

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

- Correctly perform a history/physical examination focusing on acute care and resuscitation
- Recognise serious illness requiring urgent management/intervention
- Undertake and interpret common acute investigations such as ECG, ABG etc.
- Demonstrate knowledge and understanding of the relevant anatomical, biochemical,

physiological and pathological processes commonly encountered in critical care

- Pharmacological and clinical management of acute patients
- Formulate differential diagnoses and a management plan
- Interpret common diagnostic tests and imaging in the critical care environment
- identify and know how to manage common and important acute clinical conditions
- Recognise serious illness requiring urgent management /intervention
- Demonstrate understanding of the principles of resuscitation
- Use evidence-based medicine approach in emergency and intensive care medicine

Clinical Supervision and Assessment

Students have a variety 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. Students can be failed for not meeting attendance requirements on Clinical Placement.

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

In Clinical Placement 5, ITA can be completed in W6 due to the OSCE being held in W7 In the final Clinical Placement 12 (Subject MEDI72-503) all WBA are due end of W5

- For assistance with Osler contact: osler@bond.edu.au
- For assistance with WBA contact: Med-assessment@bond.edu.au
- Full details of all WBA requirements are located on iLearn.

The In-Training Assessment (ITA): The ITA is a summary evaluation of whether students have met the requirements of that placement at the time of completion for:

- Clinical knowledge
- Procedural skills
- Clinical History taking and physical examination skills
- Communication
 - o Communication with children and families
 - Appropriate clinical handover using ISBAR
- Personal and professional behaviour
- Attendance

The ITA can be completed by the supervising Consultant or their delegate registrar, preferably after seeking opinion from the team about the student performance. The clinician who spends the most time observing the student, is the best person to complete this task. In ICU, nursing staff con complete the ITA if they are consistently observing the student in practice.

End-Placement ITA due WK7: 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 not meeting attendance requirements on Clinical Placement – if they are not present then they are not spending time with patients sufficient to demonstrate competency.

Mini-CEX due WK6: Students are encouraged to participate in active learning by interacting with patients by conducting a history or physical examination and then engage in discussions with clinician supervisors, known as Mini-Clinical Examinations (Mini-CEX). During the clinical placement, students will be supervised by the consultant supervisor or their delegate which can be a range of clinicians in specialist training pathways in the medical team, Senior House Officer or higher. PGY 1 and 2 are not permitted to complete Mini-CEX. Students are required to complete and evidence as follows:

If attending a CC placement (Includes ICU and Anaesthetics) then the following applies: 3 Mini CEX as Patient Management Plans in each of the two disciplines.

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 three disciplines.

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.

Patient Management plans are an observed Mini-CEX that requires the student to take a history, conduct a physical examination and review investigations. The student then integrates these skills and has a verbal discussion with the observing supervisor on next best steps in patient management. This integrated clinical task reflects the higher level of clinical reasoning and synthesis required as they approach internship. 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 (history or examination or patient management plan) relevant to their current level of learning:

Students are required to complete and evidence six (6) Mini-CEX at an entrustability rating Level 3:

- 1. Unable to complete the task and requires direct instruction and intervention from supervisor (Repeat task)
- 2. Performs the task with proactive supervisor input and intervention (Repeat task)
- 3. Performs the task competently with minimal supervisor input and intervention (clear Pass for med student)
- 4. Performs the task competently and independently with supervision nearby if required (Intern level Pass)

Ward Call: Students are required to complete in their final year one (1) Ward Call by graduation. Students will join the clinical team attending to a rapidly deteriorating/critically unwell patient. Students will observe the team in action and can offer to assist with clinical tasks which are within their scope of practice such as:

- 1. Write Notes about Clinical Assessment- doing an SBAR of the clinical interaction
- 2. Assist in the delivery of any basic airway care/recovery position/medication or fluid changes by nursing staff

- 3. Assist with performing ECG/monitoring of saturations/BP that might be done as part of the assessment- emphasising the clinical relevance of these observation to the given interaction
- 4. Conduct any procedures that might be done like IV, blood tests taken, urine tests
- 5. Look and detect and calculation of the clinical signs of deterioration that might indicate need for ICU/Reg review such as GCS and seizure type
- 6. Seek out opportunities to be involved in these types of clinical assessment
 - a. Fall in an elderly patient
 - b. Assessing Chest pain on the ward
 - c. Respiratory Assessment in the post-op patients

Procedural Skills and Clinical Tasks:

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. Ten skills are to be completed on patients under guided supervision whilst two clinical tasks and three theory modules support their skills development. A wide range of health professionals can evaluate their skills competency, including doctors, nurses, allied health, and hospital technicians.

