



Bond University Medical Program

Cardiology

Clinical Placement

Student/Clinician Guide

Introduction

The capstone, elective, flexible and selective placements provide students' a choice of interest area, or specialty placement, to gain additional clinical experience on top of specified clinical curriculum placements.

The learning priorities for all clinical specialties are to gain insight and understanding of the most common presentations and conditions encountered. It is anticipated that all students will have opportunities to enhance their skills in history taking and clinical examination. Students should also be encouraged to translate the information from patient interactions into commonly used formats by interns, such as *ISBAR (Introduction, Situation, Background, Assessment, Recommendation)*. Additional specific procedural skills development is welcomed.

Timetable and Contacts

Students are expected to be present on a daily basis during their placement. If students are unable to attend for any reason, they are required to advise the clinician, hospital co-ordinator (where available) and the Placements Team at Bond University: Med-placements@bond.edu.au

Cardiology Placement in General

The basis of the Cardiology Placement is for students to see patients whose clinical problems relate to the broad array of cardiac and cardiovascular problems and to experience first-hand the daily routine and practice of medicine by a cardiologist and the hospital team. Students are expected to learn about the assessment and management of cardiology patients in the clinical setting.

The knowledge explosion and rapid advances in medicine generally, and cardiology in particular, means that it is impossible to cover everything in one single placement. However, knowledge of the common cardiac presentations and conditions will provide a firm foundation for students continuing professional development.

Goals

The goals for the Cardiology Placement are:

- To provide students with learning experiences associated with the clinical care of cardiac patients
- For students to hone their history taking and examination skills and use clinical reasoning to form diagnoses and differential diagnoses
- For students to learn about and to become comfortable discussing clinical management of cardiac patients
- For students to develop clinical knowledge and understanding of the common conditions in Cardiology
- To provide students with a real-life clinical working environment and opportunity to work with a clinical team.

Learning Outcomes

Students to be able to demonstrate:

- the ability to take a complex cardiology focused medical history
- a cardiovascular focused physical examination
- correct appraisal and assessment of medical symptoms and signs
- Recognition of serious cardiac disease requiring urgent management/intervention
- Application of knowledge about the pharmacological and clinical management of cardiology patients.
- Rational use of investigations and justify their appropriateness (support or refute a diagnosis, cost-effectiveness, influence on management as well as the associated risks)
- Understanding and interpretation of common cardiac diagnostic tests, imaging, and investigations (eg. ECG)
- Knowledge and understanding of the relevant anatomical, biochemical, physiological and pathological processes underlying common cardiac conditions
- Clinical reasoning to formulate differential diagnoses and management plans
- Knowledge and understanding of common drugs used in cardiology.

Clinical Supervision and Assessment

Students have a suite of workplace-based assessments (WBA) to successfully complete during this Clinical Placement. All WBA are completed in Osler ePortfolio, a cloud-based mobile assessment technology, giving students, supervisors and faculty immediate access to WBA feedback and evaluation. WBA are not only the students' richest source of personal feedback on performance but are also evidence of their clinical skills development and safety to practice.

At the end of each clinical placement, the Board of Examiners (BOE) will review all required WBA to decide whether the student has passed the Clinical Placement. If all WBA are not submitted by the due date, the BOE may not have sufficient evidence to make an Ungraded Pass decision and the student progression in the Medical Program may be delayed.

WBA are to be submitted in Osler by 8 am Monday following the end of each Clinical Placement

1. For assistance with Osler contact: osler@bond.edu.au
2. For assistance with WBA contact: Med-assessment@bond.edu.au
3. For full details of all WBA requirements, read the WBA booklet located on iLearn.

The In-Training Assessment (ITA)

The ITA is designed for the clinical supervisor to evaluate and provide feedback on the student overall clinical performance on that placement to date. It is a summary evaluation of whether students have met the requirements of that placement *at the expected level* for their clinical learning exposure:

- Clinical knowledge
- Procedural skills
- Clinical History taking and physical examination skills
- Communication
 - o Communication with children and families

- o Appropriate clinical handover using ISBAR
- Personal and professional behaviour
- Attendance on placement

The End-placement ITA (due Wk7):

This ITA is completed by the assigned supervising Consultant or their delegate registrar, after seeking opinion from the clinical team about the student performance throughout the placement as to whether the student is performing 'at expected level'. Students can fail for lack of professional behaviour or for not meeting attendance requirements on Clinical Placement. If students are not present, then they are not spending sufficient time with patients to demonstrate competency.

