



Bond University Medical Program

**Anaesthetics Rotation
Clinician Guide**

YEAR 5

Introduction

Students in the final year of the Bond University Medical Program have 6 rotations to train in a broad array of medical, surgical, and other specialities.

These Rotations are made up from one of each of:

- Anaesthetics, Critical Care, and orthopaedics (2 weeks of each)
- Elective or Capstone
- Emergency Medicine,
- Flexible/End of year elective
- General Practice,
- Selective

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

The learning priorities for all clinical specialities 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 5 days a week during their rotation, 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 co-ordinator (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.

MD Program Learning Outcomes

MEDI72-YR5 Extended Clinical Practice and Research, A, B & C and Doctor of Medicine (MD)

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)

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 16-22).

On successful completion of this program the learner will be able to:

Program LOs 2021	NEW 2021	Description	AMC Domain
01	Y5SS01	Apply current medical and scientific knowledge to individual patients, populations and health systems.	1.1, 1.2, 1.3, 1.4
02	Y5SS02	Apply evidence-based and environmentally sustainable healthcare practices in patient care and research methodology.	1.5, 1.6, 2.7
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
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 clinical settings.	2.2
05	Y5CP02	Perform an accurate and complete physical examination on any body system including a mental state examination.	2.3
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
07	Y5CP04	Recognise and assess deteriorating and critically unwell patients who require immediate care and perform common emergency and life support procedures.	2.12
08	Y5CP05	Safely perform a range of common procedures.	2.6, 2.11, 2.14

09	Y5CP06	Safely prescribe by applying the principles of “quality use of medicines” in an environmentally sustainable way.	2.6, 2.7
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
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
12	Y5HS01	Using 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
13	Y5HS02	Critically reflect on population health issues applicable to the relevant clinical and community setting.	3.1, 3.2, 3.4, 3.5, 3.8, 3.9
14	Y5HS03	Discuss the complex interactions between the healthcare environment, doctor and patient, and the role of the individual to ensure a safe working context.	2.1, 2.8, 3.6, 3.7, 4.5
15	Y5HS04	Communicate effectively in all roles including health advocacy, education, assessment, and appraisal.	2.1, 3.3, 4.9
16	Y5PL01	Critically discuss medico-legal and ethical issues in the healthcare setting.	3.6, 4.1, 4.2, 4.4, 4.6, 4.10
17	Y5PL02	Demonstrate an ability to manage a case load across a range of patients and from a variety of clinical settings.	2.2, 2.3, 2.4, 4.1, 4.2, 4.5, 4.9
18	Y5PL03	Comply with organisational policies regarding timely and accurate documentation.	2.15, 4.1, 4.2, 4.10
19	Y5PL04	Practise as an effective team member, respecting the variety of roles within the clinical setting and the professional responsibilities relevant to one's own position and/or role within the team.	3.1, 4.1, 4.2, 4.6, 4.8
20	Y5PL05	Uphold the standards and values of the medical profession and perform clinical activities in accordance with ‘Good Medical Practice for Doctors in Australia’ to support the health and well-being of individuals, communities and populations now and for future generations.	4.1, 4.2, 4.3, 4.5, 4.10
21	Y5PL06	Self-evaluate one's professional practice and seek appropriate assistance according to level of training and experience	4.1, 4.2, 4.5, 4.7, 4.9
22	Y5PL07	Demonstrate life-long learning behaviours	

Anaesthetics Rotation in general

The basis of the Anaesthetics Rotation is to provide students with a real-life clinical working environment and opportunity to work with a clinical team especially in the Operating Theatre.

So that students understand how to evaluate the patient for anaesthesia, the clinical care and monitoring of the anaesthetised patient, and the post-operative management of the surgical patient.

The basic principles of clinical management of patients undergoing anaesthesia includes assessment of fitness, diseases and medications to guide decisions on anaesthetic and medication management.