#	Required Procedural Skills				
1	In-dwelling Catheter insertion				
2	Intravenous Cannulation				
3	Suturing – basic wound closure				
4	Intramuscular injection				
5	Subcutaneous injection				
6	Electrocardiograph acquisition				
7	Venesection				
8	Blood Culture Sampling				
9	Sterile handwash, gown, and glove				
10	Airway Management				
Required Theory Modules					
11	Personal Protective Equipment				
12	Assessment of the ICU patient				
13	Pulse Oximetry				
Required Clinical Tasks					
14	Discharge Summary completed in EMR				
15	Ward Call				

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

Students are required to complete all 15 clinical tasks prior to graduation

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

- 1. Unable to complete the task and requires direct instruction and intervention from supervisor (Repeat task)
- 2. Performs the task with proactive supervisor input and intervention (Repeat task)
- 3. Performs the task competently with minimal supervisor input and intervention (clear Pass for med student)
- 4. Performs the task competently and independently with supervision nearby if required (Intern level Pass)

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

- -Four Competency Assessments: Ultrasound, ALS, Mental Health First Aid and WH Intimate Exam
- -MD OSCE during Wk7 of Clinical Placement 5 as a check on clinical skills competency
- -Five (5) written knowledge Open Book Progress Tests, one at the end of each semester to promote continuous development in their clinical knowledge
- -MD Project and Conference presentation

If you have any concerns regarding any aspect of student behaviour and/or performance, please contact the Medical Program Placement Team (0420 928 125 or

MED-Placements@bond.edu.au) ASAP.

MD Program Outcomes PHASE2 (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 are Science and Scholarship Domain (learning outcomes 1-3), Clinical Practice Domain (learning outcomes 4-11), Health and Society Domain (learning outcomes 12-15) and Professionalism and Leadership Domain (learning outcomes 16-21).

- 1. Science and Scholarship: The medical graduate as scientist and scholar (SS)
- 2. Clinical Practice: The medical graduate as practitioner (CP)
- 3. Health and Society: The medical graduate as a health advocate (HS)
- 4. Professionalism and Leadership: The medical graduate as a professional and leader (PL)

Program LOs 2024		Description On successful completion of this program the learner will be able to:	AMC 2012	AMC standards 2023
01	Y5SS01	Apply current medical and scientific knowledge to individual patients, populations andhealth systems.	1.1, 1.2, 1.3, 1.4	4.1, 4.2, 4.3, 4.4, CP 1.13, 1.24
02	Y5SS02	Apply evidence-based and environmentally sustainable healthcare practices in patient care and research methodology.	1.5, 1.6, 2.7	4.2, 4.3, 4.5, 4.6, CP 1.15, 1.16
03	Y5SS03	Apply project management and/or communication skills to complete an evidence basedand professionally focussed project including its dissemination.	1.1, 1.5, 1.6, 3.3, 4.9	4.5, 4.6, HS 3.6,
04	Y5CP01	Demonstrate cognitive, technical and interpretive skills in undertaking an accurate, detailed system-focussed history from a range of patients within a variety of clinicalsettings.	2.1, 2.2	1.3, 1.2, 1.4, 1.6,
05	Y5CP02	Perform an accurate and complete physical examination on any body system including amental state examination.	2.3	1.9
06	Y5CP03	Use knowledge of common conditions, the patient history and physical examination findings, and clinical data, to undertake clinical reasoning and formulate probable and differential diagnoses.	2.2, 2.3, 2.4, 2.7, 2.8, 2.10	1.10, 1.13, 1.16, 1.22,
07	Y5CP04	Recognise and assess deteriorating and critically unwell patients who require immediatecare and perform common emergency and life support procedures.	2.12	1.20, 1.21, 1.23
08	Y5CP05	Safely perform a range of common procedures.	2.6, 2.11, 2.14	1.1, 1.5, 1.6, 1.7, 1.11, 1.12, 1.14, 1.17, 1.18
09	Y5CP06	Safely prescribe by applying the principles of "quality use of medicines" in an environmentally sustainable way.	2.7, 2.11	1.11, 1.12, 1.16, 1.17, 1.18,
10	Y5CP07	Select and justify common investigations, with regard to the pathological basis of disease, utility, safety, cost-effectiveness, and sustainability, and interpret their results.	2.5, 3.7	1.11, 1.12, 1.15, 1.23, HS 3.7, 3.8 SS 4.1
11	Y5CP08			1.1, 1.5, 1.6, 1.7, 1.11, 1.12, 1.16, 1.19, 1.23, 1.24, HS 3.2, 3.3
12	Y5HS01	Apply evidence from behavioural science and population health research, integrate prevention, early detection, health maintenance and chronic disease management intoclinical practice.	1.6, 2.10, 3.5	3.7, 3.8, CP1.4, 1.7, 1.22

