

Assessment Public Report

Advanced Specialised Training in Emergency Medicine - Structured Assessment using Multiple Patient Scenarios

AST EM StAMPS 2022B

Purpose

This public report provides information for candidates, supervisors, educators and training organisations and is produced following each Emergency Medicine (EM) Structured Assessment using Multiple Patient Scenarios (StAMPS). It includes information on the conduct, outcome, statistics and commentary for the most recent delivery of the assessment. Past public reports are available on the <u>ACRRM website</u>.

Introduction

The StAMPS assessment is an oral assessment in which the candidate is presented eight realistic rural medicine scenarios. Candidates are asked three questions over 10 minutes for each scenario. StAMPS aims to test higher order thinking skills in a highly contextualised framework. Candidates are expected to explain how they would approach a given situation, demonstrating clinical reasoning, not only knowledge of facts in the emergency setting.

The 2022B AST EM StAMPS was held on 12-13 November 2022.

Overall Outcome

A total of 63 candidates sat the 2022B exam, with 32 of the candidates passing. The overall pass rate was 50.8%.

Assessment Statistics

The total number of candidates is consistent with other EM StAMPS exams. The pass rate is lower than the 2022A exam (64.9%).

Table 1: Breakdown of pass rates by number of attempts

Attempt number	Total Number	% of Cohort	Number Passed	Pass Rate (%)
1	50	79.4	30	60.0
2+	13	20.6	2	15.4
All	63	100.0	32	50.8

For historical context, the overall pass rates for previous exams are illustrated in the plots below:



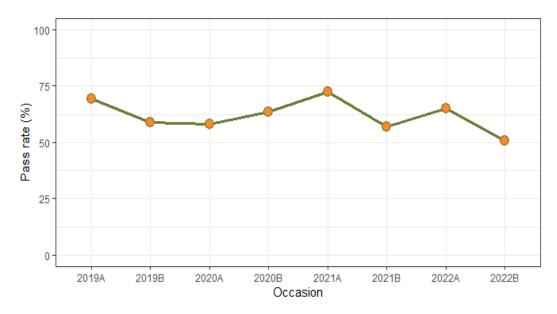


Figure 1: Historical Pass Rates between 2015 – 2022

Conduct of the Exam

The assessment was conducted according to the previously established processes for EM-StAMPS delivery via the Zoom platform.

Candidates were provided a 'Community Profile' that described the demographics, logistics and health service availability of a simulated rural community in which the assessment is set. This ensures consistency of assessment delivery and marking for all candidates regardless of their actual practice location. The Community Profile used was unchanged from recent previous EM-StAMPS exams. The current Community Profile is published on the ACRRM website and available to view by the general public.

Candidates were provided with 10 minutes of reading time prior to the start of the first scenario to review the provided printed material. 10 minutes were scheduled between scenarios to ensure there was at least 5 minutes for reading time and a buffer to accommodate for any technical audio-visual issues and/or allow troubleshooting. Candidates remained on one continuous videoconference link throughout the assessment with an ACRRM room monitor online and a nominated invigilator on-site. Examiners moved between the virtual rooms.

Further information may be found in the Handbook for Fellowship Assessment.

Quality Assurance

Extensive quality assurance and analysis is undertaken prior to, throughout and following the assessment to ensure that:

- scenarios are appropriate, at the correct level and consistent with previous AST EM StAMPS
- · assessors mark fairly and consistently
- any process issues are considered



In the weeks prior to the assessment, moderation sessions are held with individual assessors to "fine tune" scenarios to minimise any ambiguities, develop appropriate probing questions, and to consider "Borderline" and "Fail" criteria to be in line with the level expected of AST in EM StAMPS candidates.

Grading and Scoring Overview

Candidate performance is graded against a rubric and behaviour anchors on an 8-point linear scale. Each scenario offers the candidate the opportunity to earn up to 7 points on 6 items/domains which are scored independently.

- Management in Part 1 that incorporates relevant medical and rural contextual factors
- 2. Management in Part 2 that incorporates relevant medical and rural contextual factors
- 3. Management in Part 3 that incorporates relevant medical and rural contextual factors
- 4. Problem Definition & Systematic Approach
- 5. Communication & Professionalism
- 6. Flexibility to changing context

Scenario Development

The 2022B EM StAMPS exam consisted of previously used scenarios which were extensively rewritten to reflect contemporary practice and be of AST standard as well as aligning to BARS format.

As a quality assurance measure, all scenarios in this exam underwent review by the EM StAMPS review panel to confirm contemporary relevance and AST standard. This resulted in some updating, wording changes, adjustment of complexity and development of suggested 'probing questions' to be used by the examiners.

Once deemed suitable, all 8 scenarios for 2022B were put through a moderation process by the Lead Examiner with the examiners who delivered each scenario on the exam day.