Goals - Anaesthetics Specific Learning Outcomes

- For students to develop clinical knowledge and understanding of:
 - the pharmacology of some of the more common anaesthetic agents and their use
 - airway management
 - intra operative life support
 - provision of pain control;
 - intra-operative diagnostic stabilisation;
 - preparation of patient for emergency surgery

- Students should be able to:
 - Demonstrate the ability to perform a preoperative assessment on patients
 - Demonstrate a knowledge and understanding of the process and role of anaesthesia for surgical procedures and pain relief;
 - Demonstrate and understand the basic management principles of intra-operative care
 - Demonstrate and understand the principles of post-operative care
 - Demonstrate and understand the principles and pharmacology of acute pain management
 - Observe each stage in the process from pre-operative clinic, admission and discharge from hospital.

Clinical Skills	
Pre-Operative Assessment History and Examination	<ul style="list-style-type: none"> • Consent • Cardiac Disease • Respiratory Disease • Diabetes Mellitus
Medication History	
Anaphylaxis	
Pharmacology	<ul style="list-style-type: none"> • Sedation • Muscle relaxants • Analgesia • Anti-emetics
Assist with and/or witness anaesthesia	<ul style="list-style-type: none"> • General • Regional • Spinal • Epidural
Basic Airway Management	
Basics of Ventilation	
Fluid Management	
Post-Operative Care	<ul style="list-style-type: none"> • Analgesia • Fluids

Specific Clinical Skills	
Basic Airway Management	
Patient Monitoring	
IV Cannulation	
Procedural Skills	Description
Patient Monitoring Systems	Peri operative patient monitoring
ECG	Perform and Interpret an ECG
Spirometry/Peak flow	Perform and interpret basic spirometry and peak flow measurement
Venepuncture	Perform a venepuncture
Injection	Perform injections <ul style="list-style-type: none"> • Intramuscular injection (IMI) • Intravenous injection (IVI) • Sub Cutaneous (SC)
IV Cannula	Insert an IV cannula
IV infusion	Set up an IV
IV drug administration	Describe the safe administration of an IV drug
IV fluid and electrolyte therapy	<ul style="list-style-type: none"> • Explain fluid and electrolyte balance • Calculate and correct imbalances

Clinical Supervision and Assessment

Formal educational sessions should be conducted every week throughout the clinical rotation to reinforce and enhance student learning. These sessions may vary throughout the placement.

Students have multiple workplace-based assessments (WBA) to successfully complete as a requirement for progression in the Medical Program. Assessments are completed in Osler ePortfolio, a cloud-based mobile assessment technology.

In-Training Assessment (ITA) is a workplace-based assessment tool utilised in clinical rotations. In the ITA, the clinical supervisor provides comments about student overall performance on that rotation. The ITA is a summary evaluation of whether students have met the requirements of that rotation for:

- Clinical knowledge
- Procedural skills
- Clinical History taking and physical examination skills
- Clerked Case
- Communication and
- Personal and professional behaviour

ITA: The ITA can only be completed by the supervising Consultant or their delegate after seeking opinion from the team about the student performance. The ITA is due in Week 7.

Mini-CEX: During the clinical placement, students will be supervised by a number of clinicians such as those in specialist training pathways in the medical team. Students are encouraged to participate in active learning by interacting with patients. Students are required to evidence this as Mini-CEXs which can be assessed by these team members.

