Royal Australasian College of Surgeons

Notes to Candidates
Cardiothoracic Surgery Fellowship Examination 2023

Candidates are reminded of their agreement to the Covid-19 Disclaimer as at the date of examination registration. This Note sets out the relevant information concerning the Fellowship Examination as at the date of this Note and should be read in conjunction with the Covid-19 Disclaimer. Candidates are aware of RACS' requirement to comply with both Australian and New Zealand laws, policies and restriction and acknowledge that while RACS is committed to provide updates relating to examination changes as soon as practicable, it is ultimately the responsibility of the candidate to be aware of such changes and act accordingly.

The following information is provided to help candidates prepare for the Fellowship Examination in Cardiothoracic Surgery. It is hoped that after reading this, candidates will have a better understanding of the structure of the examination and the level of knowledge and expertise expected of them. If candidates come to the examination adequately prepared their likelihood of success will be maximised. **The COVID 19 pandemic has no doubt disrupted training and preparation and candidates should not present for the exam unless they feel ready and are prepared.**

The benchmark for the Fellowship Examination is to assess whether the candidate is ready to undertake Cardiothoracic Surgery with a level of competency equivalent to that of a specialist in Cardiothoracic Surgery in his or her first year of independent practice. Implicit in this assessment is the expectation that a successful candidate will not only have sound knowledge of the range of conditions that Cardiothoracic Surgeons commonly encounter, but also, they will be able to appropriately assess, investigate and manage patients with these conditions.

1 SUMMARY OF CHANGES

The changes made to allow the examination to proceed in the setting of the pandemic do not affect content, standard setting or assessment of overall performance:

- Short Clinical cases will not have patients. Instead there will be three virtual cases in PowerPoint format with clinical information, imaging and primary investigations, similar to what may take place at a ward consultation.
- Long Clinical cases will not have patients. Instead a case will be presented in a PowerPoint format such as would be used for an in-depth case discussion at an MDT with selected imaging and test results.

2 THE EXAM CONTENT

The content of the exams is defined by the Curriculum as developed by the Board in Cardiothoracic Surgery. The Curriculum Modules are available on the RACS website:

https://www.surgeons.org/surgical-specialties/cardiothoracic/

The questions, scenarios or cases in each segment may refer to each of the levels of cognitive function (i.e., knowledge/comprehension, application/analysis or synthesis/evaluation) or, where appropriate, may be a global assessment.

Wherever possible, evaluation of the ten surgical competencies is taken into consideration throughout the assessment process. The relevant areas are the following:

MEDICAL EXPERTISE

- Relevant basic sciences outlined.
- Significance of symptoms/features identified and addressed.
- Potential pathologies identified.

JUDGEMENT – CLINICAL DECISION MAKING

History Taking and Examination:

- Exploration of the patient and condition.
- Description of physical examination.
- Demonstration of appropriate patient interaction.

Investigations:

- Identification of appropriate investigations.
- Justification for selection of investigations.
- Analysis of data from investigations.

Differential Diagnosis:

- Possible alternatives identified and considered.
- Justification of possible alternatives from evidence.
- Clinical implications of the alternatives considered.

Treatment and Management:

- Appropriately selected treatment.
- Safe and appropriate management plan that takes into account patient's needs.
- Consideration of on-going management requirements.
- Consideration of other required professional support.

TECHNICAL EXPERTISE

Description of Procedure:

- Surgical procedure appropriate for the condition and diagnosis.
- Significant potential risk factors identified.
- Attention to safety of patient, self and others.

COMMUNICATION

- With patients, families and referring practitioners.
- Clear, complete, and appropriate information for the patient.
- Appropriate communication of risks, advantages and alternatives of any management alternatives advocated.
- Prognosis reflecting the most likely outcomes.

LEADERSHIP AND MANAGEMENT

- Reasons for selection of investigations and treatment indicating consideration of patient needs and system constraints.

PROFESSIONALISM AND ETHICS

- Clear understanding of medico-legal and ethical issues in relation to the patient and their management.