Mini-CEX (due Wk6):

A Mini-Clinical Examinations (Mini-CEX) is designed to encourage students to participate in active learning of core clinical skills on patients by conducting a history or physical examination and then engaging in discussions on their findings with clinician supervisors. A range of clinical team members can complete Mini-CEX including Consultants, registrars, Senior House Officers and Principle House Officers. Junior House Officers/Interns cannot complete Mini-CEX.

Students are required to complete **4 Mini-CEX total as Patient Management plans**

Patient Management Plans are integrated tasks that require a higher level of reasoning and synthesis. Students take the patient history, conduct the physical examination (MSE for mental Health) review patient investigations then integrate this information and share their recommended patient management verbally with a team member. This can be done in a group setting such as ward rounds or one-on-one.

The Mini-CEX WBA format is shared with Griffith University, designed as a global entrustability rating to reduce the cognitive workload for supervisors, whilst enhancing personalised feedback on performance to students. Feedback provided in the WBA should align to that given to students at the time of the interaction. The Global score given relates to the students' ability to conduct this clinical skill relevant to their current level of learning:

- 1. Unsatisfactory:** Unable to complete the task and requires direct instruction and intervention from supervisor
- 2. Borderline:** Performs the task but supervisor intervention is required (Repeat task)
- 3. Clear Pass:** Performs the task competently with minimal supervisor input or intervention
- 4. Excellent:** Performs the task competently and independently with supervision nearby if required

If students are given a Level 1 (Unsatisfactory) or Level 2 (Borderline) score, the clinical task must be repeated until a Level 3 (Clear pass) or Level 4 (Excellent) is reached by the end of the clinical placement.

Procedural Skills and Clinical Tasks

It is an expectation of the Australian Medical Council that graduating medical students can safely perform a range of core procedural skills on graduation. Bond Medical Students are required to complete the following Procedural Skills and Clinical Tasks **on patients** by the completion of their Phase 2 to graduate. A wide range of health professionals can evaluate their skills competency, including doctors, nurses, allied health, and hospital technicians.

Students choose the location and timing of when they are ready to conduct this skill for assessment.

They are encouraged to conduct the skill for learning multiple times prior to being assessed for evidence of their competency

#	Required Procedural Skills	Best opportunity	Additional Advice
1	In-dwelling Catheter insertion	WH, ED, Surgery	<ul style="list-style-type: none"> • These procedures must be observed conducted on patients or being performed in the clinical setting at a L3 Entrustment rating • Skills 1 – 9 require you to: (p.20) <ol style="list-style-type: none"> 1. Watch the Osler learning module 2. Pass a Quiz to generate the WBA 3. This WBA must be assigned to the observing clinical team member
2	Intravenous Cannulation (2)	MED, ED, CCO, ACSP	
3	Suturing – basic wound closure	Surgery, ED	
4	Intramuscular injection	GP, MED, ED	
5	Subcutaneous injection	GP, MED, ED	
6	Electrocardiograph acquisition	MED, ED, GP, MH, Surgery	
7	Venesection	MH, Surgery, ED	
8	Blood Culture Sampling	Ward Call, ED, ICU	
9	Sterile handwash, gown, and glove	Surgery	
10	*Airway Management: Bag/Mask technique – no Osler learning module	ED, Surgery, anaesthetics	
11	Glasgow Coma Scale Interpretation	ED, MED, ICU, Ward Call	
Required Theory Modules			
12	Personal Protective Equipment		<i>Theory Module in Osler ePortfolio</i>
13	Assessment of the ICU patient	CC /CCO	<i>Theory Module in Osler ePortfolio</i>
14	Pulse Oximetry		<i>Theory Module in Osler ePortfolio</i>
Required Clinical Tasks			
15	Deteriorating patient	CC/CCO,ED,ACSP Ward Call	Refer to additional information
16	Discharge Summary (conducted in ieMR)	MED, Surgery, WH, CH, MH	Refer to additional information

