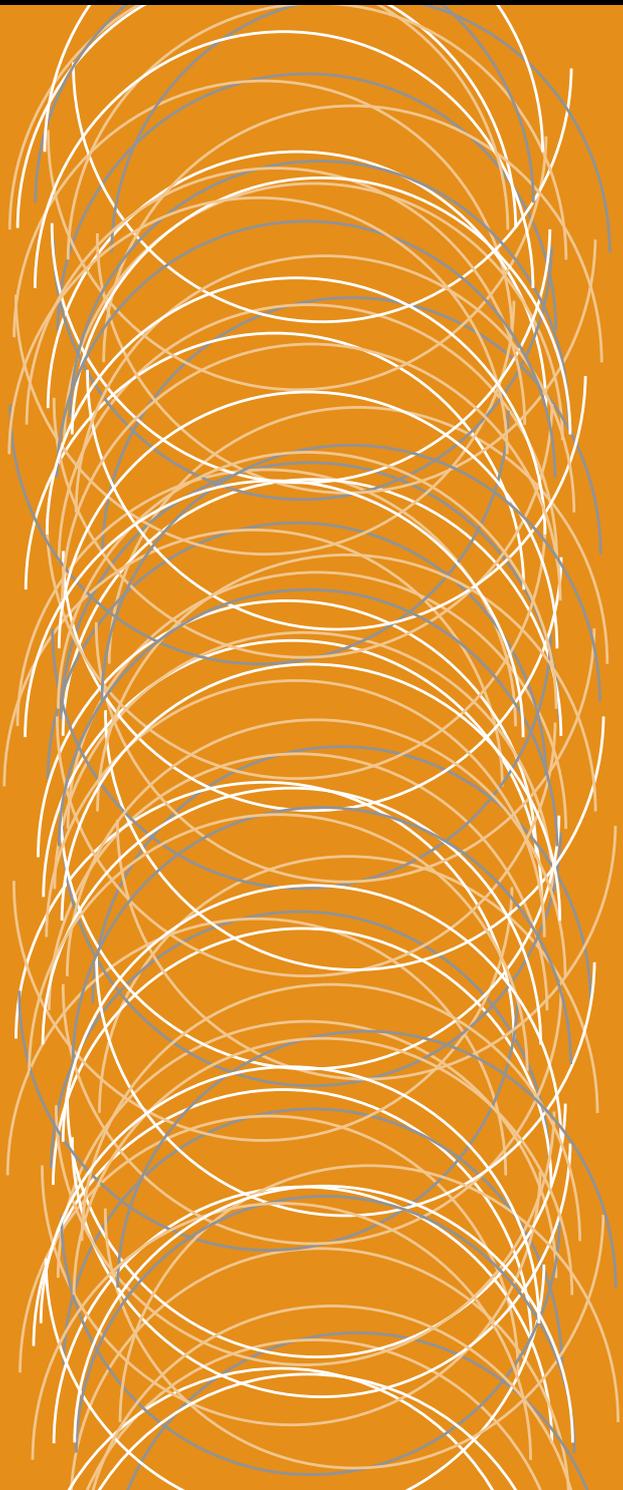


Australian Medical Council Limited

Accreditation of
University of Otago
Otago Medical School
medical program

AMC



Medical School Accreditation Committee
November 2018

April 2019
Digital publication

ABN 97 131 796 980
ISBN 978-1-925829-22-8

Copyright for this publication rests with the
Australian Medical Council Limited

Australian Medical Council Limited
PO Box 4810
KINGSTON ACT 2604

Email: amc@amc.org.au
Home page: www.amc.org.au
Telephone: 02 6270 9777
Facsimile: 02 6270 9799

Contents

Executive summary 2018	1
Key findings	3
Introduction	6
1 The context of the medical program	9
1.1 Governance.....	9
1.2 Leadership and autonomy	11
1.3 Medical program management.....	11
1.4 Educational expertise	12
1.5 Educational budget and resource allocation.....	13
1.6 Interaction with health sector and society	13
1.7 Research and scholarship	14
1.8 Staff resources	14
1.9 Staff appointment, promotion & development	15
2 The outcomes of the medical program	16
2.1 Purpose.....	16
2.2 Medical program outcomes.....	17
3 The medical curriculum	19
3.1 Duration of the medical program.....	19
3.2 The content of the curriculum.....	19
3.3 Curriculum design.....	21
3.4 Curriculum description	21
3.5 Indigenous health.....	22
3.6 Opportunities for choice to promote breadth and diversity	22
4 Learning and teaching	23
4.1 Learning and teaching methods	23
4.2 Self-directed and lifelong learning	24
4.3 Clinical skill development.....	25
4.4 Increasing degree of independence	25
4.5 Role modelling.....	26
4.6 Patient centred care and collaborative engagement	26
4.7 Interprofessional learning.....	27
5 The curriculum – assessment of student learning	28
5.1 Assessment approach.....	28
5.2 Assessment methods.....	28
5.3 Assessment feedback.....	29
5.4 Assessment quality	29
6 The curriculum – monitoring	30
6.1 Monitoring.....	30
6.2 Outcome evaluation.....	31

6.3	Feedback and reporting.....	31
7	Implementing the curriculum - students	33
7.1	Student intake	33
7.2	Admission policy and selection	34
7.3	Student support.....	35
7.4	Professionalism and fitness to practise.....	36
7.5	Student representation	37
7.6	Student indemnification and insurance	37
8	Implementing the curriculum – learning environment.....	38
8.1	Physical facilities.....	38
8.2	Information resources and library services	39
8.3	Clinical learning environment.....	40
8.4	Clinical supervision.....	41
Appendix One	Membership of the 2018 AMC Assessment Team.....	42
Appendix Two	Groups met by assessment team.....	43

List of Tables

Table 1:	OMS learning objectives compared to AMC graduate outcomes	20
Table 2:	Enrolment figures 2013-2018.....	33

List of Figures

Figure 1:	School Structure.....	10
Figure 2:	Decision making and authority in the MB ChB curriculum.....	12
Figure 3:	The Otago MB ChB.....	19

Accreditation process

According to the Australian Medical Council's (AMC) *Procedures for Assessment and Accreditation of Medical Schools by the Australian Medical Council 2018*, 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 University of Otago, Otago Medical School program expires on 31 March 2019.

An AMC team completed the reassessment. It reviewed the School's submission and the student report, and visited Otago Medical School and associated clinical teaching sites in the week of 6 – 10 August 2018.

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 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

In accordance with the *Procedures for Assessment and Accreditation of Medical Schools by the Australian Medical Council 2018*, section 5.1, the accreditation options are:

- (i) Accreditation for a period of six years subject to satisfactory progress reports. Accreditation may also be subject to certain conditions being addressed within a specified period and to satisfactory progress reports (see section 4). 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 shorter periods of time. If significant deficiencies are identified or there is insufficient information to determine that the program satisfies the accreditation standards, the AMC may grant accreditation with conditions and for a period of less than six years. At the conclusion of this period, or sooner if the education provider requests, the AMC will conduct a follow-up review. The provider may request either:
 - a full accreditation assessment, with a view to granting accreditation for a further period of six years; or
 - a more limited review, concentrating on the areas where deficiencies were identified, with a view to extending the current accreditation to the maximum period (six years)

since the original accreditation assessment). Should the accreditation be extended to six years, in the year before the accreditation ends, the education provider will be required to submit a comprehensive report for extension of the accreditation. Subject to a satisfactory report, the AMC may grant a further period of accreditation, up to the maximum possible period, before a new accreditation assessment.

- (iii) 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 would take such action after detailed consideration of the impact on the healthcare system and on individuals of withdrawal of accreditation and of other avenues for correcting deficiencies.

If the AMC withdraws accreditation, it will give the education provider written notice of the decision, and its reasons; and the procedures available for review of the decision within the AMC. (See 3.3.11)

An organisation that has its accreditation revoked may re-apply for accreditation. It must first satisfy the AMC that it has the capacity to deliver a program of study that meets the accreditation standards by completing a Stage 1 accreditation submission.

The AMC is satisfied that the medical program of the University of Otago meets the approved accreditation standards.

The 1 March 2019 meeting of AMC Directors agreed:

- (i) that the six-year Bachelor of Medicine / Bachelor of Surgery (MBChB) medical program of the University of Otago, Otago Medical School be granted accreditation to 31 March 2025; and
- (ii) that accreditation of the program is subject to the meeting the following conditions and to meeting the monitoring requirements of the AMC, including satisfactory progress reports.
 - a) By 2019, provide evidence that the medical program has addressed the following conditions from the accreditation report:

AMC condition #	Accreditation condition
1	Provide the position description for the Dean of the Otago Medical School, confirming the role, reporting lines and responsibilities, including the degree of budget and medical program autonomy. (Standard 1.2)
2	Provide details of the outcomes of the Otago University review of support staff, including effects on the staffing, infrastructure and autonomy of the Otago Medical School. (Standard 1.2, 1.8)
3	Confirm that the Otago University review of support staff has not affected the ability of Information Technology Staff to undertake and complete ongoing and planned work for the Otago Medical School. (Standard 1.2, 4.1, 8.2)

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 (met/substantially met) in making decisions about accreditation programs and providers.

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

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

1. The context of the medical program	Met
--	------------

Standard 1.2 is substantially met.

Conditions

2019

- 1 Provide the position description for the Dean of the Otago Medical School, confirming the role, reporting lines and responsibilities, including the degree of budget and medical program autonomy. (Standard 1.2)
- 2 Provide details of the outcomes of the Otago University review of support staff, including effects on the staffing, infrastructure and autonomy of the Otago Medical School. (Standard 1.2, 1.8)
- 3 Confirm that the Otago University review of support staff has not affected the ability of Information Technology Staff to undertake and complete ongoing and planned work for the Otago Medical School. (Standard 1.2, 4.1, 8.2)

Commendations

The teaching and learning community of practice facilitated by the Education Advisors. (Standard 1.4, 6.1)

The strong research output in the field of medical education. (Standard 1.7)

2. The outcomes of the medical program	Met
---	------------

Nil

3. The medical curriculum	Met
----------------------------------	------------

Recommendations

- A Continue the work to realise the potential of the Otago Medical School Curriculum map, including securing adequate resourcing to complete this useful project. (Standard 3.4, 4.1, 5.2, 5.4, 8.2)

Commendations

The enthusiasm, collegiality and educational expertise embodied in the Otago Medical School Medical Curriculum Committee. (Standard 3.2)

The work of the Hauora Māori Curriculum Sub-Committee for their work in developing and strengthening the Indigenous curriculum. (Standard 3.5, 8.3)

The collegial, open and collaborative approach to learning and teaching. (Standard 3.5)

4. Teaching and learning	Met
---------------------------------	------------

Commendations

Teaching in Hauora Māori and Pacific health. (Standard 4.1)

The exemplary role modelling and positive learning environment provided to students. (Standard 4.5)

The School vision, strategy and execution of interprofessional learning. (Standard 4.7)

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

Recommendations

B Prioritise and secure adequate resourcing for the development of the Student Achievement Summary Report. (Standard 5.1)

C Provide greater clarity for clinicians in the standard that is expected of student work aligned with each increment of the grading scale for graded assessment pieces. (Standard 4.3)

6. The curriculum – monitoring	Met
---------------------------------------	------------

Nil

7. Implementing the curriculum – students	Met
--	------------

Recommendations

D Evaluate and respond to student perceptions that the University's leave policy can at times be unnecessarily and unreasonably inflexible. (Standard 7.3)

E Increase student awareness of the anonymous online tool for reporting bullying and intimidation in the clinical environment. (Standard 7.3)

F Evaluate the effectiveness of the anonymous online tool for reporting bullying and intimidation in the clinical environment. (Standard 7.3)

G Separate the offices of the Clinical School Dean and the Associate Dean, Student Affairs in Dunedin to optimise the separation of student support from academic decision making and remove potential, perceived barriers for students seeking support. (Standard 7.3)

8. Implementing the curriculum- learning environment	Met
---	------------

Recommendations

H Explore ways to expand teaching in Primary Care. (Standard 8.3)

Commendations

The development and implementation of Hauora Māori teaching. Primary care practitioners report that there has been an impact on the competence of the graduates in this area. (Standard 8.3)

Introduction

The AMC accreditation process

The AMC is a national standards body for medical education and training. Its principal functions include assessing Australian and New Zealand medical education providers and their programs of study, and granting accreditation to those that meet the approved accreditation standards.