Curriculum Blueprint

The table below provides a brief overview of the 2022B scenarios, the domains of the curriculum assessed and percentage of candidates who examiners felt "met the standard" in each scenario.

ACRRM Domains:

- 1. Provide expert medical care in all rural contexts
- 2. Provide primary care
- 3. Provide secondary medical care
- 4. Respond to medical emergencies
- 5. Apply a population health approach



- 6. Work with Aboriginal, Torres Strait Islander, and other culturally diverse communities to improve health and wellbeing
- 7. Practise medicine within an ethical, intellectual, and professional framework
- 8. Provide safe medical care while working in geographic and professional isolation

Topics covered and percentage pass rate:

Scenario	2022B Topics covered	Pass rate
1	Trauma	69.8%
2	Cardiology	54.0%
3	Abdominal pain in pregnancy	60.3%
4	Gastrointestinal – UGIB	69.8%
5	Severe asthma – paediatric	69.8%
6	Neurosurgery	66.7%
7	Paediatric DKA	73.0%
8	Obstetric – eclamptic seizure	66.7%

The pass rates of individual scenarios varied from 54-73%. This was similar to previous years, although scenario 2 was lower than usual. (In previous cohorts, 2020A, 2020B, 2021A and 2021B, 2022A the pass rates of individual scenarios ranged from 63-95%, 68-88%, 78-94% and 60-86%, 57 - 92% respectively).

The Cronbach alpha for the internal equivalence of scenario total scores was 0.81. This implies very high internal consistency or "equivalence" of the scenarios. Broken down further, within item domain the alpha values are shown in the following table.

Cronbach alpha within item domains:

Management	Structure	Communication	Flexibility
0.798	0.811	0.712	0.75

Although Cronbach's alpha is commonly calculated and reported, it should be noted that it is not a measure of validity or quality.

Candidate and Educator Guidance

The following commentary is provided to assist candidates in understanding their results, future candidates in preparation for this assessment and educators who are supporting candidates. Brief individualised feedback is routinely provided, but this does not entirely capture the differences between success and non-success. Therefore, it is recommended that individual results and feedback be read in conjunction with the comments below.

Passing the AST EM StAMPS requires a candidate to demonstrate their ability to manage emergency presentations as outlined below:



- Autonomously stabilise and initially manage all emergency patients across all Australian Triage categories.
- Competently provide definitive emergency medical care for most emergency patients and determine when additional support from experienced colleagues is required (Which may be through distance telehealth technology).
- Provide continuity of care for patients in the Emergency Department pending admission to hospital, transfer to another facility, or awaiting discharge.
- Provide collegial support and clinical advice to colleagues in more remote settings via telehealth technology
- Take a leadership role in the Emergency Department as the most senior doctor on duty

Further information may be found in the <u>Advanced Specialised Training Emergency</u> Medicine Guidebook.

In addition to the abilities required in the CGT curriculum for EM, doctors achieving AST in EM are required to be able to competently provide definitive emergency medical care including common emergency medicine procedural interventions for individual patients across all presentations including Australian Triage Category 1 and 2.

ACRRM and the Regional Training Organisations have a number of preparation activities available to candidates to prepare for this assessment including an online StAMPS module that is now available to all members. It is noted that candidates who have significant current or recent EM experience appear to be significantly better prepared to sit the EM StAMPS exam.

Survey Feedback

Following the exam, assessors, candidates and invigilators are encouraged to provide feedback via an online survey. Feedback is reviewed and considered accordingly and may be used to drive continuous improvement and improve candidate, invigilator and assessor experience for future exams.

Based on feedback received from the 2022B cohort of candidates and invigilators, the following themes were identified:

- Strong preference for a virtual delivery allowing doctors to attempt exams across the country without having to travel
- The exam was a positive experience and very well organised
- The assessment team was very professional and supportive; examiners are professional and friendly
- Trouble shooting and dealing with technical issues are dealt with rapidly and efficiently by the assessment team



Evaluation

Led by the Assessment Committee, ACRRM undertakes a cycle of quality improvement in its suite of assessments, including the EM StAMPS.

ACRRM has an ongoing commitment to improve the transparency and reliability of its assessments and to ensure its assessment systems are comprehensible to Registrars and Educators. Work is ongoing to review and update the 'Community Profile', assessor recruitment, training, professional development, feedback and to improve qualitative feedback for candidates.

Acknowledgements

ACRRM would like to thank everyone who contributed to this assessment including the other Lead Clinical team members, scenario writers, assessors, quality assurance assessors, reviewer, ACRRM staff, invigilators and organisations who provided the venues.

The College would also like to thank the Registrars who participated and the Medical Educators who assisted in preparing them for this assessment.