Evaluation of student procedural skills performance is based on an Entrustability Rating Scale:

- Trust Level 1. Requires physician assistance / direct instruction (Repeat skill)
- Trust Level 2. Requires significant supervisor input (*Repeat skill) (*L2 considered a pass for Airway Mx only)
- Trust Level 3. Performs independently but requires direct supervision (Pass – medical student level)
- Trust Level 4. Safe to perform independently (supervision immediately available) (Pass – intern level)

In addition, to WBA, MD students will conduct the following other assessments:

Clinical Skills: Students will sit an MD OSCE at end of year following CP6 as a check on clinical skills competency and safety to progress to the final year of the program

Clinical Knowledge: to promote continuous development in clinical knowledge, students will conduct five (5) written knowledge Progress Tests, one at the end of each subject.

Competency: Advanced Life Support, Ultrasound, Women’s Intimate Examinations, MD Project and Conference presentation

Prescribing: Students conduct the National ‘Prescribing Skills Assessment’ (PSA)

MD Program Outcomes AKA YEAR 4 and 5
MEDI71-401, 402 and 403 Core Clinical Practice A, B and C

MEDI72-501, 502 and 503 Extended Clinical Practice and Research, A, B and C

The [Australian Medical Council's Graduate Outcome Statements](#) are organised into four domains. Within this Subject, the framework mapped to the learning outcomes (LOs) are

Clinical Practice: The medical graduate as practitioner (CP) (LOs 1-11),
Professionalism and Leadership: The medical graduate as a professional and leader (PL) (LOs 12-18),
Health and Society: The medical graduate as a health and wellbeing advocate (HS) (LOs 19-25)
Science and Scholarship: The medical graduate as scientist and scholar (SS) (LOs 33-40).

2025 PLO	2025 Domain#	2025 Program Learning Outcomes On successful completion of this Program, the learner will be able to:	AMC Outcomes 2023 *
01	CP 1	Adapt communication skills to engage safely, effectively and ethically with patients, families, carers, and other healthcare professionals, including fostering rapport, eliciting, and responding to needs or concerns whilst supporting health literacy. [Communication]	1.1, 1.3, 1.4, 1.6, 2.4
02	CP 2	Elicit an accurate, structured medical history from the patient and, when relevant, from families and carers or other sources, including eco-biopsychosocial features. [Medical History]	1.8, 1.5
03	CP 3	Demonstrate competence in relevant and accurate physical and mental state examinations. [Physical Examination]	1.9
04	CP 4	Integrate and interpret findings from the history and examination of a patient to make an initial assessment, including a relevant differential diagnosis and a summary of the patient's mental and physical health. [Clinical Reasoning]	1.10
05	CP 5	Demonstrate proficiency in recognising and managing acutely unwell and deteriorating patients, including in emergency situations. [Emergency Care]	1.20, 1.21
06	CP 6	Demonstrate competence in the procedural skills required for internship. [Procedural Skills]	1.14
07	CP 7	Prescribe and, when relevant, administer medications and therapeutic agents (including fluid, electrolytes, blood products and inhalational agents) safely, effectively, sustainably and in line with quality and safety frameworks and clinical guidelines. [Therapeutics]	1.17, 1.18
08	CP 8	Select, justify, request and interpret common investigations, with due regard to the pathological basis of disease and the efficacy, safety and sustainability of these investigations. [Investigations]	1.15
09	CP 9	Demonstrate responsible use of health technologies in the management and use of patient data and incorporate their use to inform, support and improve patient health care and digital health literacy, especially among groups who experience health inequities. [Digital Technologies]	1.19, 1.24, 2.15, 3.8
10	CP 10	Formulate an evidence-based management plan in consultation with the interprofessional team, including patients and families across a variety of clinical settings with consideration of eco-biopsychosocial aspects that may influence management at all stages of life. [Patient Management]	1.1, 1.2, 1.5, 1.11, 1.12, 1.16, 1.22, 1.23
11	CP11	Record, transmit and manage patient data accurately and confidentially. [Documentation]	1.19, 2.3, 2.15
12	PL 1	Display ethical and professional behaviours including integrity, compassion, self-awareness, empathy, discretion, and respect for all in all contexts. [Professional Behaviour]	2.1, 2.18
13	PL 2	Demonstrate effective interprofessional teamwork to optimise patient outcomes whilst respecting boundaries that define professional and therapeutic relationships. [Teamwork]	2.2, 2.6, 2.9, 2.11, 2.12, 2.17
14	PL 3	Apply principles of professional leadership, followership, teamwork, and mentoring by contributing to support, assessment, feedback and supervision of colleagues, doctors in training and students. [Leadership]	2.2, 2.16
15	PL 4	Integrate the principles and concepts of medical ethics and ethical frameworks in clinical decision-making and patient referral, including through appropriate use of digital technologies and handling of patient information. [Ethical Behaviour]	2.3, 2.10
16	PL 5	Critically apply understanding of the legal responsibilities and boundaries of a medical practitioner across a range of professional and personal contexts. [Legal Responsibilities]	1.19, 2.15
17	PL 6	Actively seek feedback and demonstrate critical reflection and lifelong learning behaviours to improve and enhance professionalism and clinical practice recognising complexity and uncertainty of the health service and limits of own expertise to ensure safe patient outcomes and healthcare environment. [Critical Self-reflection]	2.5, 2.8, 2.13, 2.14, 2.17, 2.18