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

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

The AMC's Medical School Accreditation Committee oversees the AMC process of assessment and accreditation of primary medical education programs and their providers, and reports to AMC Directors. The Committee includes members nominated by the Australian Medical Students' Association, the Confederation of Postgraduate Medical Education Councils, the Committee of Presidents of Medical Colleges, the Medical Council of New Zealand, the Medical Board of Australia, and the Medical Deans of Australia and New Zealand. The Committee also includes a member of the Council, a member with background in, and knowledge of, health consumer issues, a Māori person and an Australian Aboriginal or Torres Strait Islander person. The AMC appoints an accreditation assessment team to complete 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 2018*. The granting of accreditation may be subject to conditions, such as a requirement for follow-up assessments.

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

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

The University, the Faculty and the School

Founded in 1869, the University is New Zealand's oldest university. The University has campuses in Dunedin, Southland, Christchurch, Wellington and Auckland.

The University hosts 20,838 students. As of 2017 the University employs 1,552 FTE academic and research staff and 2,476 FTE professional staff.

The University is organised into four academic divisions: Humanities, Science, Health Sciences and Business. The Division of Health Sciences contains the University of Otago Medical School, the Faculty of Dentistry, School of Pharmacy, School of Physiotherapy, and the Bioethics Centre.

The University of Otago Medical School offers a six-year undergraduate Bachelor of Medicine / Bachelor of Surgery (MB ChB). Students entering the program via direct entry will complete a first year that is common to all schools and faculties in the Division of Health Sciences. All students, including some graduate entry students, then attend the Dunedin campus for the Early Learning in Medicine component in Years 2 and 3 before dispersing to Christchurch, Wellington, or remaining in Dunedin for the Advanced Learning in Medicine component of the program in Years 4 to 6.

The Otago Medical School consists of four Schools across three campuses:

- Dunedin School of Medicine
- School of Biomedical Sciences
- University of Otago, Christchurch
- University of Otago, Wellington.

The number of domestic students enrolled into the MB ChB program has increased over the last 10 years from 190 students to 282 students per year (5 year program) with up to 10 places being available for international students. There is a headcount of 1191 academic staff and 624 general staff employed by the Otago Medical School, with an additional 85 clinical staff engaged by the School as sessional or honorary staff.

Accreditation Background

The AMC first assessed the Faculty of Medicine, University of Otago in 1994. At that accreditation was given for a limited (five-year) period to 31 December 1999 with two conditions on the accreditation. The Medical Council of New Zealand also accredited the Faculty for five years and imposed conditions similar to those imposed by the AMC. In addition, the Medical Council of New Zealand highlighted general practice and behavioural science resourcing, and the adequacy of student counselling services as issues for attention.

In 1999, the AMC conducted a follow-up assessment of the Faculty. The AMC extended accreditation to 31 December 2004.

In 2004, the AMC conducted a reaccreditation assessment of the Faculty. The AMC granted accreditation for four years to 31 December 2008 subject to a report on conditions in 2005 and 2006.

In 2008, the AMC conducted a reaccreditation assessment of the Faculty. The AMC granted accreditation for six years to 31 December 2014 subject to conditions.

In 2014, the Faculty submitted a comprehensive report for extension of accreditation. The AMC granted accreditation for four years to 31 March 2019.

Following the 2014 comprehensive report, no conditions on accreditation were imposed and the School was asked to provide progress reports in 2016 and 2017.

The AMC considered the 2016 progress report from the School, together with the students' report. The AMC accepted the report and agreed that the School continued to meet the standards.

The AMC considered the 2017 progress report from the School at the 3 November 2017 meeting. The AMC accepted the report and agreed that the School continued to meet the standards.

This report

This report details the findings of the 2018 reaccreditation assessment.

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

The members of the 2018 AMC team are at **Appendix One**.

The groups met by the AMC team in 2018 are at **Appendix Two**.

Appreciation

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

1 The context of the medical program

1.1 Governance

1.1.1 The medical education provider's governance structures and functions are defined and understood by those delivering the medical program, as relevant to each position. The definition encompasses the provider's relationships with internal units such as campuses and clinical schools and with the higher education institution.

1.1.2 The governance structures set out, for each committee, the composition, terms of reference, powers and reporting relationships, and allow relevant groups to be represented in decision-making.

1.1.3 The medical education provider consults relevant groups on key issues relating to its purpose, the curriculum, graduate outcomes and governance.

The Vice Chancellor demonstrates a strong commitment to the Otago Medical School describing it as the "Jewel in the Crown" of the University.

The Otago Medical School sits within the Division of Health Sciences, which is led by the Pro Vice Chancellor who reports directly to the Vice Chancellor. The Pro Vice Chancellor for Health Sciences is a member of the University Advisory Group and the Deputy Vice Chancellors/Pro Vice Chancellors Group.

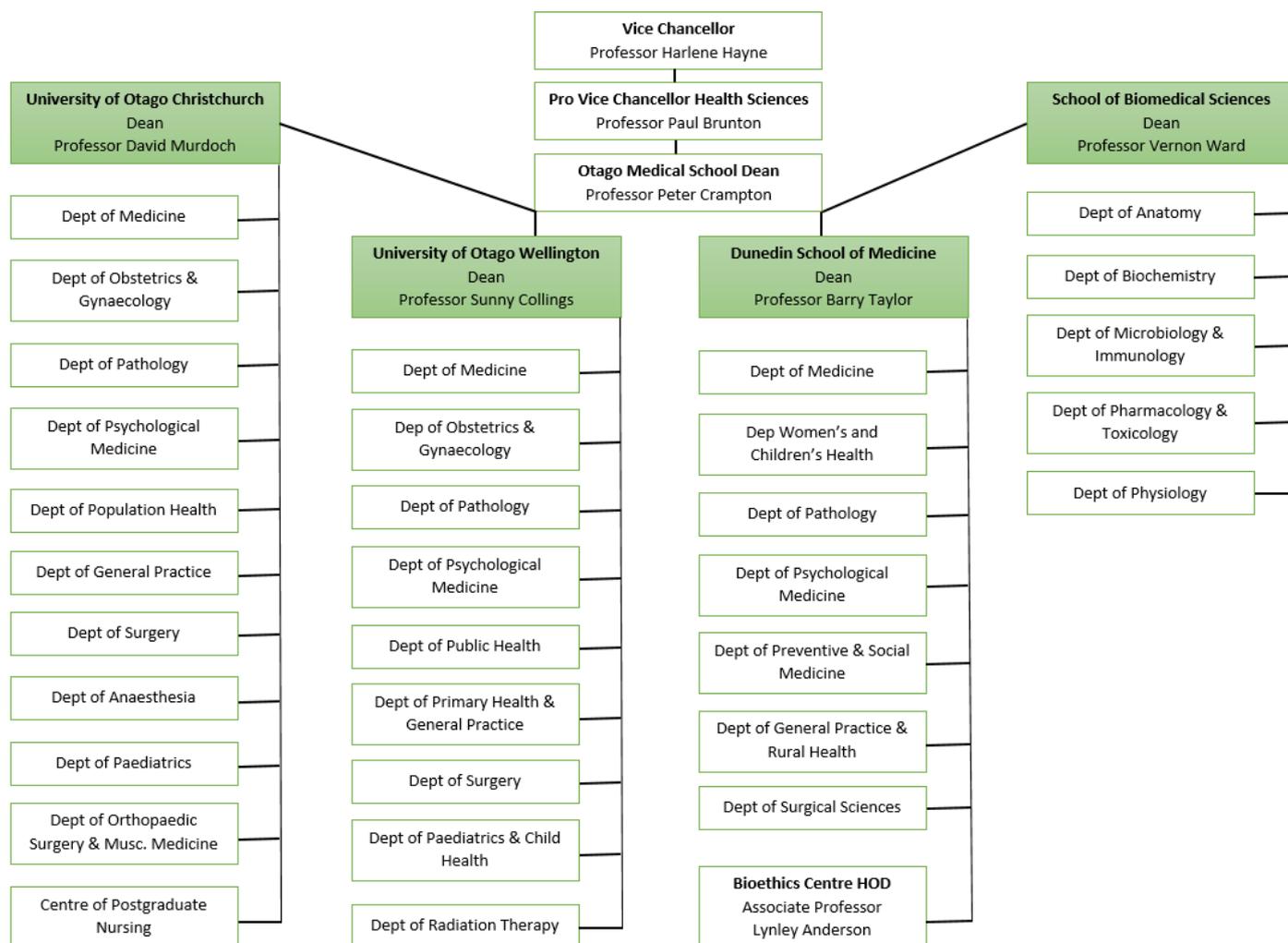
Within the Otago Medical School, there are four schools:

- Dunedin School of Medicine
- School of Biomedical Sciences
- University of Otago, Christchurch
- University of Otago, Wellington.

The four schools are overseen by a School Executive which includes the Dean and Deputy Dean of Otago Medical School, the Dean of University of Otago Wellington, Dean of University of Otago Christchurch, Dean, School of Biomedical Sciences, Dean, Dunedin School of Medicine, MB ChB Program Director, and Associate Dean and Director, Centre for Early Learning in Medicine. The main function of the Executive is to develop the overall School strategy and ensure there are adequate resources to deliver the Program, which, in the main, appear to be adequate. The School's governance structure is clear and well understood.

Figure 1 shows the functional structures of the four schools that make up the Otago Medical School.

Figure 1: School Structure



The School engages with a wide range of stakeholders, including the communities in which the Program has a footprint. The recent revisions of the purpose statement have included consultation with key groups such as Health Workforce New Zealand, District Health Boards (DHB), Medical Council of New Zealand (and its community reference group), the Nursing Council, and iwi and Pacific partners. The consultation also included a public event in Christchurch.

The success of the consultation on the School’s revised purpose motivated extension of consultation to a range of aspects of the Program, and development of mechanisms for community input.

There are formal reference groups for Pacific communities and the Hauora Māori departments of the Schools have close working relationships with their communities that inform program development.

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.

At the time of the review, the Otago Medical School has an appropriate level of autonomy to design the Program and allow for its ongoing development. However, there are areas where there is potential for loss of autonomy for the School.

Since 2004, the Pro Vice Chancellor for Health Sciences has also been a medical practitioner and the Dean of the Otago Medical School. In 2018, this arrangement has changed, and the Dean of the Medical School is no longer the Pro Vice Chancellor for Health Sciences. While the Medical School is undoubtedly valued by the Vice Chancellor and new Pro Vice Chancellor, this may have implications for the voice of the medical program within the wider University.

At the time of the visit, the position description for the Dean of the Otago Medical School had not been written nor advertised. It is important that the role, reporting lines and responsibilities, including the degree of budget and Program autonomy described in a revised position description for this role, are consistent with meeting the accreditation standards.

At the time of the review, the Otago University was still in the midst of a three year long review of support staff, including some of those in the Otago Medical School. Uncertainty remained as to the reporting lines of many of the support staff but was likely to include many staff reporting outside the Otago Medical School, which may or may not impact the autonomy of the Otago Medical School.

Amongst the support staff, uncertainty remains for Information Technology (IT) staff as to their reporting line and the impact of change on the ongoing, and planned work for the School.

