



Bond University Medical Program

**Neurosurgery Rotation
Clinician Guide**

YEAR 5



For a one-page summary of WBA requirements, use this QR Code

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, and Recommendations)*

Timetable and Contacts

Students are expected to be present 5 days a week during their rotation. 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.

Student involvement in the day-to-day care and management of patients provides the best opportunity for learning. Students will be able 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 16-21).

Program LOs 2022	2022	Description On successful completion of this program the learner will be able to:	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.	2.1, 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.	, 2.7
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	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
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
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, to understand 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
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

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 Doctors in New Zealand”	4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10
17	Y5PL02	Explain and apply the principles and concepts of medical ethics including physician virtue and 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
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
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
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
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

Neurosurgery Rotation

The basis of the Neurosurgery Rotation is for students to see patients whose clinical problems relate to the broad array of neurosurgical problems and to experience first-hand the daily routine and practice of neurosurgery in the hospital team. Students are expected to learn about the clinical assessment and management of neurosurgical patients.

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

Goals

The goals for the Neurosurgery rotation are:

- To provide students with learning experiences associated with the clinical care of Neurosurgical 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 Neurosurgical patients
- For students to develop clinical knowledge and understanding of the common conditions in Neurosurgery
- To provide students with a real-life clinical working environment and opportunity to work with a clinical team.

Learning Outcomes

Students must be able to:

- Demonstrate the ability to take a complex Neurosurgical history as well as a focused system history in common neurological disorders.
- Correctly perform a physical examination with focus on the Peripheral and Central Nervous Systems including related systems examination and relevant procedures

- Demonstrate correct appraisal and assessment of neurological symptoms and signs
- Apply clinical reasoning skills to formulate clear differential diagnoses and a management plan
- Recognise serious neurosurgical conditions requiring urgent management/intervention
- Demonstrate understanding and application of pharmacological, medical and surgical management of Neurosurgical patients
- Undertake, justify and interpret common neurological investigations

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.

1. 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
- Clinical History taking and physical examination skills
- 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.**

2. 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, conducting a relevant clinical activity. Students are required to evidence this as Mini-CEXs which can be assessed by these team members. Students are required to complete and evidence **FOUR (4) Mini-CEX** during this placement:

The Mini-CEX can be evaluated by a wide range of other health practitioners such as doctors, nurses, allied health, and hospital technicians

The Mini-CEX has been re-designed in conjunction with Griffith University to reduce the workload of completion for supervisors – whilst enhancing personalised feedback on performance to students.

Feedback should align to that given to students at the time of the interaction.

The Global result is a trust rating scale to align our evaluation of students with future clinician decisions around Entrustable Professional Activities.

3. 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 can be completed by a wide range of observing supervisors using Osler e-Portfolio, including nurses, specialist nurses, doctors, allied health, and hospital technicians.

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)

Clerked Case:

Clerked Cases are no longer required as compulsory WBA. They are, however, a valuable learning tool for students. Clinical supervisors are welcome to request that students complete a Clerked Case as part of their evaluation of student engagement on placement to support completion of ITAs.

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.**