BOND UNIVERSITY
FACULTY OF HEALTH SCIENCES & MEDICINE

Bond University Medical Program

Radiology 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)*

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 coordinator (where available) and the Placements Team at Bond University: Med-placements@bond.edu.au

Radiology Placement

The use of the name radiology to describe this speciality is historic as imaging and interventional procedures performed by radiologists may include ultrasound, magnetic resonance, assorted injections (dyes and therapeutic substances), X-rays, computed tomography, nuclear medicine, and biopsies. The practice of radiology may include both diagnostic and therapeutic procedures.

It is expected that students will see patients with a broad array of clinical conditions in need of interventional and diagnostic imaging.

You will experience the daily routine and practice of Radiologists in many areas of interventional and diagnostic imaging firsthand.

Learning Outcomes

Students must be able to:

- Develop clinical knowledge and understanding of the common Radiological investigations
- Improve general knowledge of the range of radiological interventions and investigations available
- explain their appropriate use in different clinical situations
- demonstrate ability to apply this knowledge as it relates to management of common clinical presentations
- Justify investigations and provide a rationale for their appropriateness and
- Interpret the results of commonly encountered diagnostic imaging in these patients
- Recognise serious l conditions requiring urgent management/intervention
- Demonstrate understanding and application of pharmacological, medical and surgical management of Diagnostic imaging patients
- Understand the importance of effective and timely communication and documentation
- Identify the harms and benefits of commonly used diagnostic and interventional imaging procedures

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.

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

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 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
    - Communication with children and families
    - Appropriate clinical handover using ISBAR
- Personal and professional behaviour
- Attendance

Due Wk7: End-Placement 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 not meeting attendance requirements on Clinical Placement – if they are not present then they are not spending time with patients sufficient to demonstrate competency.

Due Wk6: Mini-CEX: 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:

four (4) Mini-CEX in the form of 4 x patient management plans.

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 relevant to their current level of learning:

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

Outcomes:

Level 3 (Student level) and 4 (intern level) are considered a Pass

Level 1 (fail) or 2 (Borderline) require the student to Repeat the skill or conduct another Mini-CEX until level 3 is reached in a minimum of four (4) by end of the clinical placement.

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 patient

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:

- Trust Level 1. Requires physician assistance / direct instruction (Repeat skill)
- Trust Level 2. Requires significant supervisor input (*Repeat skill)
- 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:
Students will sit an OSCE during Wk7 of Clinical Placement 5 as a check on clinical skills competency
Students will also conduct five (5) written knowledge Open Book Progress Tests, one at the end of each semester to promote continuous development in their clinical knowledge

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 PHASE 2 (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 and health 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 based and 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, 1.8,
05	Y5CP02	Perform an accurate and complete physical examination on any body system including a mental 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 immediate care 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	Formulate an initial management plan in consultation with patients, family and carers across a variety of clinical settings with consideration of psychosocial, environmental and cultural aspects that may influence management.	2.1, 2.7, 2.9, 2.13, 2.14, 2.15, **3.2, 3.4**	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 into clinical 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, demonstratingprofessional 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 andactive 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