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 Dean of the Otago Medical School has responsibility for the design, development and implementation of the educational program. This responsibility is delegated to the Program Director who is Chair of the MB ChB Curriculum Committee (MCC). This committee effectively drives the strategy, policy and coordination of the Program. The MCC seeks approval for academic matters from the Otago Medical School Academic Board and seeks resources from the Otago Medical School executive. This governance arrangement appears to work well.

The MCC has multiple sub-committees including the Early Learning in Medicine, Advanced Learning in Medicine, three campus Curriculum Sub-Committees, Rural Medicine Immersion Program, five Domain Sub-Committees, MB ChB Assessment Sub-Committee, MB ChB Education and Research and Evaluation Sub-Committee and the eLearning and Information and Communication Technology Sub-Committee. The team were satisfied that there were clear roles and responsibilities for each of the committees and an effective communication pathway between all the sub-committees and the MCC.

The MCC includes representatives from each stage and site of the Program, and includes representation from students and each sub-committee.

In the event of significant curriculum or assessment changes, the MCC initially approves the changes. Further approval is required by the Otago Medical School Academic Board, which then reports to the Academic Board of the Division of Health Sciences, which in turn reports to the University's Board of Undergraduate Studies. All deliberations are guided by the national Committee on University Academic Programs. The most recent approval was to an assessment process in the Early Learning Medicine 2 and 3 in 2018 and a modification to the MB ChB profile in 2015.

Figure 2 describes the decision making and authority within the medical program.

Figure 2: Decision making and authority in the MB ChB curriculum

		Strategy	Admissions	Learning outcomes	Learning opportunities	Learning assessment	Curriculum structure	Course evaluation/QA	Staff Support	Student support	Resources
Otago Medical School Level	Otago Medical School Executive	Review & endorse							Direct	Direct	Provide
	Otago Medical School Academic Board			Approve significant changes	Approve significant changes	Approve significant changes	Approve significant changes				
MB ChB Curriculum Committee and Sub-Committees	MB ChB Curriculum Committee	Define & lead	Determine & direct	Determine & direct	Delegate & approve	Determine & approve	Determine & direct	Determine & direct	Determine & recommend	Recommend	Recommend
	Advanced Learning in Medicine Curriculum Sub-Committee			Ensure distribution across modules in Advanced Learning in Medicine	Determine & direct distribution/ coordination across modules, and provision of equivalence across campus	Oversee	Design within Advanced Learning in Medicine	Respond			
	Early Learning in Medicine Sub-Committee			Ensure distribution across modules in Early Learning in Medicine	Determine & direct distribution/ coordination across modules in Early Learning in Medicine	Ensure distribution across modules in Early Learning in Medicine	Design within Early Learning in Medicine	Implement & respond			
	Campus Curriculum Sub-Committee			Ensure distribution/ coordination across modules in campus	Ensure distribution/ coordination across modules in campus	Ensure distribution/ coordination across modules in campus	Recommend & oversee implementation	Implement & respond			
	Curriculum Map Sub-Committee			Moderate & recommend content and staging							
	Domain Sub-Committee			Propose learning outcomes & staging	Oversee/ monitor	Oversee/ monitor					
	MB ChB Assessment Sub-Committee					Recommend & direct		Recommend, implement & respond			
	MB ChB Education Research Evaluation Sub-Committee							Recommend, implement & synthesise			
	Admissions		Recommend & implement								
	eLearning and ICT Sub-Committee			Support	Create/enable	Support		Support	Education support		

Where any cell is blank, a committee can suggest/contribute

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 Otago Medical School has a significant number of academic and support staff on all three campuses. Likewise, each campus includes staff with educational expertise including Hauora Māori who are supported by an Educational Development and Staff Support Unit with a dedicated Director and an eLearning Senior Lecturer. There is an Education Advisor, a fractional Clinical Education Advisor, an eLearning Facilitator and fractional Clinical Skills Director at each campus supporting the three Associate Deans of Medical Education, Associate Deans Pacific and Associate Deans Māori. The teaching and learning community of practice that is facilitated by the Education Advisors is of great benefit to the Program.

The Hauora Māori Sub-Committee (HMSC) coordinates the design, development, implementation and evaluation of the overall indigenous curriculum within the Program. The Chair of the HMSC is a member of the MCC and members of the HMSC take on membership of the MCC sub-committees

to ensure the Hauora Māori learning outcomes align to the Curriculum Map and have responsibility for the quality of the Hauora Māori curriculum delivered.

The Otago Medical School has a strong research presence in medical education and has had national and international influence and impact particularly in Hauora Māori.

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.

Currently, the Vice Chancellor determines the Divisional funding allocation and the Pro Vice Chancellor Health Sciences has autonomy to direct resources within the Division including the Otago Medical School. The Vice Chancellor, new Pro Vice Chancellor and the current Dean of the Otago School of Medicine do not envisage any changes to the allocation to the Otago Medical School in the coming years.

The Dean of the Otago Medical School has the ultimate authority and autonomy over academic, budget and human resource decisions. The Dean delegates responsibility for the operational delivery of aspects of the Program to the campus Deans at Wellington, Christchurch and Dunedin. The three campus Deans have budget autonomy to achieve their purpose and objectives of the medical program.

With the additional domestic places and the strong support of the Otago Medical School by the Vice Chancellor, the School currently has a secure income stream to sustain its medical program.

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 major stakeholders for the School include the three DHBs; Southern, Canterbury, and Capital and Coast. The Otago Medical School has formal agreements with all three. These appear to be very effective partnerships, with the Vice Chancellor and the Pro Vice Chancellor meeting with the CEOs at least annually. The Deans of each of the three campuses meet monthly with their relevant CEO and Chief Medical Officer of their DHB and have very good working relationships. The Program Director of MB ChB also meets regularly with Health Workforce New Zealand and the Medical Council of New Zealand's Education Committee.

The departments of General Practice at each campus have effective relationships with multiple Primary Health Organisations and individual practices and their lead representatives.

The Otago Medical School has strong engagement and formal agreements with health service providers with significant Māori and Pacific populations particularly through the Associate Deans

Māori. The Otago Medical School has a significant number of memoranda of understanding with Ministries of Health and Medical Schools in the Pacific region.

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 Otago University has eight research centres and seven themes led from the Otago Medical School. This stems from the strong history of research and scholarship held by the School. In 2017, the School secured \$73.5M in external research income - the highest in New Zealand and 54% of staff have been found to contribute at the national and international level in their field of expertise, of which 14% were ranked at the highest level of international excellence. The Otago Medical School has a very strong research output in the field of medical education, which has informed the construction and delivery of the curriculum locally and internationally.

There is a strong teaching philosophy where the medical students learn from academics who have strong research backgrounds to instil a curious and critical approach to students' clinical practice. The students also engage actively in research during their time in the Program including the opportunity to undertake summer studentship research projects.

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.

The School employs 781 FTE (1191 headcount) academic staff and 474 FTE (624 headcount) general staff. The School also employs 85 clinical staff in sessional or honorary positions. In addition, there are a substantial number of clinicians at the hospitals, and in general practice, who contribute to the student teaching.

The School has excellent administrative and support staff but at the time of the assessment, the Otago University was in the midst of a review of their support staff, including information technology staff. The review is concerned with the numbers and distribution of support staff across the University, and as such, will examine the reporting lines of many of the School support staff. At the time of the visit, there was uncertainty as to the final outcome of this review. The review may culminate in many staff reporting outside the Otago Medical School and the impact of this on the School's operations is yet to be known.

The Otago Medical School supports an Associate Dean Māori and Associate Dean Pacific at each of the three sites. The Otago Medical School has used a range of approaches to recruit and retain indigenous staff including engaging Māori students in research, encouraging post graduate students in Māori health and gaining research funding in order to employ researchers. Initiatives

to support Māori staff include the opportunity to participate in Te Poutama Māori, the Māori academic staff caucus and professional development activities organised by Māori staff.

The volunteer patients for the Early Learning in Medicine are recruited through the Friends of the Medical School, which operates under ethical approval from the University. These volunteers are provided with information about the program and about their forthcoming visits. Other community members contribute to student learning during Early Learning in Medicine and are provided with written material about the aims of the student contact and asked to provide evaluation data each year.

The University holds Public and Products Liability Insurance and Professional Liability Insurance covering all staff and students undertaking University responsibilities in teaching, research and community service. The University also has travel insurance covering domestic and international travel for staff and students.

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 Otago Medical School follows the University's policies and practices for academic appointments and promotions to ensure a balance of teaching, research and service functions. It is unclear whether there is a University strategy to address staff diversity including gender equity, which appears to be a challenge for senior academic posts.

The School academic staff, including those in honorary positions, and support staff undertake annual appraisals using the University Human Resources online system.

2 The outcomes of the medical program

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

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

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

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

2.1 Purpose

2.1.1 The medical education provider has defined its purpose, which includes learning, teaching, research, societal and community responsibilities.

2.1.2 The medical education provider's purpose addresses Aboriginal and Torres Strait Islander peoples and/or Māori and their health.

2.1.3 The medical education provider has defined its purpose in consultation with stakeholders.

2.1.4 The medical education provider relates its teaching, service and research activities to the health care needs of the communities it serves.

There are clearly defined public mission and vision statements for the Division of Health Sciences and for the Otago Medical School. These statements emphasise the promotion of equitable health outcomes through basic and applied research and through academic and professional leadership.

There is a range of further purpose statements below the mission and vision statements specific to campuses and programs which state the values and principles relevant to each. Many of these stated values and principles are shared across campuses and programs.

The School has recently revised its purpose statement and the Program's purpose statement aiming to prepare graduates committed to high-quality, patient-centred, evidence-based medical care.

The revised program purpose statement highlights equity for all New Zealand and explicitly refers to the Treaty of Waitangi. The statement is published in both Te Reo and in English. Evidence of the practical commitment of the School to Māori peoples and their health was found throughout all facets of the School's Program. The School has similarly committed to the health of Pacific peoples who now constitute a significant proportion of the New Zealand population.

The School consulted with a full range of stakeholders before finalising the program purpose statement in 2017. These stakeholders included the New Zealand Medical Council, Health Workforce New Zealand, District Health Boards, Māori and Pacific communities and members of the Canterbury community.

The School has a Social Accountability Plan which charts activity in its aims to embed social accountability in teaching, research and clinical practice. Its aim is to improve health outcomes for

people of New Zealand and beyond. The Plan focuses on leadership, workforce responsiveness, on being a “conscience of society”, on community partnerships and on research.

In keeping with the close relationships between New Zealand and Pacific Island countries, the School, and the University more broadly, has a strategic plan to increase the Pacific curriculum across all areas of teaching.

In their submission to the AMC, the students take a narrower view of purpose than that set out by the School and identify purpose as defined learning outcomes, largely by lecture objectives and assessment requirements. The School could do more to ensure that the student view of the purpose of the Program more accurately aligns with the views of the University and the School.

2.2 Medical program outcomes

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 School’s goal for medical education is aligned with the AMC Graduate Outcome Statements, though the way the School has articulated its graduate profile outcomes has necessitated a cross-referencing exercise to demonstrate the alignment. The goals are also embedded in the School’s Program Curriculum Map, though the mapping project is currently incomplete.

The School’s medical graduate profile sets out a range of expectations describing personal, interactive and disciplinary attributes of graduates. The goal is that the graduate should be competent to practise safely and effectively as a first-year doctor and should have an adequate foundation for further training in any branch of medicine. In addition, there are overview statements for the Early Learning in Medicine (ELM) program and the Advanced Learning in Medicine (ALM) program as well as more detailed objectives that are set out for individual modules.