18	PL 7	Actively monitor and implement strategies to manage self-care and personal wellbeing in the context of professional, training, and personal demands. [Self-care]	2.7, 2.8, 2.9
19	HS 1	Demonstrate culturally safe practice with ongoing critical reflection on their own knowledge, skills, attitudes, bias, practice behaviours and power differentials to deliver safe, accessible and responsive health care, free of racism and discrimination. [Culturally safe practice]	1.5, 2.18, 3.2, 3.4, 3.5
20	HS 2	Describe Aboriginal and/or Torres Strait Islander knowledges of social and emotional wellbeing and models of healthcare, including community and eco-sociocultural strengths. [Striving for Aboriginal and Torres Strait Islander Health and wellbeing equity]	1.7, 3.11, 4.3
21	HS 3	Recognise and critically reflect on historical, individual, and systemic challenges to Aboriginal and Torres Strait Islander peoples. [Barriers to Aboriginal and Torres Strait Islander Health and well-being equity]	3.2, 3.3, 3.4, 3.5
22	HS 4	Apply health advocacy skills by partnering with communities, patients and their families and carers to define, highlight, and address healthcare issues, particularly health inequities and sustainability. [Health and well-being advocacy]	3.6
23	HS 5	Critically apply evidence from behavioural science and population health research to protect and improve the health of all people. This includes health promotion, illness prevention, early detection, health maintenance and chronic disease management. [Public Health]	1.22, 3.6, 3.7, 4.2 (4.1)
24	HS 6	Describe ecologically sustainable and equitable healthcare in the context of complex and diverse healthcare systems and settings. [Environmentally sustainable healthcare]	3.1, 3.10
25	HS 7	Describe global and planetary issues and determinants of health and disease, including their relevance to healthcare delivery in Australia and Aotearoa New Zealand, the broader Western Pacific region and in a globalised world. [Global and Planetary Health]	3.2, 3.12, 4.1, 4.2
26	SS 1	Apply and integrate knowledge of the foundational science, aetiology, pathology, clinical features, natural history, prognosis and management of common and important conditions at all stages of life. [Foundational science]	1.13, 4.1, 4.4
27	SS 2	Apply core medical and scientific knowledge to populations and health systems, including understanding how clinical decisions for individuals influence health equity and system sustainability in the context of diverse models and perspectives on health, wellbeing and illness. [Population and health systems]	4.1, 4.2, 4.3, 3.9
28	SS 3	Critically appraise and apply evidence from medical and scientific literature in scholarly projects, formulate research questions and select appropriate study designs or scientific methods. [Research and scientific methods]	4.5, 4.6
29	SS 4	Comply with relevant quality and safety frameworks, legislation and clinical guidelines, including health professionals' responsibilities for quality assurance and quality improvement. [Quality and safety]	1.1, 3.9, 4.7