COLLABORATION AND TEAMWORK

- Understanding of other healthcare professional's involvement and roles in patient management.
- Demonstrating ability to initiate.

3 THE MARKING SYSTEM

Examiners are paired for the duration of each examination; candidates will be assessed by a number of pairs of examiners. Each segment of the examination is marked separately without reference to other segments already completed. The results in each segment are collated by the senior examiner and the progress or final result of each candidate remains unknown to individual examiners until the meeting of the Specialty Court at the conclusion of the examination.

A candidate's performance is assessed by two examiners in each segment. Within each segment there is a pre-determined number of marking points.

The exam is marked using the Expanded Close Marking System (ECMS). Each marking point is scored according to the ECMS grades:

4	=	Well above the required standard.
3	=	At or above the required standard.
2	=	Below the required standard.
1	=	Well below the required standard.

The grades achieved in these marking points are used by each examiner to conclude their individual final mark and also used by the examining pair to determine a final consensus grade for that segment (also using the ECMS). Although each exam segment contains different numbers of Marking Points, all segments have equal weighting in determining if a candidate's overall performance is satisfactory.

At the conclusion of all segments, the Specialty Court in Cardiothoracic Surgery (comprising the Senior Examiner and all examiners participating in that exam) meets to discuss the candidates' results. Candidates who have been successful in all segments of the exam will pass the Examination. Candidates who have not passed all 7 segments of the exam may still pass the Examination if the Specialty Court considers that their overall performance throughout the exam was satisfactory. The overall performance is based on consideration of the distribution of all the marking point grades through all seven segments of the Examination.

4 THE STRUCTURE OF THE EXAMINATION

There are seven components (segments) consisting of two written and five clinical/viva examinations.

The written segments are completed approximately a month prior to the clinical/viva segments (in April and August). Candidates nominate which venue they wish to attend; venues are available in Adelaide, Brisbane, Melbourne, Sydney, Perth, in Australia and in Auckland and Wellington in Aotearoa New Zealand.

The Clinical/viva segments are held in May and September and they occur from Friday to Sunday.

The dates for the 2023 Fellowship Examinations can be found on the RACS website at the following address:

http://www.surgeons.org/becoming-a-surgeon/surgical-education-training/examinations/examination-datesand-locations/

5 WRITTEN EXAMINATION

This examination consists of two separate **150 minutes** segments which are sat approximately one month before the viva and clinical examinations. The main objective of the written examination is to test the breadth of the candidate's knowledge acquired during their training. The questions cover many aspects of the syllabus/curriculum. The questions evaluate clinical management and decision-making; aspects of anatomy, pharmacology, pathology, embryology, surgical anatomy and operative surgery may be included.

The Cardiothoracic Surgery written examination will be delivered electronically.

EXAMINATION ONE – 150 MINUTES

Value of questions proportional to time allocation:

- A clinical scenario with short answer, guided questions (50 minutes).
- The rest of the exam will be a combination of short answer questions of 30, 15 or 10 minutes duration.

The marking points are spread evenly across the exam with reference to the time involved in answering the questions.

EXAMINATION TWO – 150 MINUTES

Value of questions proportional to time allocation:

- A clinical scenario with short answer, guided questions (50 minutes).
- The rest of the exam will be a combination of short answer questions of 30, 15 or 10 minutes duration.

The marking points are spread evenly across the exam with reference to the time involved in answering the questions.

Candidates are encouraged to view the Demonstration version of the electronic format available at (log-in required):

http://www.surgeons.org/becoming-a-surgeon/surgical-education-training/examinations/fellowshipexamination/preparing-for-the-written-examination/

Important Information
1. *Answers are typed in the text box provided for each question. The amount of space provided for questions is unlimited.*
2. *Answers are autosaved every 60 seconds and whenever the 'Next' button is clicked.*
3. *If a candidate runs out of time, all answers will be submitted automatically and the examination will close.*
4. *Diagram paper will be provided. This is for diagrams, algorithms and other drawn exam techniques that are unsupported by the electronic delivery platform.*

6 CLINICAL/VIVAS

This component consists of five separate segments. At each viva the candidate is examined by a pair of examiners. The examiners will introduce themselves and will also wear name badges. They will introduce any observer which may be present for the examination and discussion of the candidate. The Examiners will address the candidates by their candidate number and not by their name. This is to help maintain anonymity and impartiality.