Expectations of the ELM program, as set out in its purpose statement, include the establishment of basic science knowledge, clinical skills, understanding of broader social and cultural concepts, the patient as partner, professionalism, life-long learning and critical thinking and reflection. ELM is delivered in Dunedin at the University of Otago campus, where students spend two pre-clinical years attending whole-of-class lectures, laboratory sessions and smaller group teaching in clinical skills, professionalism and integrated case-based learning.

The aims of the ALM program are explicitly stated to prepare graduates for clinical practice and for further study in any branch of medicine. Students are based at one of three campuses for the three years of the ALM program from where they rotate to associated community, regional and rural clinical sites.

The School is aware that individual student experiences differ, particularly in the ALM years, but has taken steps to ensure that there is consistency of program outcome, even if the path taken by students differs. It has achieved this through the work of the MCC and its sub-committees, by the diligence of its staff including Deans and Associate Deans, and not least of all by its commitment to collegiality and open communication.

There is significant variation in the duration of some similar modules at different campuses, for example paediatrics, which results mostly from each campus striving to make maximum use of locally available teaching resources. The School aims to balance flexibility with consistency across sites but acknowledges that greater alignment would improve equity and may offer economies of scale. The School is committed to students having equivalent, but not identical, experiences.

A common written and clinical assessment at the end of Year 5 ensures that graduate outcomes are achieved regardless of study site.

3 The medical curriculum

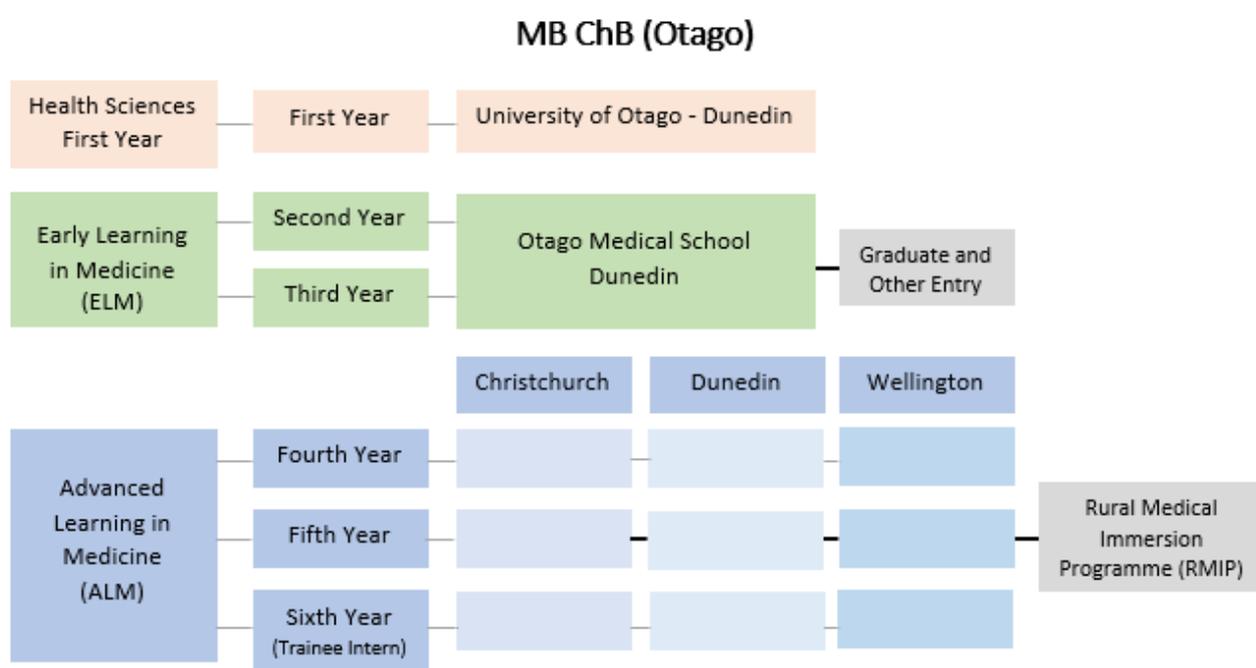
3.1 Duration of the medical program

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

The School runs a six-year MB ChB Program for undergraduate entry students. Post-graduate entry students are, in most cases, able to enter the Program in the second year, thereby completing the Program in five years.

The first year, which all undergraduate entry students study is a Health Sciences First Year program which serves as a foundation year for all health sciences degrees at the University of Otago. Health Sciences First Year is followed by a two-year ELM program and then a three-year ALM program which includes a final Transition to Internship year.

Figure 3: The Otago MB ChB



3.2 The content of the curriculum

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

3.2.1 Science and Scholarship: The medical graduate as scientist and scholar.

3.2.2 Clinical Practice: The medical graduate as practitioner.

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

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

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

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

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

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

The curriculum is organised around 'Core Elements' of three types:

- 132 Core presentations - the reasons why, and the ways in which patients present to health services
- 481 Core conditions - the disorders, diseases, illnesses or injuries that patients develop
- 43 Core professional activities - the activities that doctors undertake within their professional roles.

Each core element links to one or more of the Otago Medical School learning outcomes and these elements are organised into five domains for the purposes of oversight, review and development.

The five Otago Medical School domains are: Hauora Māori; Clinical Skills, Diagnostics and Therapeutics; Population Health and Epidemiology; Professional Practice; and Science, Scholarship and Research. Hauora Māori is integrated throughout the curriculum vertically and horizontally, the other four domains are equivalent to the AMC domains as shown in table 1.

Table 1: Otago Medical School learning objectives compared to AMC graduate outcomes

OMS domain		AMC domain
Clinical Skills Diagnostics and Therapeutics	→	Clinical Practice: the medical graduate as practitioner
Population Health and Epidemiology	→	Health and Society: the medical graduate as a health advocate
Professional Practice	→	Professionalism and Leadership: the medical graduate as a professional and leader
Science, Scholarship and Research	→	Science and Scholarship: the medical graduate as scientist and scholar
Hauora Māori		

Each Domain is overseen by a Domain Sub-Committee comprising members actively involved in ELM and in ALM. The MCC effectively brings Domain Convenors together with leaders of all elements of the curriculum including representation from the three main teaching sites. The enthusiasm, collegiality and educational expertise of the MCC especially in their efforts to share effective learning, teaching and assessment practice across the three campuses is impressive.

The Science, Scholarship and Research Domain Sub-Committee oversees learning in the medical sciences. Learning begins with a firm foundation in the comprehensive Health Sciences First Year course and continues throughout ELM and ALM.

Clinical Skills (communication, physical examination and procedural) are taught in ELM and ALM with students learning core skills in a safe simulated setting during ELM in Years 2 and 3 prior to applying and refining them in clinical settings during ALM in Years 4 - 6. The Clinical Skills, Diagnostics and Therapeutics Sub-Committee oversees this teaching and is striving to achieve consistency in teaching across sites.

The AMC Health and Society domain equates largely to the Otago Medical School domain of Population Health and Epidemiology and is overseen by the domain sub-committee of the same name. Much effort has gone into achieving a coordinated curriculum throughout the entire program since the Sub-Committee's inception in 2014, and there is significant overlap between the School's Hauora Māori domain and the AMC Health and Society domain.

The Professional Practice Domain Sub-Committee oversees the curriculum in professionalism, medical law, ethics and patient safety.

The team noted ongoing work to improve consistency of teaching across the three major ALM sites while recognising the necessary differences between them. Students recognised the variation between sites but, in the main, felt it strengthened the Program.

3.3 Curriculum design

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

There is ample evidence of purposeful curriculum design demonstrating horizontal and vertical integration and staged development of learning through the different phases of the Program.

The Program is organised via two interacting types of modules. Block modules provide a focus on a particular system or context at one time, while vertical modules address issues that are relevant across multiple block modules and allow learning across years or multiple years.

Building on the Health Sciences First Year program, the ELM program comprises 13 vertical modules running through the backbone of 11 block modules based around body systems. A three-year ALM phase follows in which students rotate through a series of clinical placements augmented by modular teaching for half or full days each week. ALM in Year 6 is a trainee intern year enabling students to gain experience through an apprenticeship model where they learn about the reality of being an intern and develop their clinical skills in a workplace setting. Each phase is well articulated, employing appropriate pedagogical approaches to enable students to acquire the graduate outcomes while developing increasing independence as a lifelong learner. The team notes the improvements resulting from the review of the Health Sciences First Year program and the strategies in place to facilitate and support the transition between ELM and ALM which students report as challenging.

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.

The Otago Medical School graduate outcome statement and descriptors are available publicly on the Otago Medical Degree website and is refined in the ELM and ALM purpose statements.

Learning outcomes are linked to the Core Professional Activities, Core Presentations and Core Conditions. These core elements are fundamental to the curriculum and are revisited through the course at varying levels of complexity. Specific learning objectives exist for all learning activities and are communicated via MedMoodle and in each course/module or handbook. Students use MedMoodle and felt that learning objectives were well understood.

A comprehensive initiative to have the entire Curriculum Map available to all students and staff online is well underway. This is an enormous undertaking which the team felt was not adequately described by the term 'map'. The moniker 'curriculum universe' might more accurately convey the breadth and fundamental importance of this resource to the effective planning and running of the Otago Medical School Program. There is an apparent need for additional IT resources to complete

this project in a timely fashion and for securing ongoing support to maintain the project recognising the dynamic nature of a complex medical curriculum.

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 team commend the Hauora Māori Curriculum Sub-Committee for their work in developing and strengthening the Indigenous curriculum and was impressed by the collegial, open and collaborative approach Otago Medical School has adopted to creating a culture conducive to learning and teaching. Students highly value the breadth and depth of the Hauora Māori program throughout the course and feel very well prepared to improve Māori health. All concerned identified this as a strength of the program and support the initiative to include Pacific people's health in the program.

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.

Opportunities for choice occur at several stages throughout the program. During the Health Sciences First Year program an optional eighth paper may be taken in Arts, Science or Commerce. In the third year of ELM there is an opportunity to take a six-week selective in a Humanities course. This is always well received by students with most students enjoying this diversity in learning.

ELM students may also opt to take a Summer School paper choosing from a wide variety of topics.

Twenty students each year are accepted for the fifth year Rural Medical Immersion Program where they spend one whole year in a rural setting. This initiative is generally oversubscribed with more than twice as many students applying as there are places available. There is potential scope to increase the number of sites where the Rural Medical Immersion Program is available.

The main opportunity to promote breadth and diversity of experiences for most students is the 12 week elective period in the trainee intern sixth year. The team noted that around 70% of Otago Medical School students travel overseas for the elective. There is also some scope for students to choose particular attachments in Year 6.

Students reported limited opportunities to gain leadership experience beyond the opportunities for them to serve as year representatives or on School committees. The team noted that this year students at one site are being offered the opportunity to participate in a DHB course in health systems change and leadership, and such collaboration is encouraged.

4 Learning and teaching

4.1 Learning and teaching methods

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

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. Teaching methods include: self-directed learning, small-group learning (laboratories, tutorials, seminars, etc.), clinical immersion activities and some large group activities to apply learning within a variety of health care settings.

The Health Sciences First Year is a common foundation year for all health science professional and medical science degrees, encompassing more than 2000 students with future medical students only making up 10% of the class. This program provides a sound foundation for those entering the Medical Program the following year. Throughout the Health Sciences First Year, teaching is mainly delivered through lectures, large tutorial groups and practical lab work. A review of the Health Sciences First Year curriculum has resulted in a 15% reduction in its content and contact time, aimed at reducing student stress, and improving the learning experience while maintaining the relevant content.

The ELM program (Years 2 and 3) is delivered on the Dunedin campus and comprises four components:

- 1 Biomedical Science modules
- 2 Early Professional Experience
- 3 Clinical skills
- 4 Integrated cases.

