

## Guide to the Primary Examination

Each topic in the primary syllabus has been assigned one of the following three levels of assessment:

### Level of assessment 1 (LOA 1)

In general, these topics have a strong relation to, such that they underpin or are core to areas of the fellowship curriculum designated “expert” or “high level of practice”. As such, they will be eligible to be assessed in depth both in the MCQ and viva components of the primary examination. These topics are considered essential knowledge.

Questions may assess knowledge, comprehension, application and/or analysis. Clinical integration of basic science concepts may be examined to the extent covered by the relevant prescribed primary examination texts. Topics at this level will be examined more frequently than topics assigned LOA 2 and LOA3. Candidates should demonstrate a detailed knowledge and understanding of the topic including the ability, where relevant, to use formulae, construct graphs and use diagrams to explain concepts.

### Level of assessment 2 (LOA 2)

In general, these topics have a relation to areas of the fellowship curriculum designated “high level of practice” and, as such, these topics are of importance in emergency medicine. Candidates should demonstrate a good understanding of key concepts related to these topics. These topics will be eligible for being assessed in some detail, both in the MCQ and viva components of the primary examination.

Questions may assess knowledge, comprehension and/or application. Clinical integration of basic science concepts may be examined to the extent covered by the relevant prescribed primary examination texts. Topics at this level will be examined more frequently than LOA 3 but less frequently than LOA 1.

### Level of assessment 3 (LOA 3)

In general, these topics relate to areas of the fellowship curriculum designated as “general level of practice”. Questions will assess knowledge and comprehension only. Topics at this level will be examined less frequently than LOA 1 and LOA2. Candidates will demonstrate a basic understanding of the overarching concepts and a knowledge of the general principles involved in the topic without the need for fine detail.

#### Definitions:

<i>Knowledge</i>	Able to recall facts or information about the subject. Examples of the types of tasks required include: define, describe, identify, list, name, outline, match, label.
<i>Comprehension</i>	Understand the meaning of concepts. Examples of the types of tasks required include: explain, estimate, give examples, summarise, predict and interpret data.
<i>Application</i>	Apply knowledge and comprehension. Examples of the types of tasks required include: compute, construct, demonstrate, relate, solve.
<i>Analysis</i>	Separate concepts into component parts so that its organisational structure may be understood. Examples of the types of tasks required include: analyse, compare, differentiate, distinguish between.

## Anatomy

There will be an emphasis on applied anatomy in both MCQ and viva sections. Candidates are expected to have a detailed knowledge of the upper and lower limbs, with a special emphasis on anatomy important to the practice of emergency medicine.

Knowledge of the surface and general anatomy of other regions of the body relevant to the practice of emergency medicine is expected. This includes areas on which procedures are performed or where anatomy is important in the understanding of injury patterns and complications, patterns of disease or which demonstrate important anatomical principles.

Candidates must be familiar with anatomy essential for the interpretation of diagnostic imaging used by emergency physicians. The candidate is expected to be familiar with common X-rays and with cross-sectional anatomy necessary for the interpretation of CT scans. CT scans may be included in the exam and candidates will be expected to show knowledge of gross features and relationships. These will be single slices only, with knowledge appropriate to the practice of emergency medicine. Detailed radiology knowledge is not expected. CT levels are most likely to demonstrate important anatomical levels, e.g. level of transpyloric plane, aortic arch. Detailed neuro-anatomy is not expected, but candidates should be able to describe lobes, ventricles and other gross structures.

Histology and embryology will not be examined, however, knowledge of clinically relevant paediatric anatomy is expected.

It should be stressed that detailed knowledge of the techniques of clinical procedures is not expected, but that the knowledge of areas in which these procedures are performed are obviously of key importance to emergency physicians.

### **LOA 1**

Candidates should demonstrate a detailed knowledge of the anatomical structures relationships, nerve and blood supply as they pertain to the topic. Candidates should be able to explain the clinical significance of the anatomy as applied to the practice of emergency medicine.

