

# **The Medical Curriculum**

## **MBChB Graduate Learning Outcomes**

### **Domain: Applied Science for Medicine**

Graduates will, with a broad scientific body of knowledge encompassing biological, behavioural and social sciences:

- Discuss the normal structure, function and development of the human body and mind at all stages of life, the factors that may disturb these, and the interactions between body and mind;
- Apply the scientific body of knowledge appropriately to common and important clinical problems and to the management of patients;
- Apply scientific principles, research methodologies and evidence to improve practice and the health of individuals and communities.

### **Domain: Clinical and Communication Skills**

Graduates will, with a culturally competent, empathetic patient-centred approach and with skills appropriate for the stage and setting of practice:

- Competently
  - elicit clear, comprehensive and relevant case histories;
  - perform routine clinical examinations;
  - select and interpret appropriate diagnostic investigations;
  - perform a range of procedures for diagnostic and therapeutic purposes;
  - synthesise and integrate information to formulate differential diagnoses;
  - develop and implement a clinical management plan;
  - inform and educate patients and their families.
- Communicate sensitively and effectively with patients, their families and colleagues using a process of shared decision-making where appropriate;
- Access, evaluate and use new knowledge and information sources to support clinical decision-making.

### **Domain: Personal and Professional Skills**

Graduates will:

- Practise ethically and with regard to medicolegal obligations;
- Practise self-reflection in personal and professional settings;
- Explain the influence of own culture and that of the health system on patient and population health outcomes;
- Apply a range of approaches to maintain psychological, physical and overall wellbeing to themselves and others;
- Demonstrate the capacity for independent critical thought, rational inquiry and self-directed learning;

- Use appropriate teaching and learning strategies to educate themselves, peers, other health care professionals and the community;
- Work as a constructive and collaborative health care team member and as a leader for elements of health care, with respect for complementary skills and competencies;
- Make appropriate decisions in situations of incomplete knowledge, complexity/ambiguity, or resource constraint.

### **Domain: Hauora Māori**

Graduates will, with a critical understanding of the social, cultural, political, economic and environmental determinants impacting on Māori health:

- Engage in a culturally safe manner with Māori individuals, whānau and communities;
- Identify approaches to reducing and eliminating health inequities including actively challenging racism;
- Engage in a process of reflection on own practice, as it relates to obligations under the Treaty of Waitangi.

### **Domain: Population Health**

To guide practice and to improve the health of New Zealanders, graduates will:

- Identify feasible strategies to improve health that incorporate the broader determinants of health at community and population level;
- Identify major threats to health and critique trends in prevention efforts and health care delivery in New Zealand and internationally;
- Apply population health principles including policies, health promotion, funding, screening and addressing the underlying determinants of population health.

## **Purposes of Outcomes, Domains and Phases**

### **Graduate Learning Outcomes**

The graduate learning outcomes indicate the competencies you should have to enter the workforce and practice effectively as a first year House Officer (PGY1), and thence postgraduate training. You should use the Graduate Learning Outcomes to guide your learning during the year. They guide teaching and assessment in the medical programme and convey to staff and employers the competencies the Faculty of Medical and Health Sciences (FMHS) expects its graduates to have at the end of the six-year programme. The set of outcomes is important for two purposes.

The Learning Outcomes for the final year of the medical programme are the Graduate Learning Outcomes for the programme as a whole. Departments have provided specific

emphases within these outcomes, which should be the focus of your learning during your various attachments and with which your clinical assessments are aligned. These are outlined in the section related to each discipline. It is important to note that there is a considerable amount of overlap, with much learning being transferable and relevant to all areas of medical practice.

The clinical scenarios form the central building blocks for, and effectively define, the core curriculum. The scenarios are mostly symptom-based, provide a clinically focused approach to learning and highlight the expected knowledge base across the five domains of the curriculum.

For each compulsory attachment you should:

1. Review the list of clinical scenarios and identify those with which you are not yet familiar.
2. Identify conditions you are likely to experience during the attachment.
3. Ensure you are familiar with the common conditions and those less common conditions which are “important not to miss”.
4. Ensure you achieve the key learning for the attachment, including appropriate revision of material from previous years.

Prescribing is an area frequently associated with error which carries significant potential for risk to patients. In Phase 3, you should pay particular attention to developing the skills necessary for safe prescribing, including a thorough knowledge of the medicines appearing on the Core Medicines list in the clinical scenarios, knowledge of the legal requirements of prescribing and strategies to ensure safe practice.

## The Phases

The phases are intended to help you see the context of science within clinical medicine in the initial years, and to continue to use the basic sciences in your more clinically-focused years. Throughout the phases you will continue to revisit various topics at an increasing level of difficulty and in more complex contexts.

There are four distinct phases in the medical curriculum.