These four components are delivered throughout both years concurrently with the vertical modules (Blood, Cancer, Evidence-Based Practice, Ethics, Genetics, Hauora Māori, Infection and Immunity, Pathology, Palliative Medicine and End of Life Care, Pharmacology, Professional Development, Psychological Medicine and Public Health). Block modules (Cardiovascular, Endocrine, Gastrointestinal, Musculoskeletal, Psychological Medicine, Respiratory, Nervous system, Renal, Metabolism and Nutrition, Reproduction, Development and Ageing, and Regional Clinical Anatomy) are taught sequentially to provide an integrated overall program. A mix of lectures, tutorials, and laboratory teaching is used in the ELM program.

For the ALM program in final three years of the course, students are divided between three main campuses – the Dunedin School of Medicine (DSM), the University of Otago, Christchurch (UOC) and the University of Otago, Wellington (UOW). Each of these campuses has associated satellite learning centres in provincial hospitals and in primary care settings where the class is divided into groups which rotate around a number of clinical learning settings. Learning methods vary across sites and include small groups, large groups, simulation, and project work.

In addition, the Rural Medical Immersion Program, offers a 'longitudinal integrated clerkship' model for 20 students per year in Year 5. Teaching centres are in a number of rural areas. These are currently located at Southland, Clutha, Westland, Marlborough, Wairarapa and Tararua. In this model students live in the community in which they are placed and work with staff in hospitals, clinics and practices in an apprentice-like relationship. The educational experience for students in the Rural Medical Immersion Program is at least equal to that of their campus-based peers, and students receive a broad patient-based experience of medicine. Learning was seen to be self-directed in a context that built up students' confidence in patient management.

The trainee intern year in Year 6 consists of four, 12-week rotations with students attached individually to clinical teams. Students are expected to contribute to the work of the team in a junior capacity in an apprenticeship model, with small group tutorials the main teaching method.

The team commends the School on its indigenous health teaching. The Pacific and Hauora Māori Associate Deans oversee the Hauora Māori, as well as Pacific Island teaching. These Deans are not only working towards increasing the number of indigenous Pacific Island students, offering pastoral and academic support to students, developing specific learning outcomes for Hauora Māori and Pacific health, and implementing a Pacific immersion weekend at the Dunedin School of Medicine campus, but have also developed a strong curriculum. Several Leaders in Indigenous Medical Education (LIME) awards have recognised the strength of the Hauora Māori curriculum.

Module convenors, lead tutors, local Associate Deans of Medical Education and domain sub-committee leads, oversee and coordinate teaching, assessment, student outcomes and evaluations.

The School is developing technology-enhanced learning, and reported development of electronic learning resources including a Curriculum Map, which allows sharing of learning resources across years and campuses by linking key learning resources to core elements. This work has not yet been completed. The delay for this seems to be multi-factorial, involving time of module convenors, development of detailed learning outcomes as well as IT resources. The Medical School IT resourcing has been affected by retirement of a staff member, followed by a hiring freeze and an overdue review of a structural review of the university IT structure. This has resulted in delays of delivering minimal datasets, such as assessment and the Curriculum Map, as outlined by the medical curriculum committee. It is strongly recommended that the university set a timeline for the IT re-structure so that the Medical School's and central university IT staff are clear on their staffing, roles and responsibilities and adequate resources are available to continue this crucial work.

The teaching and learning methods employed at each stage of the program cater to different types of learning and support the student experience.

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 Medical Program promotes self-directed learning by increasingly encouraging students to evaluate and take responsibility for their own learning, and preparing them for lifelong learning.

The Program promotes self-directed learning through reflection, assessment and role modelling.

The ELM teaching timetable includes scheduled teaching sessions but also allows students some time for independent study as well as small group learning and reflections.

Self-directed learning is required of the students in ALM as students have increasing periods of self-directed learning time, with opportunities for independent study and observation of clinical areas of interest. There are fewer large class sessions, instead with smaller group tutorials and learning is very much focused on the clinical placement. By the sixth year, trainee interns are expected to work in a largely independent manner, while remaining under supervision.

Opportunities for reflection as a learning modality are numerous. In the ELM reflective writing is expected in the Early Professional Experience program, in course and integrative cases and professional development. In ALM reflective activities relate to critical incidents and in-built debriefing sessions attached to many modules or experiences. The Dunedin School of Medicine professional development mentors are helping students in reflective practice at regular junctures.

4.3 Clinical skill development

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

The Clinical Skills, Diagnostics and Therapeutics Sub-Committee provide oversight of the clinical skills content within the Program. There are Clinical skills leaders in ELM and on each campus. Together with the newly established simulation lead, this allows for a progressive, coordinated and consistent approach to delivery.

Teaching in clinical skills is integrated well into the Program. The team was impressed with the well-developed clinical skills component, increasing simulation with volunteer patients, actors or equipment, progressive development of the students' clinical and technical skills in a safe environment prior to use in clinical practice.

In ELM the students have two 2-hour clinical skills tutorials each week, practicing on each other or on simulated patients. Emphasis is mainly on consultation and examination skills, and the introduction of clinical reasoning. Detailed workbooks and comprehensive resources are made available. There are formative objective structured clinical examinations (OSCEs) at the end of semester one in each of Year 2 and Year 3 and summative OSCE assessments at the end of each year.

In ALM each of the three main campuses uses clinical skills funding differently according to local need, which makes the teaching and learning vary across sites.

In Dunedin the Clinical Skills Laboratory is shared with the DHB. The facility includes a dedicated area for simulated consultation skills learning as well as a simulated two-bed ward room and space for resuscitation and part-task training. Clinical skills teaching is distributed through the modules, students use a clinical skills logbook and there is a focus on communication skills.

In Christchurch the UOC Simulation Centre as well as other facilities are used and clinical skills are taught through the block modules. There is an interprofessional learning activity and the Hauora Māori module uses simulated patients for consultation skills and for integrating acquisition of skills and cultural competency.

In Wellington Clinical skills simulation is located in three areas: The Consultation Suite in the Department of Primary Care and General Practice, in the Department of Surgery and Anaesthesia and in the Department of Obstetrics and Gynaecology. In ALM Year 4 there is an advanced Clinical Skills block module and there are vertical block modules in ALM Years 4 and 5 that are integrated into the clinical placements within the blocks.

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 are exposed to volunteer patients from ELM onwards to learn clinical skills, patient centredness and to complement formal learning. In ELM the clearly defined learning outcomes are achieved through a high degree of formal teaching. As the students progress through ALM into the trainee intern year, increasing independence of the students' own learning as well as clinical skills development are expected. While early on most patient interaction is supervised, the intensity of supervision decreases as students gain confidence and become more competent.

By the trainee intern year, students are full-time in the clinical environment and are expected to work as part of the team, which includes 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.

4.5 Role modelling

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

Role modelling as a learning tool occurs when students are able to observe more senior clinicians at work. This starts in ELM through clinicians teaching into the Program. Those involved in teaching are frequently also active researchers, especially those with a university appointment, which requires a 40% research component of their academic time. This sets the students up to experience an academic environment where teaching and research are promoted and modelled.

The School further promotes role modelling by academics and clinicians through a range of tools and educational activities. These are:

- Staff development activities to assist in improving teaching and supervision.
- The Professional Development team at DSM chose to use Crucial Conversations™, a training course delivered by the Professional Development team at Dunedin, to mentors in ALM and academic staff.
- The Creating a Positive Learning Environment project, a research project that aims to establish best practice in promoting positive learning environments in clinical settings, and pilot and evaluate some interventions.
- Feedback through a range of committees, such as the student staff liaison committee.
- Discussion of thought-provoking episodes during Professional Development sessions.
- A project in ELM Year 3 on feedback literacy where staff are taught how to appropriately model maximising the learners' role in feedback.

The enthusiasm and collaborative interaction between discipline and academic leaders, clinical teaching staff and placement coordinators is excellent. 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.

Students are trained in the Calgary-Cambridge model of interviewing, which starts in ELM and is carried through in ALM. In the clinical years, students learn the principles of patient centred collaborative care, especially when learning from and working with multi-disciplinary teams, either in the hospitals or when working with primary care health professional teams. During placements, students see and work with nursing, allied health staff and students, medical staff of different specialist areas, the patient's family, friends, carers and the patient themselves, and collaborate to decide on the most suitable management for the patient. Collaboration with patients is specifically assessed in the end of ALM Year 5 whole-class OSCE, where students are required to pass all three stations in history taking, examination, and explanation and planning. The latter station has a particular focus on patient engagement and patient centredness.

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.

In 2015, the Health Sciences Divisional Executive adopted a vision to establish the University of Otago as a national leader in Interprofessional education (IPE) across the health professions and ratified three interprofessional learning specific goals related to culture, resources and education.

The establishment of a Centre for Interprofessional Education and a Divisional Interprofessional Education Group, with IPE Facilitators appointed on sessional basis on each campus provides a positive foundation for interprofessional learning. The School has created many opportunities for students to work with, and learn from a diverse range of health professionals and health profession students throughout the Program. This has resulted in interprofessional learning in ELM, as well as the smoking cessation module in Year 3. In ALM there are many interdisciplinary small group learning opportunities, such as the Tairāwhiti immersion program, home visits, case reviews, prescribing tasks, simulation of clinical skills and presentations, and community projects with clearly defined learning outcomes. There is some variation between the campuses in these activities but it is clear that all students get multiple, well-thought through, well planned and well executed learning opportunities in interprofessional learning. The School vision, strategy and execution of this, often underestimated and at times difficult to implement program is excellent.

5 The curriculum – assessment of student learning

5.1 Assessment approach

5.1.1 The medical education provider's assessment policy describes its assessment philosophy, principles, practices and rules. The assessment aligns with learning outcomes and is based on the principles of objectivity, fairness and transparency.

5.1.2 The medical education provider clearly documents its assessment and progression requirements. These documents are accessible to all staff and students.

5.1.3 The medical education provider ensures a balance of formative and summative assessments.

The School has extensive documentation covering the strategy, policy and procedures which have been adopted with regards to assessment.

The School has clearly defined the purpose of assessment as guiding student learning, ensuring students are performing satisfactorily at each stage, and evaluating the course content and teaching.

Increased summative evaluations have been introduced to the ELM years in response to student feedback. This approach has shifted the assessment from being wholly focused on end-of-year performance.

The development of the Student Achievement Summary Report is a key strategy towards successful programmatic assessment. The team notes that progress has 'inched' forward in recent times and that an effective and sustainable information technology solution is overdue. The School should prioritise and resource this development.

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 School is committed to systematic assessment and there is clear evidence of strategy, implementation and evaluation. This commitment underpins what the team saw as a logical approach to assessment and quality improvement.

The School is conscious of potential variation that might arise from differences at the three main sites in the ALM years. Consequently, the School has analysed variation in student outcomes to find possible deficiencies and areas for improvement. This analysis has reassured the School that there is consistency of assessment against learning outcomes, and has also identified areas of the teaching curriculum requiring specific action.

The School has a vision to achieve programmatic assessment.

The Curriculum Map promises to offer a great range of benefits for programmatic assessment, but it is yet to achieve its potential as a mechanism to complete the feedback cycle at a program level for individual students. The Curriculum Map is a key component that must be realised before programmatic assessment can be fully achieved.

There is evidence of growing comfort among students with the Retained Knowledge Test which is intended to allow students to monitor and reflect on the knowledge that is accumulated as they

progress through the course. The Retained Knowledge Test feedback documentation supported the intended use of this form of progress testing.

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.

The School has a suite of documents and templates which guide student feedback on assessment and performance.

Feedback loops between assessment, the curriculum, student performance and teacher performance are well established, if unevenly applied. Some clinical teachers acknowledged that feedback to students had improved, but they were not always aware of cohort performance.

While the standards for pass/fail in modules were well understood, greater clarity could perhaps be provided for clinicians regarding the higher standards required for a distinction.

