

Bond University Medical Program Critical Care 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 5 days a week during their placement, and this includes signing on and off, so that the university can monitor attendance. If students are unable to attend for any reason, they are required to advise the clinician, hospital coordinator (where available) and the Placements Team at Bond University, please refer to student guide for clarification on attendance requirements.

Student involvement in the day-to-day care and management of patients provides the best opportunity for learning. Students will be able to learn the most through interviewing and examining patients and being involved in clinical decision making at the bed side.

As well as clinical knowledge, students must display other professional skills such as working well within the multidisciplinary team, considering the psychological and social impact of the illness on the patient and the family, being honest, empathetic, and respectful with regard to the patient's choices and decisions.

It is also important for students to recognise their own limitations, competencies, and scope of practice associated with their stage of training.

Critical Care Placement

The basis of the Critical Care Placement is for students to see patients whose clinical presentation relates to a broad array of emergency and potentially life-threatening problems and to experience first-hand the daily routine and practice of medicine within the critical care environment of Emergency Department and the Intensive Care Unit. Students are expected to learn about the assessment and management of critically ill patients in the clinical setting.

The knowledge explosion and rapid advances in medicine generally, and in both emergency and intensive care particularly, mean that it is impossible to cover everything in one single placement. However, knowledge of the common emergency presentations and conditions will provide a firm foundation for students continuing professional development. To cover a broad range of conditions, students need to see as many patients as possible.

Goals

The goals for the Critical Care Placement are:

Emergency Medicine

- To provide students with learning experiences associated with the variety of acute presentations in both adult and paediatric patients through the ED
- For students to hone their history taking and examination skills and use clinical reasoning to form diagnoses and differential diagnoses in this undifferentiated patient population
- For students to learn about and to become comfortable discussing clinical management of patients requiring acute care
- For students to develop clinical knowledge and understanding of the common emergency conditions presenting through the ED
- To provide students with a real-life clinical working environment and opportunity to work with a clinical team.

Intensive Care Medicine

- To provide students with learning experiences associated with the variety of critical ill
 patients in ICU
- For students to hone their history taking and examination skills and use clinical reasoning to form diagnoses and differential diagnoses in this acute setting
- For students to learn basic principles in the recognition of serious illness and its clinical management
- For students to develop clinical knowledge and understanding of the common conditions seen in the ICU
- To provide students with a real-life clinical working environment and opportunity to work with a clinical team.

Critical Care Learning Outcomes

		BOND LO
CC1	Correctly perform a history/physical examination focusing on acute care and resuscitation	CP2,
		CP3,
		CP5
CC2	Recognise serious illness requiring urgent management/intervention	CP5
CC3	Undertake and interpret common acute investigations such as ECG, ABG etc.	CP6,
		CP8
CC4	Demonstrate knowledge and understanding of the relevant anatomical, biochemical,	SS1
	physiological and pathological processes commonly encountered in critical care	
CC5	Pharmacological and clinical management of acute patients	CP7,
		CP10
CC6	Formulate differential diagnoses and a management plan with the clinical team	CP4,
		CP10,
		PL2
CC7	Interpret common diagnostic tests and imaging in the critical care environment	CP8
CC8	Identify and know how to manage common and important acute clinical conditions	CP5,
		CP6
CC9	Demonstrate understanding of the principles of resuscitation	CP5
CC10	Use evidence-based medicine approach in emergency and intensive care medicine	CP10,
		SS3

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

- For assistance with Osler contact: <u>osler@bond.edu.au</u>
- 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 <u>at the expected level</u> for their clinical learning exposure:

- Clinical knowledge
- Procedural skills
- Clinical History taking and physical examination skills
- Communication
 - 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.

CCO students are required to complete 6 Mini-CEX total as Patient Management plans: 2 or 3 in each discipline conducted.

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.

- If attending a CC placement (Includes ICU and Anaesthetics) then the following applies: 3 Mini-CEX as Patient Management Plans in each of the disciplines. Total 6.
- If attending a CCO placement (Includes ICU, Anaesthetics and Orthopaedics) then the following applies: 2 Mini CEX as Patient Management Plans in each of the disciplines. Total 6.

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 <u>relevant to their current level of learning</u>:

- 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	These procedures must be observed				
2	Intravenous Cannulation (2)	MED, ED, CCO, ACSP	<u>conducted on patients</u> or being				
3	Suturing – basic wound closure	Surgery, ED	performed in the clinical setting at a				
4	Intramuscular injection	GP, MED, ED	■ L3 Entrustment rating ■ Skills 1 – 9 require you to: (p.20)				
5	Subcutaneous injection	GP, MED, ED	1. Watch the Osler learning module 2. Pass a Quiz to generate the				
6	Electrocardiograph acquisition	MED, ED, GP, MH, Surgery					
7	Venesection	MH, Surgery, ED					
8	Blood Culture Sampling	Ward Call, ED, ICU	WBA				
9	Sterile handwash, gown, and glove	Surgery	3. This WBA must be assigned to				
10	*Airway Management: Bag/Mask	ED, Surgery, anaesthetics	the observing clinical team member				
	technique – no Osler learning		member				
	module						
11	Glasgow Coma Scale Interpretation	ED, MED, ICU, Ward Call					
	Required Theory Modules						
12	Personal Protective Equipment		Theory Module in Osler ePortfolio				
13	Assessment of the ICU patient	CC /CCO	Theory Module in Osler ePortfolio				
14	Pulse Oximetry		Theory Module in Osler ePortfolio				
	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				

Conducting Airway Management on a patient is a required Procedural Skill, most often completed in CCO

- The Airway Management Mini-CEX is located in both the Procedural Skills Tile and the CCO Tile.
- The WBA is linked, which means it will indicate it is completed in both places once submitted, regardless
 of which location you conduct it.
- You are only required to complete 6 Mini-CEX in total for CCO/CC placement, one of which can be the Airway Management Mini-CEX.

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 <u>Australian Medical Council's Graduate Outcome Statements</u> 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 ecobiopsychosocial 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