

Student Evaluation Report

AI virtual-patient OSCE practice platform

Australian Medical Students' Association context | Anonymised survey analysis

55

SURVEY RESPONSES

47

UNIQUE RESPONDENTS

80%

WOULD MISS MEKSI

93%

RECOMMENDED/PLANNING

Prepared for discussion with AMSA medical education stakeholders and MEKSI partners.

Survey period: 16 Sep 2022 - 03 Feb 2023.

This report uses aggregated and anonymised survey responses only. Direct identifiers were excluded from analysis and are not reproduced.

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1. Executive Summary

This report summarises 55 survey responses collected from medical students and users of MEKSI, an AI virtual-patient platform designed to support OSCE preparation and clinical consultation practice. The survey was administered between September 2022 and February 2023 and captures early evidence about student need, perceived value, recommendation behaviour, and priorities for further development.

The results indicate a strong educational and product-market signal. Eighty per cent of respondents reported that they would be either very or somewhat disappointed if they could no longer use MEKSI. Ninety-three per cent had either already recommended MEKSI or were planning to do so. Respondents repeatedly described the platform as interactive, convenient, realistic, and valuable for self-directed practice outside scheduled clinical teaching.

The clearest educational opportunity is not simply to expand access, but to deepen the learning loop. Students wanted more detailed post-case feedback, clearer explanation of missed items, better guidance around differential diagnosis and management, and improved recognition of varied question phrasing. These findings suggest that MEKSI is already solving an important access and practice problem, but that its educational impact would increase if each simulated consultation produced more explicit formative feedback.

Key finding	Interpretation
Strong retention signal	44 of 55 respondents (80%) would be disappointed if MEKSI were unavailable.
High referral intent	51 of 55 respondents (93%) had recommended MEKSI or intended to.
Clear target learner group	Junior medical students were the most frequently identified beneficiary group (34 responses; 62%).
Educational value proposition	The dominant benefits were practice-based learning, ability to train at any time, and consultation-skills development.
Development priority	The most common improvement need was richer feedback and guidance after case completion.

2. Context and Purpose

AMSA positions itself as the peak representative body for Australian medical students with a mandate to connect, inform and represent the emerging health workforce. This report is therefore framed as a national student-education evaluation, not as a single-university teaching audit.

Medical students often need repeated, low-stakes OSCE practice, but access to peers, tutors, simulated patients, and structured feedback is uneven. AI virtual-patient systems may help fill this gap by allowing students to practise history-taking, clinical reasoning and communication at times that suit their schedules.

The purpose of this report is to translate survey findings into a publication-quality evaluation document that can support partner discussions, AMSA reporting, pilot planning, and future research design.

3. Methodology and Data Handling

The analysis draws on 55 response records from a 10-item survey. The survey included categorical items, multi-select benefit responses and open-text questions asking students to describe alternatives, improvement needs and the most enjoyable aspects of using MEKSI.

The analysis was descriptive. Categorical responses were summarised as counts and percentages. Multi-select benefit responses were separated into their component selections. Open-text responses were reviewed thematically and grouped into recurring categories. Representative quotations were lightly corrected only where required for readability; names and email addresses are not included.

Survey feature	Description
Response records	55
Approximate unique respondents	47
Survey period	16 September 2022 to 03 February 2023
Question types	Categorical, multi-select and free-text
Privacy handling	Identifiers excluded; public reporting should remain anonymised

4. Respondent Profile

Respondents came primarily through social media and most identified junior medical students as the group most likely to benefit from MEKSI. This suggests the platform resonated strongly with students early in clinical training, when structured consultation practice and pattern recognition are still developing.