The team were particularly interested in the development of the Curriculum Map as a feedback tool. This was identified by the AMC as a critical development in the 2014 accreditation report. The Curriculum Map remains an unrealised mechanism to complete the feedback cycle at a program level for individual students. As the Curriculum Map is a tool for programmatic assessment and a feedback mechanism for individual students, resourcing and expediting the implementation of the completed Curriculum Map should be a clear priority for the School.

The team notes that the Map could include the AMC Accreditation Standards as a component.

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 School's MB ChB Assessment Sub-Committee.

Regular reviews by the School are on-going and the team saw evidence of good availability of data and increasing analysis to inform the on-going development of assessment practice.

Assessment and teaching in ALM does vary across sites. This variation is often due to local capacity or the arrangement of specialties. Despite this variation, the assessment process is robust enough to detect variation as a result of teaching and allows the School to implement positive changes.

Final assessments in Year 5 are common and adequate for ensuring the equivalence of achievements against the learning outcomes of the Program.

6 The curriculum – monitoring

6.1 Monitoring

6.1.1 The medical education provider regularly monitors and reviews its medical program including curriculum content, quality of teaching and supervision, assessment and student progress decisions. It manages quickly and effectively concerns about, or risks to, the quality of any aspect of medical program.

6.1.2 The medical education provider systematically seeks teacher and student feedback, and analyses and uses the results of this feedback for monitoring and program development.

6.1.3 The medical education provider collaborates with other education providers in monitoring its medical program outcomes, teaching and learning methods, and assessment.

The School has comprehensive and systematic processes for monitoring key aspects of the Program and evaluating its quality at multiple levels ranging from teacher, convenor, and curriculum sub-committees, through to the University Quality Advancement Unit. The School's MB ChB Educational Research and Evaluation Committee (MEREC), a sub-committee of the MCC, coordinate the overall framework effectively.

The School's approach is to integrate evaluation by making this a shared responsibility of convenors, the four educational advisers, four Associate Deans of Medical Education, curriculum committees, plus components of the work of a number of members of MEREC. Through this integrated approach, the School has established a culture of continuous improvement within its teaching staff, including clinical teachers, partially through creating a strong matrix of communication processes between curriculum committees, but also by embedding educational advisers within each clinical School and the ELM years to support module convenors.

The team was impressed by the breadth of information collected about the quality of the Program which is reported through module digests. This information includes formal and informal student feedback, teacher feedback, peer reviews of teacher quality, assessment data, and suggestions for improvement. A schedule of reporting over a three-year cycle ensures modules are comprehensively evaluated. Thematic analysis of all module digests is undertaken by MEREC annually. Themes that emerge, or problems that are identified are referred to the MCC and a plan for improvement is developed. MEREC follows up in 12 months to monitor the status of the issues identified.

Within the ELM component of the Program, tutors observed that immediate feedback on teaching can be readily gained from students, with the small group size enabling honest feedback. Formal, anonymous feedback on teaching is also elicited several times per module. The ELM tutors' articulated a readiness to engage in peer review of their teaching by their respective module convenors. The School has established peer observation and feedback for teachers by encouraging this form of evidence for performance reviews and promotion.

With regard to closing the loop in response to evaluation inputs, the team noted examples where the School had responded quickly to issues raised that affected the quality of the student experience, including one that involved staff behaviours that had adverse effects on students.

In addition to module level monitoring, the School has undertaken major programmatic-level evaluations of the ELM in 2013 and more recently a thorough review of the ALM years was initiated by the University's Quality Enhancement Unit. The team noted the comprehensive way that the School has and continues to respond to improvement recommendations from these reviews.

The School collaborates with the University of Auckland for key assessment meetings and projects, for example in blueprinting the end of Year 5 OSCE. The School has participated over three

sequential years with the Medical Deans Australia and New Zealand/AMC assessment benchmarking projects.

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 evaluation of assessment data is conducted by MB ChB Assessment Sub-Committee (MASC) with reports provided to MEREK as part of the quality improvement framework. Variations in performance of student cohorts at the three primary clinical sites in the end of Year 5 assessments are actively monitored by MASC, and the team concluded that the School had good systems in place to ensure consistency in the standard of end of Year 5 assessments.

Recent graduates from the School participate in the Graduate Opinion Survey and survey results are fed into the quality improvement cycle. The School is an active participant in the MDANZ Medical Student Outcomes Database (MSOD), where it achieves high response rates from its graduates. Funding provided by Health Workforce New Zealand has enabled the MSOD survey to be applied to the School's graduates for up to eight years post-graduation.

The team noted that the School has participated in evaluative research that considers admissions data and progression data with a number of relevant publications that have eventuated.

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.

The team was particularly impressed with the highly collegial relationship between the four Associate Deans of Medical Education and educational advisers, which form a strong community of practice that shares learnings about program quality. A network of curriculum committees ensures that issues and improvement actions are communicated to staff. The module digests, and the annual 'super digest' provide formal reports to communicate the status of the student experience, student outcomes and teaching quality to clinical and ELM teachers and tutors.

The School has student representation on a number of curriculum committees and the team met with a number of engaged student representatives who actively participate on campus-based staff-student liaison committees which facilitate communication about curriculum evaluation to the student body. The team also met with a range of current students from multiple years of the Program and were impressed with their level of engagement and understanding of key issues relevant to the quality of learning, teaching and assessments within the Program. These committee structures and meeting frequency ensure a strong network of communication channels between the School leadership and students, including communication of issues relevant to program quality.

The School maintains relationships with, and active participation with key external stakeholders. For example, the Chair of the Fitness to Practice Committee serves on the Medical Council of New

Zealand, and the School's Head of Program currently sits on the Board of Health Workforce New Zealand. The Vice-Chancellor noted that the School and the local DHB have a good relationship and are supporting each other with the development of the new Dunedin hospital. Deans of each Campus School have regular meetings with their local DHBs which provide opportunities to communicate aspects of the Program quality.

7 Implementing the curriculum - students

7.1 Student intake

7.1.1 *The medical education provider has defined the size of the student intake in relation to its capacity to adequately resource the medical program at all stages.*

7.1.2 *The medical education provider has defined the nature of the student cohort, including targets for Aboriginal and Torres Strait Islander peoples and/or Māori students, rural origin students and students from under-represented groups, and international students.*

7.1.3 *The medical education provider complements targeted access schemes with appropriate infrastructure and support.*

The New Zealand government has increased the School's intake of medical students over the last 10 years, from 190 to 282 domestic students. No further increases are planned and international fee-paying students now comprise a very small proportion of the cohort.

The size of a current year's cohort is limited by a number of infrastructural factors. The ELM, undertaken in Years 2 and 3 of the Program, is offered to the whole year cohort on the University of Otago campus in Dunedin. Teaching includes whole-of-class lectures where current facilities are at capacity.

Similarly, capacity in the ALM Years 4-6 of the Program is influenced by clinical access at the three campuses and associated sites. Clinical access at each campus is largely governed by the size of the local population attending DHB facilities, though access has been enhanced by the establishment of regional learning centres, for example at Timaru, Palmerston North and Invercargill.

Table 2: Enrolment figures 2013-2018

	2013	2014	2015	2016	2017	2018
Health Science First Year	176	203	199	198	198	197
Graduate	63	46	55	54	68	66
Alternative	27	24	26	30	16	19
Yr 2 Class Total	269	274	274	289	288	290

The School follows the Division of Health Sciences 'Mirror on Society' selection policy which aims to ensure that graduates reflect New Zealand society in respect of ethnicity and urban/rural origins. Over recent years, the intake of Māori students has increased to 19% and the number of Pacific students entering the Program has reached 8%. The School does not currently have a similarly well-developed strategy for students from disadvantaged socioeconomic circumstances but is intending to undertake more work in this respect.

The Division of Health Sciences established the Māori Health Workforce Development Unit to support Māori students in the health sciences, including in the medical program. The unit comprises a small and dedicated group with appropriate experience and expertise to support Māori students with their academic pursuits but also in promoting their engagement with the Māori community.

Pacific Islander students in Dunedin are supported through the Office of the Associate Dean, Pacific and the University's Pacific Island Centre. For Pacific students at Christchurch and Wellington the local Associate Dean takes on this role.

The School's work in implementing the 'Mirror on Society' policy is admirable. The School notes, however, that it will not be until current students enter practice that the practitioner proportions better mirror that of New Zealand society.

The domestic attrition rate for the Program's students has varied between 3% and 6% over the past twenty years and averages approximately 4%. The international student attrition rate is higher, averaging 10%, but with a much smaller cohort of students. The attrition rates for Māori and Pacific students are similar to the domestic average.

7.2 Admission policy and selection

7.2.1 The medical education provider has clear selection policy and processes that can be implemented and sustained in practice, that are consistently applied and that prevent discrimination and bias, other than explicit affirmative action.

7.2.2 The medical education provider has policies on the admission of students with disabilities and students with infectious diseases, including blood-borne viruses.

7.2.3 The medical education provider has specific admission, recruitment and retention policies for Aboriginal and Torres Strait Islander peoples and/or Māori.

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

The Medical Admissions Committee, which receives recommendations from the Associate Dean for Medical Admissions, has authority for final selection of candidates. All applicants are identified only by an identification number to prevent bias or discrimination.

There are three main categories for admission to the School's Program: Health Sciences First Year, graduate, and alternative. Māori, Pacific and rural students can enter through any of these pathways. The principal pathway for entry is via Health Sciences First Year.

Health Sciences First Year students are ranked on academic grades obtained in seven Health Sciences First Year papers (67%) and on a weighted UMAT score (33%). Graduate entry applicants must exceed a UMAT threshold and ranking is by weighted graded average achieved over the course of the applicant's degree. Selection of alternative pathway applicants (mature students, allied health professionals) is through an initial process of short-listing by a selection panel followed by a semi-structured interview.

In each of these categories of entry, the School ensures that the selection criteria are aligned with the Program's purpose.

The School complies with University Policy for Infectious Diseases for Health Professional Students.

Applicants seeking entry under the Māori sub-category must supply a Māori genealogy endorsed by a tribal official. A statement of commitment to Māori health is also required.

The Māori Health Workforce Development Unit works with a range of Māori stakeholders in recruitment initiatives, which include programs for secondary school students. Associate Deans Māori in each of the three main campuses coordinate pastoral and academic support for Māori medical students. Current retention rates for Māori medical students are high and more than 95% of Māori students complete the course.

There are also Associate Deans Pacific in Wellington, Christchurch and Dunedin who oversee extensive support for Pacific students. The number of Pacific students entering the medical program has increased significantly since 2012 to 104 students in 2018.

The University of Otago Calendar, available in hard copy and as an e-book, provides information on entry requirements and selection criteria. This information is also published on the Division of Health Sciences website.

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.

At each of the three campuses an Associate Dean of Student Affairs is responsible for student support. In Dunedin a full-time Student Affairs Office Manager provides support for both ELM and ALM students. Meetings of the Associate Deans of Student Affairs group occur regularly and strategic matters are discussed in addition to discussion of individual students with concerns at each campus.

Students can seek support themselves by directly contacting the Student Affairs Offices or they can be referred by student progress committees. An Associate Dean of Student Affairs will determine likely causes of difficulty and will advise, refer or support as needed; they do not provide medical care to a student in difficulty.

Students who are seeking extended leave or special consideration will discuss their situation with an Associate Dean of Student Affairs before submitting formal applications. Some students complained that the University's leave policy can be unnecessarily and, at times, unreasonably inflexible. The School would benefit from addressing these perceptions.

The School offers a comprehensive range of academic and personal support at all sites, though there are differences between sites in the range and accessibility of some services. At Dunedin, Student Health offers a full range of health services including psychiatric assessment and treatment. A mental health support team can provide urgent intervention where needed.

At Wellington, students have access to funded general practitioner services and to counselling. At Christchurch, students can attend a medical centre free of charge or can see their own general practitioner on a subsidised basis if necessary.