VIRTUAL LONG CASE – 60 MINUTES

A case will be presented in a PowerPoint format such as would be used for an in-depth case discussion at an MDT with selected imaging and test results. The candidate will have 30 minutes to review and organise their thoughts. This is followed by a discussion with the examiners on the significance of findings, diagnosis, interpretation of investigations presented initially, the need for further investigations with results presented during the viva, management, prognosis and follow up required (25 minutes).

VIRTUAL SHORT CASES – 75 MINUTES

Candidates will be shown three cases using PowerPoint format with clinical information, imaging and primary investigations, such as might take place at a ward consultation. Total time with cases will be 30 minutes, during which the candidate evaluates the information provided and formulates a plan for completing workup and management options. They will then be required to discuss the clinical diagnosis, view and comment on further investigations and scenarios and discuss final diagnosis, further investigations, management or other relevant matters. There will be 15 minutes of discussion with the examiners on each of the three cases (45 minutes in total with the examiners).

OPERATIVE SURGERY 1 (CARDIAC) – 40 MINUTES

Candidates will be examined on aspects of operative surgery which may include pre-operative decision making and workup, operative technique and strategies and management of operative and post-operative complications.

OPERATIVE SURGERY 2 (NON-CARDIAC) – 40 MINUTES

Candidates will be examined on aspects of operative surgery which may include pre-operative decision making and workup, operative technique and strategies and management of operative and post-operative complications.

CLINICAL SCENARIOS – 40 MINUTES

This segment will include critical care and imaging-based clinical scenarios, including emergency. The higher order thinking of a cardiothoracic surgeon will be examined. There will be between six to eight scenarios.

7 COPING WITH THE EXAMINATION

It is acknowledged that the Fellowship examination is a challenging experience for candidates, but a lifetime of surgical practice is also challenging. Members of the Court of Examiners have been carefully selected to have not only good knowledge of the training requirements and the curriculum for Cardiothoracic Surgery but also strong interest in the well-being of Trainees and Specialist International Medical Graduates and a demonstrated capacity for balanced and fair assessment of candidates.

Preparation, both physically and mentally is the key to a successful exam. Practice in completing written papers is essential, answering both the long and short question components is important, including getting the timing right. Practice in answering written questions is an excellent learning tool.

Undoubtedly a lot of time needs to be spent revising the theory that underpins our specialty in the lead up to the written papers and computer-based vivas. However, success in the clinical exams requires good interpersonal skills with patients, accurate examination skills and the ability to synthesise information provided to devise and discuss a reasonable treatment plan. It is important to maintain continuous contact and involvement with the clinical environment in the lead up to the exam. Treating every patient seen in the clinical setting in the lead up to the exam as a potential medium or short case will undoubtedly improve the performance in the clinical component of the exam.

Vivas should be treated as an interaction with colleagues rather than an interrogation by the examiners. Interaction with patients in the clinical vivas should be the same as the interaction with patients under care in everyday clinical situations. Is important to remember that the patients have taken time out to help with the exam; they need to be treated politely and professionally.

Candidates who find they struggle to answer a component of a viva should ask for clarification. The examiners will give the clarification or may move forward to another area. If the examiner suggests a candidate reconsider an answer – they should be trusted and the prompts followed. Examiners are trying to help candidates, not trick them.

For unsuccessful candidates a composite written report will be provided by the Senior Examiner to the Board Chair, the current Supervisor and candidate through the Examinations Department. This report will be sent within two weeks of the Fellowship Examination. Candidates should liaise with the Board Chair and Supervisor to arrange an interview within four weeks. A regional Examiner should not be approached directly.

For any queries prior to the examination, please contact the Examinations Department by email: examinations@surgeons.org.

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