13	Y5HS02	Recognise and critically reflect on the diversity of populations regarding health issues applicable to the relevant unique historical, social and cultural contexts in the clinical and community settings including First Nations peoples.	3.1, 3.2, 3.4, 3.5, 3.8, 3.9	3.10, 3.2, 3 3, 3.8, 3.5, 3.12, CP 1.7
14	Y5HS03	Recognise and understand the complex interactions between the healthcare systems and environment, as well as the doctor and patient, whilst reflecting on power and privilege, tounderstand the role of these to ensure a culturally responsive and safe working context.	2.1, 2.8, 3.4, 3.6, 3.7, 4.5	3.3, 3.9, 3.1, CP 1.2, 1.5, 1.11,
15	Y5HS04	Communicate successfully in all roles including health advocacy, education, assessment, appraisal and with the First Nations peoples.	2.1, 3.3, 3.4, 3.8, 4.9	3.6, 3.3, 3.5, CP 1.3, 1.4, 1.6,
16	Y5PL01	Contribute to teams providing care to patients according to "Good Medical Practice: A Code of Conduct for Doctors in Australia" and "Good Medical Practice: A Guide for Doctorsin New Zealand"	4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10	2.3, 2.5, 2.6, 2.8, 2.9, 2.11, 2.12, 2.13, 2.16, 2.17, 2.18
17	Y5PL02	Explain and apply the principles and concepts of medical ethics including physician virtueand the 'four principles' of autonomy, beneficence, non-maleficence and justice in the context of team-based patient care.	3.6, 4.1, 4.2, 4.3, 4.4, 4.6, 4.10	2.1, 2.2,2.3, 2.4, 2.9, 2.10, 2.15, 2.18 HS 3.9,
18	Y5PL03	Apply the legal responsibilities of a medical practitioner across a range of professional and personal contexts in the practice of team-based patient-care.	2.15, 4.1, 4.2, 4.3, 4.10	2.2, 2.15, 2.18, CP 1.19
19	Y5PL04	Evaluate the performance of self and others as self-regulated and effective members of a diverse healthcare team in the management of a case load, respecting the roles of all healthcare professionals within the clinical setting and community settings, demonstrating professional foundation and essential skills.	3.1, 4.1, 4.2, 4.6, 4.7, 4.8, 4.9	2.2, 2.5, 2.3, 2.6, 2.9, 2.11, 2.12, 2.13, 2.15, CP 1.5, 1.6, HS 3.10,
20	Y5PL05	Demonstrate, and role model for junior medical students, skills to support the planned and active development of a career.	4.1, 4.2, 4.3, 4.8, 4.9	2.5, 2.2, 2.6, 2.11, 2.12, 2.13, 2.15, 2.16,
21	Y5PL06	Demonstrate, and role model for junior medical students, the active management of selfcare in a clinical environment as part of a clinical team managing patients.	4.1, 4.2, 4.5, 4.6, 4.7, 4.9	2.2, 2.3, 2.5, 2.7, 2.9, 2.13, 2.15, 2.16