A remediation panel at Dunedin considers referrals from the Student Progress Committee and plans a remediation program accordingly.

In the context of international attention to wellbeing in the health care system, particularly in the areas of bullying, intimidation and harassment, the School has developed an online reporting tool that enables students to report alleged adverse behaviours anonymously. The School could better promote this reporting tool to students and may wish to consider an evaluation of the tool at a later date. Reports are assessed by the Associate Dean of Student Affairs before being considered by a newly formed Behaviour Assessment Team, who recommend whether informal or formal processes should be initiated.

On application and admission, students are required to declare any health impairment that could reasonably be anticipated to affect a student's ability to meet the requirements of the Program. Students who make a health declaration are identified with the Dunedin Student Affairs Office and are referred to an Associate Dean of Student Affairs. Appropriate treatment and monitoring is then put in place.

The University Disability Information and Support Office provides learning support for students with disabilities.

The role of the Associate Deans of Student Affairs is clearly separated from academic progression decision making, though they do attend meetings of the Student Progress Committees and the Board of Censors. While Associate Deans of Student Affairs attend these meetings, they do not participate in decision-making. The Associate Deans of Student Affairs see their role as supporting students under discussion and to provide advocacy where appropriate. Similarly, Associate Deans of Student Affairs provide information to the Otago Medical School Board and the Fitness to Practise Committee but do not participate in decisions about academic progress, exclusion from the course, or appeals.

The offices of the Associate Dean of Student Affairs and Dean of the clinical schools are physically separated, though at Dunedin close proximity of the offices of the Dean and the Associate Dean of Student Affairs could inhibit students from seeking support at that campus. The School could further investigate options to better separate these offices.

Students are aware of the pathways open to them in the event of difficulties and feel adequately supported by the School.

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.

Assessments of professional attitudes and behaviour are undertaken during ELM and at each of the three ALM campuses and these are tabled at the Student Progress Committee for each of these. Health issues are managed by the Associate Dean of Student Affairs.

A Fitness to Practise Committee makes decisions about fitness to practice issues and ensures that remediation, support and monitoring is in place where warranted. This committee receives referrals where repeated or serious issues of professionalism arise and is not involved with day to day management of minor issues. In most cases, issues referred to the committee are resolved at an early stage with the cooperation of the student.

Fitness to practice includes consideration of health or personal issues, professional attitudes or behaviours and issues that arise beyond the reach of the Program such as civil or criminal offences. The School has a hierarchy of concerns which ensures that risk is appropriately managed and that, in the event of risk to patients, staff or students, the Dean has the authority to suspend or otherwise place restrictions on the continued course of study for a student.

The School has a Memorandum of Understanding with the Medical Council of New Zealand that acknowledges that the health and conduct of students prior to graduation can influence eligibility for registration as a medical practitioner.

All students are provided with a copy of the fitness to practice policy and are asked to declare their awareness and acceptance of the provisions of this policy.

In the event that there are unresolved fitness to practice issues, the Fitness to Practice Committee may recommend that a student should not be granted terms and/or should not progress in the Program.

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.

Students are represented on most, but not all, committees of the School. The MCC is a large and highly influential committee in the School but its meetings usually run for several hours and students confirmed that their attendance for very long meetings is of questionable value. On the other hand, local meetings of curriculum sub-committees, both for ELM at Dunedin and for ALM at each campus, are considered by the students to be more relevant and worthwhile.

The MCC has catered for the students by introducing pre-meetings with students from each campus several days prior to the MCC meeting. This gives students an opportunity to raise issues but also to be kept aware of agenda items in advance of the MCC meeting. This appears to be a sensible compromise that suits both the students and the School.

In the student submission, the Otago University Medical Students' Association expressed its satisfaction with the representation students have within faculty.

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 Accident Compensation Corporation scheme in New Zealand covers personal injury. The University has a Professional Indemnity Insurance policy that covers medical students both under the direct supervision of the University and where students are placed with third parties.

Students are required to join the Medical Protection Society (MPS) if travelling out of New Zealand in the course of their studies. MPS also provides Professional Indemnity Insurance for final year medical students (trainee interns) which includes any period undertaking overseas electives, subject to conditions that include approval of any such elective by the Dean and the requirement for electives to be under suitable supervision.

8 Implementing the curriculum – learning environment

8.1 Physical facilities

8.1.1 The medical education provider ensures students and staff have access to safe and 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 in general adequate to achieve the outcomes of the medical program.

Teaching in ELM Year 2 and 3 is undertaken in facilities at the main campus in Dunedin. Most of these are in the South Campus area although Biochemistry and Microbiology and Immunology are taught by the School of Biomedical Sciences in the Northern Campus area within a ten minutes' walk.

Lectures are given in the Colquhoun and Barnet theatres which seat 310 and 150 students respectively. These theatres have recently been upgraded with modern audio-visual teaching equipment. Students undertaking their ALM years in Dunedin are also given lectures here.

Laboratory teaching in Anatomy and Physiology is undertaken in older School of Medicine buildings. These facilities appear adequate for teaching and the Anatomy museum holds an impressive array of learning materials. The Hunter Centre provides the venue for small group teaching. The school has used a clever and efficient timetabling approach to allow the current facilities to adequately accommodate the 300 students in each of the ELM years. However, the facilities are clearly at capacity and will allow no further expansion in student numbers. There is planning for additional room for ELM staff and the University is examining the space needs of the Health Science Division.

There are a range of laboratory facilities at the Dunedin School of Medicine for research.

ALM Years 4 and 5 and the trainee intern year are undertaken at facilities centred around three clinical school campuses: the Dunedin School of Medicine – 80 students; Christchurch – 105-110 students; and Wellington – 105 – 110 students.

Dunedin School of Medicine

Students are limited to 80 per year to ensure maintenance of quality of clinical teaching. Facilities are adequate on the whole with excellent lecture theatres and good access to library and tutorial spaces. However, there are “tension points” especially around office space and adequate social space for the students. The school is aware of these issues. There are plans to rebuild the hospital at Dunedin, although this will not be for seven to ten years. In the meantime clinical facilities are adequate.

University of Otago, Wellington

The University is situated on the grounds of the DHB and there are a wide range of facilities for learning ranging from a 257-seat lecture theatre to computer labs and small teaching rooms. The facilities are generally modern, and excellent for the students, although some departments are awaiting upgrade.

The clinical skills simulation area, however requires urgent attention. There is a plan to renovate a section of the pathology service to address this matter and the team would recommend that this proceed as soon as practicable.

The clinical sites at the DHB are more than adequate and appropriate for teaching.

The teaching facilities are spread across 15 separate buildings in central Christchurch and are adequate for teaching and learning. The earthquake of 2011 caused much disruption and the school has coped with this admirably. Nevertheless, currently there are challenges in terms of space for some departments and staff. A business case for a new capital development was in progress at the time of the report and the team understands that this will be approved. It will be important that this progresses so that issues of space and fragmentation can be addressed.

The clinical teaching sites and facilities are adequate.

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 provides a comprehensive system of information technology, including lecture capture software, to support student learning and students have ready access to this, including through wifi, as well as a comprehensive set of library resources.

Governance is overseen by the eLearning and Information Communication Technology Sub-Committee (eLICT), a sub-committee of the MCC with wide representation from multiple levels of the School.

Libraries at each of the three main campuses provide comprehensive support to staff and students. Although the reporting structure is slightly different between the campuses a recent review of library services in the university did not recommend a change to this. The focus of the libraries has been on providing comprehensive online support and access to electronic resources 24 hours a day and wherever learning is situated.

The School learning management system is MedMoodle, which allows staff and students access to all curriculum resources. This is a comprehensive resource with a high level of functionality for students. Initiatives to ensure security and well documented improvement paths have also been put in place.

The School has eLearning support staff at each of its main campuses and in ELM and ALM and these provide support for staff and students as well as improving communication with university and school IT staff.

The Curriculum Map is available to staff and students, however work has not been completed and the degree of use is not clear at this point. Students who have used the system believe that it will be a very valuable resource. It is anticipated that this will provide a clear overview of the key elements of the learning, their organisation, structure and linkages.

The School has noted that IT capacity has been a limiting factor in the completion of the Curriculum Map and in developing enhancements to the MedMoodle system particularly in relation to the Summary of Achievement Form (SAF). Furthermore, the learning management system used by the University is Blackboard, not MedMoodle, and there has been an ongoing issue with the linkage of assessment results from the Otago Medical School with the University system.

The University is currently in the process of finalising a Support Services Review which would include changes to the provision of IT support, including increased centralisation of these services. Although the Dean expressed confidence that the possible changes would improve IT support, the detail of these changes was not available. It is likely there will be changes to personnel and funding mechanisms and may involve service level agreements between the school and a centralised IT service. In the meantime, the uncertainty associated with the review had itself contributed to a slowing of progress on a number of matters requiring IT support.

IT support and development is essential to the provision of medical education. Given the currently unresolved situation in regard to finalising the Curriculum Map and SAF as well as the continued uncertainty associated with the Support Services review, it is important that clarity is achieved soon in regard to the mechanism for provision of IT support and the level of resourcing that is available.

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 Māori.

8.3.4 The medical education provider actively engages with other health professional education providers whose activities may impact on the delivery of the curriculum to ensure its medical program has adequate clinical facilities and teaching capacity.

Patient contact commences in ALM Year 4 and continues through to the trainee intern year with increasing responsibility and through a range of block and vertical modules.

There are variations between the three clinical schools in terms of the timing and length of clinical rotations. For example the length and location of paediatric and general practice placements varies and these variations reflect the local opportunities for clinical exposure. The School has worked to ensure consistency in terms of outcome for students through the work of the MCC and the curriculum sub-committees and the work of the domains.

There are sufficient clinical teaching facilities across the three campuses to provide a range of clinical experiences, both rural and metropolitan, to students. The supervised learning experiences include: acute inpatient, rehabilitation, outpatient, community and primary care, rural or provincial, marae and hospice. Timetabling ensures sufficient exposure.

Primary care teaching is enthusiastically and competently provided and is well received by students who indicated a desire for this to be expanded. It is acknowledged that the provision of separate rooms for consultation in general practice is a rate limiting factor for increasing exposure to primary care. It is recommended that the School explore ways of addressing this to further expand teaching in this important area.

The School's development and implementation of Hauora Māori teaching is excellent. Not only is there an extensive network of academics to support the teaching, but the reports from primary care practitioners supervising trainee interns indicates that there has been a real impact on the competence of the graduates in this area.

The School has established an Interprofessional Education Unit with a lead and support staff at each main campus. The virtual unit is developing a range of specific interprofessional learning opportunities and developing close relationships with other health education providers to ensure this continued.

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 a system in place for ensuring appropriate clinical supervision. This is organised primarily by module convenors who ensure that supervisors are suitable, and a safe environment is provided for students. Module supervisors are able to monitor the progress of their students and identify issues with unsuitable supervision. The module convenors oversee the orientation of supervisors and the monitoring of performance.

It is acknowledged that a variety of clinicians will be involved in teaching students, however, the module convenors have close relationships with their students and the units in which they are placed and are able to monitor the situation effectively.

There is an impressive system of support for module convenors through the Associate Deans for Medical Education and the Education Advisors who appear to form an educational community of practice. In addition, there is a range of resources available for teachers and supervisors and it is recommended that the recently released online Clinical Education Program should be developed and expanded as an effective way to support professional development for clinical teachers.

There is an effective working relationship between the DHBs and the School to ensure that staff who are employed through a variety of employment models, have sufficient time to undertake teaching. The effective working relationships extend to practices who provide primary care placements.