### **LOA 2**

Candidates should demonstrate a general knowledge of the anatomical structures, relationships, nerve and blood supply where relevant to the practice of emergency medicine.

### **LOA 3**

Candidates should demonstrate a basic knowledge of the anatomical structures and relationships as they pertain to the topic without the need for fine detail.

### **Imaging (CT and X-ray)**

Imaging of regions important to emergency medicine will be examinable as LOA 2 with the aim of demonstrating normal anatomical structures and relationships.

Sectional imaging via CT will be examined in relation to brain, thorax and abdomen.

Plain X-ray imaging will be examined in relation to head, neck, thorax, abdomen, pelvis, spine, lower limb and upper limb.

### **Pathology**

Candidates are expected to have a detailed understanding of the general principles of the pathology of common diseases. Those of relevance to the practice of Emergency Medicine are particularly important and will be concentrated upon in the examination.

Candidates are advised to familiarise themselves with the syllabus and MCQ matrix, as these outline the areas of most importance and are a guide to the examination content.

Microbiology will not be examined as a separate subject, but those aspects that bear directly on infectious disease will be considered part of the syllabus.

Genetic and molecular pathology are not emphasised in the pathology syllabus and exam.

## **LOA**

The LOA is indicated for an entire chapter, but subsections may have increased or decreased emphasis as specifically indicated – eg. the entire chapter on cellular injury (2) will be assessed at LOA2, but the subsections on cellular adaptation (2.1) and mechanism of cell injury (2.2) will be assessed at LOA1.

## **Physiology**

A thorough knowledge of cardiovascular, respiratory and renal physiology and of fluid and electrolyte balance is required. A working knowledge of the physiology of the nervous system, muscles, digestion and absorption and the gastrointestinal tract is also required.

Biochemistry will not be examined separately, but candidates will be expected to be familiar with those aspects of metabolism and endocrine function that are relevant to emergency medicine.

### **LOA1**

Candidates should demonstrate a detailed knowledge and understanding of the topic

### **LOA2**

Candidates should demonstrate a good understanding of key concepts related to these topics. These topics will be less frequently examined in the viva, with less detail expected.

### **LOA3**

Candidates should demonstrate a basic understanding of the overarching concepts and a knowledge of the general principles involved in the topic without the need for fine detail.

## **Pharmacology**

A detailed knowledge of pharmacology is an essential part of emergency medicine. The principles of pharmacokinetics, pharmacodynamics, therapeutics and toxicology must be understood as well as their application to emergency medicine.

The pharmacology of agents acting on the central nervous system, drugs acting on the cardiovascular system and drugs used in the treatment of infectious diseases should be known in some detail. Candidates should also have an adequate knowledge of antacids, analgesic agents, anti-inflammatory agents and drugs acting on the pulmonary and gastrointestinal systems. The pharmacology of drugs acting on the endocrine system and haematologic agents will not be stressed. However, candidates will be required to know the general principles of agents in this group and to demonstrate a working knowledge of those relevant to emergency medicine.

Candidates will be expected to be familiar with recent developments or reviews of drugs published in such journals as the *Medical Journal of Australia*, *British Medical Journal*, *New England Journal of Medicine*, *Current Therapeutics* and *Emergency Medicine Australasia*.

In approaching their study, candidates should use the prototypical drug of a class (where relevant) to identify the key pharmacodynamic or pharmacokinetic principles which can then be applied to other drugs in the same group as their knowledge is expanded.

**LOA 1**

Candidates should demonstrate a detailed knowledge of the pharmacokinetics and pharmacodynamics as they pertain to the topic.

**LOA 2**

Candidates should demonstrate an understanding of key concepts including detailed knowledge of pharmacodynamics and general principles of pharmacokinetics.

**LOA 3**

Candidates should demonstrate knowledge of the general principles involved in the topic. Where relevant, candidates may base their learning on the prototypical drug of the class