<b>Phase</b>	<b>Year</b>	<b>Curriculum</b>
Phase 3	Year 6	Preparation for Workforce
Phase 2	Years 4 and 5	Clinical Practice in Context
Phase 1	Years 2 and 3	Fundamentals of Clinical Practice
Phase A	Year 1	Health Science Foundation

Each phase of the curriculum builds on the one before it, and your competencies will build continuously much as outlined in the following schema.

Increased scope		Increased utility	Increased proficiency
Increased breadth	Increased difficulty	Application (to medical practice)	Increased accomplishment
Extension to more or new topics Extension to different practice contexts Accommodation of existing knowledge or skills to new knowledge or skills	More in-depth or advanced consideration Application to a more complex situation move from a unidimensional straightforward situation to one involving multiple problems or systems move to multifactorial problems involving different factors (eg social, economical, medical) complications (eg associated with treatment) Less obvious or more subtle situations fewer cues less obvious cues atypical cues	Move from general context to specific medical context Move from theory to practice of medicine Move to integration into the role of a doctor an integrated repertoire involving a holistic approach to practice and bringing together the different abilities expected of a doctor dealing with and reconciling competing demands, such as time spent on curative and preventative medicine	More efficient performance better organised more confident takes less time more accessible less unnecessary or redundant action higher standards fewer errors Less need for supervision Takes initiative and anticipates events Better able to defend and justify actions Adopts routinely as part of practice

University of Dundee, Centre for Medical Education, September 1999

## The Domains

The graduate learning outcomes are organised into five broad domains, all of which are essential components of the programme. They are:

- Applied Science for Medicine
- Clinical and Communication Skills
- Personal and Professional Skills
- Hauora Māori
- Population Health

The five domains help to define the breadth of practice required for effective clinical practice in New Zealand. Domains are part of each clinical/community experience, although emphases will vary in each. The domains also highlight those personal attributes and qualities an individual doctor needs to acquire to be effective. Hauora

Māori and Population Health are included to highlight a student's ability to deal with societal and population issues, especially those that are unique to New Zealand.

### **Purpose of Applied Science for Medicine Domain**

This is a standalone domain for three purposes:

- To continue to emphasise the strong science basis of our medical programme.
- To ensure our students act as clinician-scientists who both use and generate evidence to inform clinical and broader health practices.
- To strengthen the research and evidence base, thereby reflecting the expertise required of graduates of The University of Auckland.

You will continue to use the basic sciences in the more clinically focused years. You are also expected to continue to revisit various topics at an increasing level of difficulty and in more complex contexts.

### **Purpose of Clinical and Communication Skills Domain**

This domain is fundamental to the role of the doctor and has relevance in:

- Phase 1 as students develop and hone their communication and clinical skills throughout various modules.
- Phases 2 and 3 in all clinical attachments.

### **Purpose of Personal and Professional Skills Domain**

This domain has been developed as a standalone domain to give greater emphasis to professionalism and the health and wellbeing aspects of the role of a doctor across all years of the programme. There are specific assessments associated with this domain and hence it must be passed to progress to the following year. While the Board of Studies (Medical Programme) has approved six themes for this domain, in 2021 the following five themes will be included in the curriculum.

1. Professionalism and Reflective Practice
2. Ethics and the Law
3. Health and Wellbeing
4. Cultural Competence
5. Learning and Teaching

### **Purpose of Hauora Māori Domain**

Ethnic inequalities in health care have been extensively documented in the international literature, including inequalities in both access to care and the quality of care received. In New Zealand it is clear that Māori experience poorer health care outcomes than non-

Māori. There are a number of factors responsible for these disparities, including the performance of the health care system.

The FMHS has adopted a graduate profile in Hauora Māori (Te Ara) for medical and health science students of all its undergraduate programmes to achieve as a baseline achievement.

Te Ara learning outcomes are:

- Engage appropriately in interactions with Māori individuals, whānau and communities.
- Explain the historic, demographic, socioeconomic, and policy influences on health status.
- Explain how ethnic inequalities in health are created and maintained and how they may be reduced and eliminated.
- Identify approaches to reducing and eliminating inequalities including actively challenging racism.
- Explain the influence of one's own culture and that of the health system on patient and population health outcomes.
- Engage in a continuous process of reflection on one's practice and actively participate in self-audit in respect of the Treaty of Waitangi.
- Identify and address professional development needs as a basis for life-long learning about Māori health.

In the medical programme we encourage the use of a 'self-audit' approach, which involves critical reflection and a commitment to ongoing monitoring of personal and institutional contributions to Māori health outcomes.

### **Purpose of Population Health Domain**

This domain is important to emphasise students' exposure to aspects relevant to population, public and community-based health issues of national and international importance. Understanding population health is essential for the practice of medicine, addressing the underlying determinants of health and providing quality healthcare.