Appendix One Membership of the 2018 AMC Assessment Team

Associate Professor Kirsty Foster (Chair) BSc, MBChB (Edinburgh), MEd, FRCGP, DRCOG, PhD
Associate Dean (International) and Head, Office for Global Health, Sydney Medical School; Associate
Professor in Medical Education & Sub Dean (Education) Northern Clinical School, University of
Sydney

Dr Peter Dohrmann (Deputy Chair) MBBS (Hons), FRACS, GradDipOccEnvH, FRACMA
Director, Neuroscience Clinical Institute, Epworth HealthCare

Professor Chris Cunningham, PhD, BSc (Hons), BSc
Professor and Director, Research Centre of Māori Health and Development, Massey University

Professor Zsuzsoka Kecskes MD, FRACP, AFRACMA, PhD, SFHEA
Deputy Dean, ANU Medical School, Australian National University

Associate Professor Joe McGirr MBBS, BSc, MHSM, FRACMA, FACEM
Associate Dean (Rural), University of Notre Dame Australia, School of Medicine, Sydney

Professor Patrick McNeil BMedSc, MBBS, PhD, Grad Dip H.Ed.
Executive Dean, Faculty of Medicine and Health Sciences, Macquarie University

Professor Imogen Mitchell BSc, MBBS, SFHEA, PhD, FRCP, FRACP, FCICM
Dean, ANU Medical School, Australian National University

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

Ms Katie Khan
Program Administrator, Australian Medical Council

Appendix Two Groups met by assessment team

Meeting	Attendees
<i>Monday, 6 August 2018</i>	
Otago Medical School	
Directors/Associate Dean Medical Education (ADME)/Manager	MB ChB Programme Director Convener, Early Learning in Medicine Curriculum Sub-Committee (ELM CSC) Convener, Advanced Learning in Medicine Curriculum Sub-Committee (ALM CSC) Convener, Dunedin School of Medicine Curriculum Sub-Committee (DSM CSC) Convener, University of Otago Wellington Curriculum Sub-Committee (UOW CSC) Convener, University of Otago Christchurch Curriculum Sub-Committee (UOC CSC) Director, Education Development and Staff Support Unit (EDSSU) Manager, Otago Medical School (OMS)
MB ChB Curriculum Committee (MCC)	MB ChB Programme Director (Convener) Convener, ELM CSC Convener, ALM CSC Convener, DSM CSC Convener, UOW CSC Convener, UOC CSC Director, EDSSU Manager, OMS Convener, MB ChB Assessment Sub-Committee (MASC) Convener, MB ChB Education Research and Evaluation Sub-Committee (MEREC) Convener, eLearning and ICT Sub-Committee (eLICT) Convener, MB ChB Clinical Skills, Diagnostics and Therapeutics Sub-Committee Convener, MB ChB Hāuora Māori Sub-Committee Convener, MB ChB Professional Practice Sub-Committee Associate Dean Medical Education, School of Biomedical Sciences (BMS) Associate Dean Pacific Director, Health Sciences First Year Programme Associate Dean for Medical Admissions Head of Department (HOD) Representative Dunedin Medical School HOD Representative School of Biomedical Science Secretary for MCC HOD Representative University of Otago Wellington Director, Division of Health Sciences Inter Professional Education Centre

Meeting	Attendees
	HOD Representative University of Otago Christchurch Curriculum Map Academic Lead Convener, MB ChB Population Health and Epidemiology Sub-Committee
Early Learning in Medicine Curriculum Sub-Committee (ELM CSC)	Associate Dean and Director, ELM (Convener) Associate Dean Medical Education, School of Biomedical Sciences Associate Dean Medical Education, DSM Assessment Programme Coordinator Clinical Skills Programme Module Convener Integrated Cases Programme Module Convener Early Professional Practice Programme Module Convener Education Adviser, ELM Hauora Māori Sub-Committee member Lead Academic Interprofessional Education Librarian Module Conveners Health Sciences First Year Representative
Behaviour Assessment Team and Creating a Positive Learning Environment (CAPLE) project	Chair, Behaviour Assessment Team Head, CAPLE Project Associate Dean, Student Affairs
Advanced Learning in Medicine Curriculum Sub-Committee (ALM CSC)	Associate Dean, ALM, Associate Dean Medical Education, UOW (Convener) Associate Dean Medical Education, UOC Associate Dean Medical Education, DSM Director, Rural Medical Immersion Programme (RMIP) Director, Education Development and Staff Support Regional Associate Dean Associate Dean Student Affairs Associate Dean Māori Education Adviser, UOW Education Adviser, UOC Education Adviser, University of Otago, DSM
Finance	Dean, OMS Manager, OMS Manager, Health Sciences Finance Director, MB ChB Programme
Student Executives	Otago University Medical Students' Association (OUMSA) Executive OUMSA ELM Education OUMSA 2 nd Year OUMSA 3 rd Year OUMSA 4 th Year OUMSA 5 th Year

Meeting	Attendees
	OUMSA 6 th Year OUMSA ALM Education
Hauora Māori	Associate Dean Māori, UOC (Convener) Associate Dean Māori, DSM Associate Dean Māori, UOW ELM Convener Education Development and Staff Support Unit Representative UO LIME Representative, Senior Lecturer MB ChB Educational Research and Evaluation Sub-Committee (MERIC) member, Senior Research Fellow UOW MB ChB Assessment Sub-Committee (MASC) member (Senior Lecturer, Māori Indigenous Health Institute (MHIH)) Medical Education Advisor UOW
OMS Executive	Dean, OMS Deputy Dean, OMS and Dean, UOW Dean, BMS Dean, DSM Dean, UOC MB ChB Programme Director Associate Dean and Director, ELM Manager, OMS
<i>Tuesday, 7 August 2018</i>	
Otago Medical School	
Health Science First Year Director	Director, Health Science First Year Programme
Vice Chancellor	Vice Chancellor
Admissions	Associate Dean for Medical Admission Associate Dean, Māori Associate Dean, Pacific
Domain Chairs	Clinical Skills, Diagnostics and Therapeutics Convener Population Health and Epidemiology Convener Professional Practice Convener Science, Scholarship and Research Co-conveners Hāuora Māori Convener
MB ChB Assessment Sub-Committee (MASC)	MB ChB Assessment Programme Convener (Convener) MB ChB Programme Director Director, Education Development and Staff Support Unit Convener, Early Learning in Medicine Assessment Sub-Committee ELM Objective structured clinical examination (OSCE) Convener ELM Assessment Convener

Meeting	Attendees
	<p>ELM Objective structured practical examination (OPSE) Convener ADME, BMS ALM Written Examination Convener ALM MCQ Convener Hauora Māori Sub-Committee Associate Dean Student Affairs ADME DSM DSM EA ADME UOC UOC EA ADME UOW Director, Rural Medical Immersion Program (RMIP) Department General Practice, DSM eLearning and ICT Sub-Committee (eLICT) representative</p>
Student Support	<p>Associate Dean for Student Affairs DSM/ELM Associate Dean for Student Affairs UOW Manager/Administrator UOC Manager/Administrator UOW</p>
Fitness to Practice Committee (F2Pract)	<p>Chair FTPC</p>
MB ChB Educational Research and Evaluation Sub-Committee (MERECE)	<p>ALM module convener (Convener) Director, Education Development and Staff Support Unit Associate Dean Medical Education, DSM Associate Dean Medical Education, Wellington Associate Dean and Director, ELM Associate Dean Medical Education, School of Biomedical Sciences Medical Education Research Academic Lead Education Adviser, ELM Education Adviser, UOW Education Adviser, UOC Education Adviser, DSM Hauora Māori Sub-Committee representative</p>
Early Learning in Medicine (ELM) Tutors	<p>ELM tutors</p>
eLearning & ICT Sub-Committee (eLICT)	<p>OMS Academic eLearning Specialist (Convener) Information Technology Manager, OMS Health Sciences Librarian eLearning Facilitator, ELM eLearning Facilitator, DMS eLearning Facilitator, UOW eLearning Facilitator, UOC Education Adviser, UOW</p>

Meeting	Attendees
Health Workforce New Zealand	Executive Chair
Education Development & Staff Support Unit (EDSSU)	Director Education Adviser, UOW Education Adviser, UOC Education Adviser, DSM Education Adviser, ELM
<i>Wednesday, 8 August 2018</i>	
Dunedin School of Medicine	
Dunedin School of Medicine (DSM) Dean & Associate Dean Medical Education	Dean, DSM ADME, DSM
DSM Curriculum Sub-Committee including Module Convenors	Chair, DSM CSC
Clinical Teachers and Supervisors	Chair, DSM CSC
Pro Vice Chancellor Health Sciences	Pro Vice Chancellor Health Sciences
District Health Board CEO	District Health Board CEO
Local and Rural GPs	Convener and Senior Lecturer, GP and Rural Health, DSM
<i>Wednesday, 8 August 2018</i>	
University of Otago, Christchurch	
University of Otago Christchurch (UOC) Dean & Associate Dean Medical Education	Dean, UOC ADME, UOC
UOC Curriculum Sub-Committee including Module Convenors	Chair Module Convenors
Clinical Teachers and Supervisors	Clinical Teachers Supervisors
District Health Board CEO	Chief Medical Officer
Local GPs	HOD, General Practice
<i>Wednesday, 8 August 2018</i>	
University of Otago, Wellington	
UOW Dean & Associate Dean Medical Education	Dean, UOW ADME, UOW
UOW Curriculum Sub-Committee including Module Convenors	Chair Module Convenors
Clinical Teachers and Supervisors	Medicine Neurology in medicine Paediatrics and Child Health Pathology Psychological Medicine Surgery

Meeting	Attendees
	Obstetrics and Gynaecology
Interprofessional Education (IPE) Centre	IPE Centre Director IPE Campus Lead UOW Tairāwhiti Interprofessional Education Programme Manager ALM/Physio Students Pharmacy Intern/IPE student IPE Centre Manager IPE Campus Administrator Dunedin IPE Campus Administrator UOW
District Health Board	Chief Medical Officer
Local GPs	Acting HOD, General Practice and Primary Health Care GPs
<i>Thursday, 9 August 2018</i>	
Clutha Health First, Health Centre Balclutha and Kew Hospital Invercargill	
Balclutha (RMIP Hub)	General Practitioners Administrator CEO Clinical Director Nurse Practitioner Primary Care Nurse Nurse Leader Students
Trainee Interns	Trainee Intern
Medical Students	Students
Senior Clinical Lecturers and Consultants	Geriatrician Orthopaedic Surgeon Paediatrician
Senior Southern District Health Board (SDHB) Personnel	Director Nursing SDHB Service Manager Surgical Director
Southland Campus Tour	Regional Associate Dean PA to Regional Associate Dean
Education (Learning) Centre & Interprofessional Education	Practice Development Educator/Resuscitation Service Leader
Practice Development Educators, Medical Director Hospice	Medical Director Hospice
GP Rural Teaching Practice	General Practitioner
<i>Thursday, 9 August 2018</i>	
Timaru Public Hospital	
Students	Trainee Interns 4 th Year Students

Meeting	Attendees
Staff involved in teaching	Psychological Medicine Teacher Medicine Teacher Surgery Teacher Paediatrics Teacher Obstetrics and Gynaecology Teacher
South Canterbury Executives	Associate Dean, South Canterbury Associate Dean, Student Experience Administrator for South Canterbury
<i>Thursday, 9 August 2018</i>	
Palmerston North Hospital	
Associate Dean Undergraduate Students, Medical Advisor & Administrator Medical Students	Associate Dean, Undergraduate Students Medical Advisor Administrator, Medical Students
Chief Medical Officer	Chief Medical Officer
Trainee Interns	Trainee Interns Former Trainee Interns
Hospital Tour	Associate Dean, Undergraduate Studies Administrator, Medical Students
<i>Friday, 10 August 2018</i>	
University of Otago, Christchurch	
AMC Team prepares preliminary statement findings	AMC Team
Delivery of the Preliminary Statement of Findings	Dean Director, MB ChB Programme