Clerked Case: This activity is designed for students to:

1. Practice the skill of concise and relevant documentation
2. Develop their ability to articulate clinically relevant patient information in both Oral and Written formats
3. Guide their deeper clinical understanding of core conditions, including management options
4. Develop their clinical reasoning – their ability to formulate a diagnosis from the History and Physical examination, supported by specific tests

Process of Clerked Case Completion:

1. We ask the student to spend time with a patient sufficient to take a full history and examination and extract the relevant findings.
2. ~ W5: Students then concisely document their findings and write a problem list and care plan, including a GP letter, with reference to the literature in support of their clinical decision-making:
 - a. This document is submitted to Osler and an assessment is assigned to you.
3. 1000 word maximum with 250-word abstract
4. ~ W6/7 the student presents the patient case to you orally and answers your questions, enabling you to evaluate their clinical reasoning.
5. Students will need guidance on when to present their clerked case orally to you, their supervisor.
6. You are encouraged to ask questions at any time in the presentation about the case and how students arrived at their diagnosis/management plan, for example:
7. Explain their rationale for each step in the clinical reasoning process
8. Explain the mechanism of action or pathophysiology of the condition
9. Ask them to identify red flags or co-morbidities
10. You may determine the format required for the presentation and communicate this to students:
 - a. You may wish students to present a power point presentation
 - b. You may wish to do the oral in front of peers for group learning
 - c. It can be done in front of the patient at the bedside
11. Once the student has presented, please complete the assessment in Osler ePortfolio
12. W7: The Osler ePortfolio assessment is due on Friday Wk7, the last day of the rotation

The evaluation of the Clerked Case will be based on performance in the following 3 domains:

1. Research, analysis, and connection of Literature to the case
2. Organisation and content of written work
3. Quality of Oral presentation

The assessment overall results is one of the following:

- Not yet at expected level (Fail)
- At expected level (Pass)
- Excellent - Above expected level

<p>Research, analysis and connection of literature to the case *</p> <p><input type="checkbox"/> Not yet at expected level</p> <p><input type="checkbox"/> At expected level</p> <p><input type="checkbox"/> Excellent - Above expected level</p>
<p>Organisation and content of written work *</p> <p><input type="checkbox"/> Not yet at expected level</p> <p><input type="checkbox"/> At expected level</p> <p><input type="checkbox"/> Excellent - Above expected level</p>
<p>Quality of Oral Presentation *</p> <p><input type="checkbox"/> Not yet at expected level</p> <p><input type="checkbox"/> At expected level</p> <p><input type="checkbox"/> Excellent - Above expected level</p>
<p>Overall Result *</p> <p><input type="checkbox"/> Not yet at expected Level</p> <p><input type="checkbox"/> At expected Level</p> <p><input type="checkbox"/> Excellent - Above expected level</p>

Procedural Skills:

Bond Medical Students are required to complete the following procedural Skills on patients by the completion of their Phase 2 placements in order to graduate. Nine skills are to be completed on patients under guided supervision whilst 5 procedures are Theory only modules to support skills development.

#	Required Procedural Skill Activities
1	In-dwelling Catheter
2	IV Cannulation
3	Suturing
4	IM injection
5	SC injection
6	ECG
7	Venepuncture (venous blood sample)
8	Blood Culture Sampling
9	Sterile wash hand, gown, and glove
10	Examination of ICU patient – Theory Module only
11	Blood Gas Analysis – Theory Module only
12	Chest X-ray Interpretation – Theory Module only
13	Pulse Oximetry – Theory Module only
14	PPE – Theory Module only

Procedural Skills Assessments are completed by the observing clinician using Osler e-Portfolio.

Clinicians evaluate student procedural skills performance on an Entrustability Rating Scale:

- | | | |
|-------------|----|---|
| Trust Level | 1. | Requires physician assistance / direct instruction |
| Trust Level | 2. | Requires significant supervisor input |
| Trust Level | 3. | Performs independently but requires direct supervision |
| Trust Level | 4. | Safe to perform independently (supervision immediately available) |

All WBA are completed on Bond University's Osler ePortfolio App/website. The student requests the supervisor to review their assessment via the ePortfolio. The supervisor can be a user of Osler (require login details) or be requested as a Guest Assessor (email link to assessment). It is recommended to be set up as a user if completing numerous assessments.

Please contact osler@bond.edu.au for further information or to be set up as a user on Osler.

**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.**