Bond University Medical Program

Infectious Diseases 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 elective, flexible and selective rotations provide choices, to allow students a selection of particular specialities or sub-specialities, to give the student some exposure and experience within their selected area of interest.

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 Recommendation)*
Additional specific procedural skills development is welcomed

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 16-22).

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	

Infectious Diseases Rotation

The basis of the Infectious Disease (ID) Rotation is for students to see patients whose clinical problems relate to the broad array of infectious problems and to experience first-hand the daily routine and practice of medicine by an Infectious Disease (ID) Physician and the hospital team. Students are expected to learn about the assessment and management of patients with a variety of infections in the clinical setting.

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

Goals

The goals for the Infectious Diseases rotation are:

- To provide students with learning experiences associated with the clinical care of ID 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 ID patients
- For students to develop clinical knowledge and understanding of the common conditions in Infectious Diseases
- 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 medical history as well as a focused system history in common ID disorders.
- Implement processes to reduce transmission of infection, including correct hand-washing, aseptic techniques, and use of protective clothing
- Correctly perform a physical examination with focus on ID and related systems examination including relevant procedures
- Demonstrate correct appraisal and assessment of medical symptoms and signs
- Apply clinical reasoning skills to formulate a clear differential diagnosis and management plan
- Recognise serious Infectious conditions requiring urgent management/intervention
- Demonstrate understanding and application of pharmacological, medical and surgical management of ID patients
- Justify and interpret common ID investigations including serology and microbiology
- Integrate the clinical condition, investigation results, and antimicrobial guidelines to guide treatment decisions

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

Research, analysis and connection of literature to the case*
- ☐ Not yet at expected level
- ☐ At expected level
- ☐ Excellent - Above expected level

Organisation and content of written work*
- ☐ Not yet at expected level
- ☐ At expected level
- ☐ Excellent - Above expected level

Quality of Oral Presentation*
- ☐ Not yet at expected level
- ☐ At expected level
- ☐ Excellent - Above expected level

Overall Result*
- ☐ Not yet at expected Level
- ☐ At expected Level
- ☐ Excellent - Above expected level

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.

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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.

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