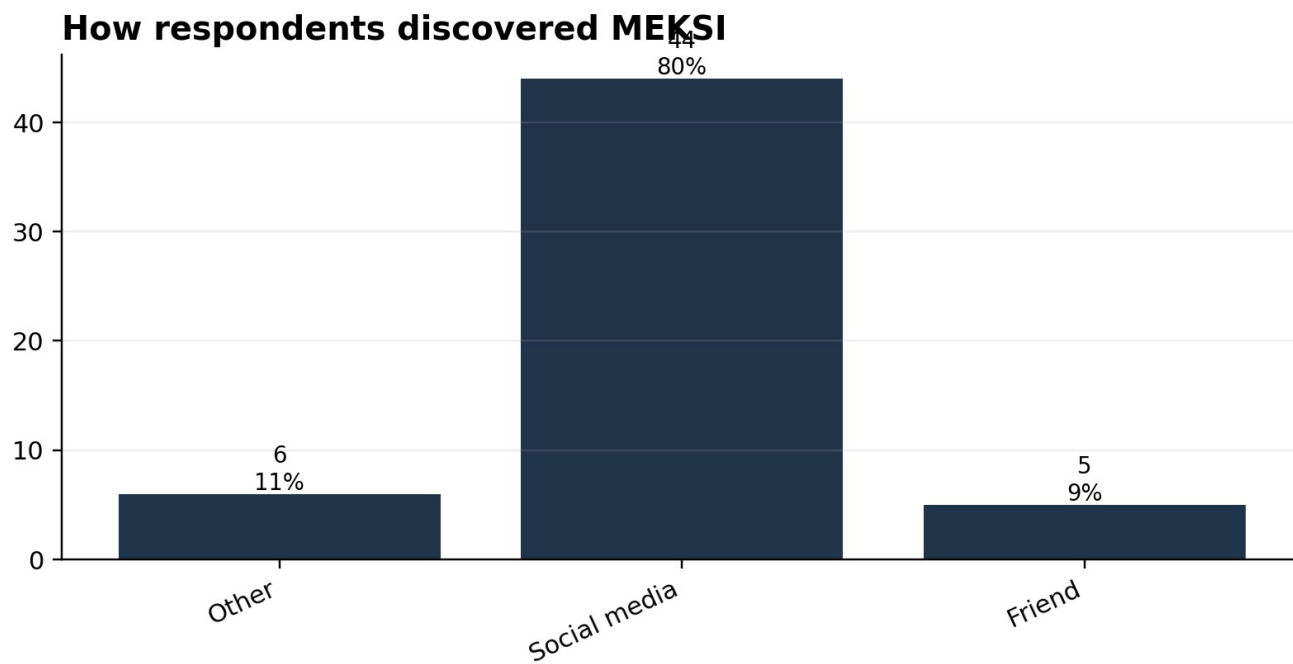


Figure 1. Discovery channel for MEKSI among survey respondents.

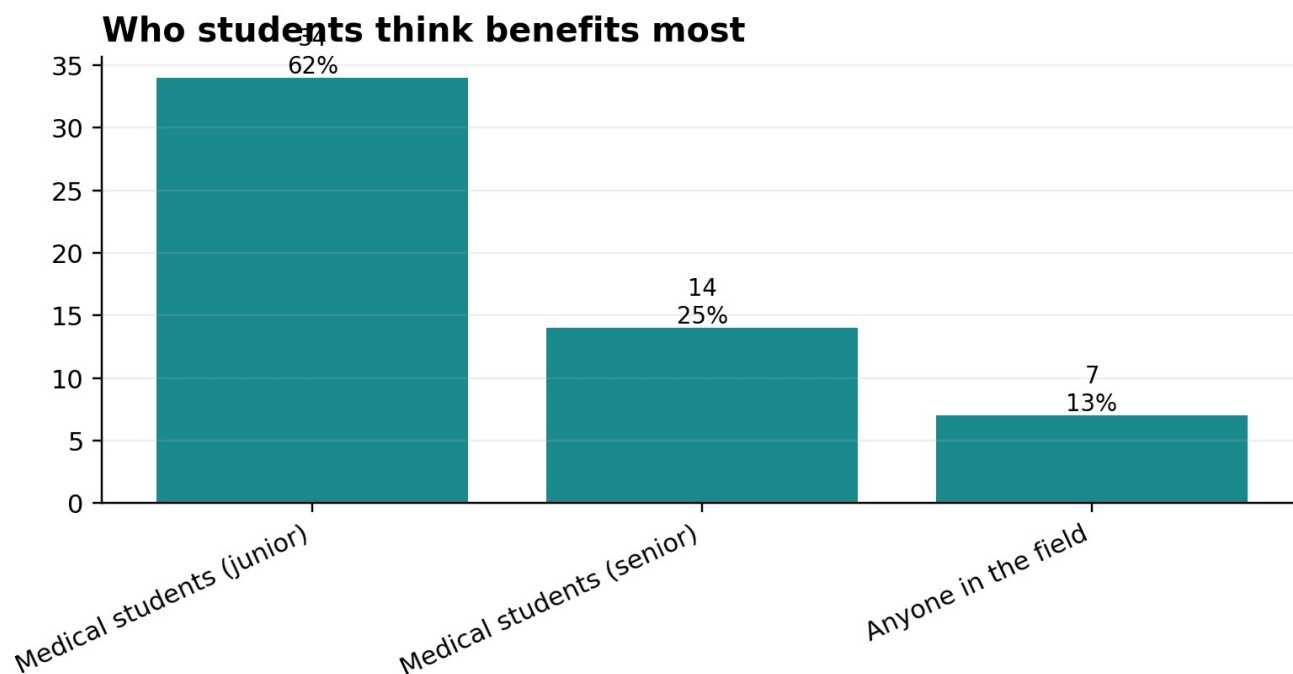


Figure 2. Student perception of the learner groups most likely to benefit from MEKSI.

5. Market Signal and Recommendation Behaviour

The product-market-fit style question provides a useful early indicator of perceived value. A combined 44 respondents indicated that they would be very or somewhat disappointed if MEKSI were no longer available. This is a strong signal for an early-stage educational product, particularly because several respondents also identified existing alternatives such as OSCE banks, Geeky Medics, peer practice or textbooks.

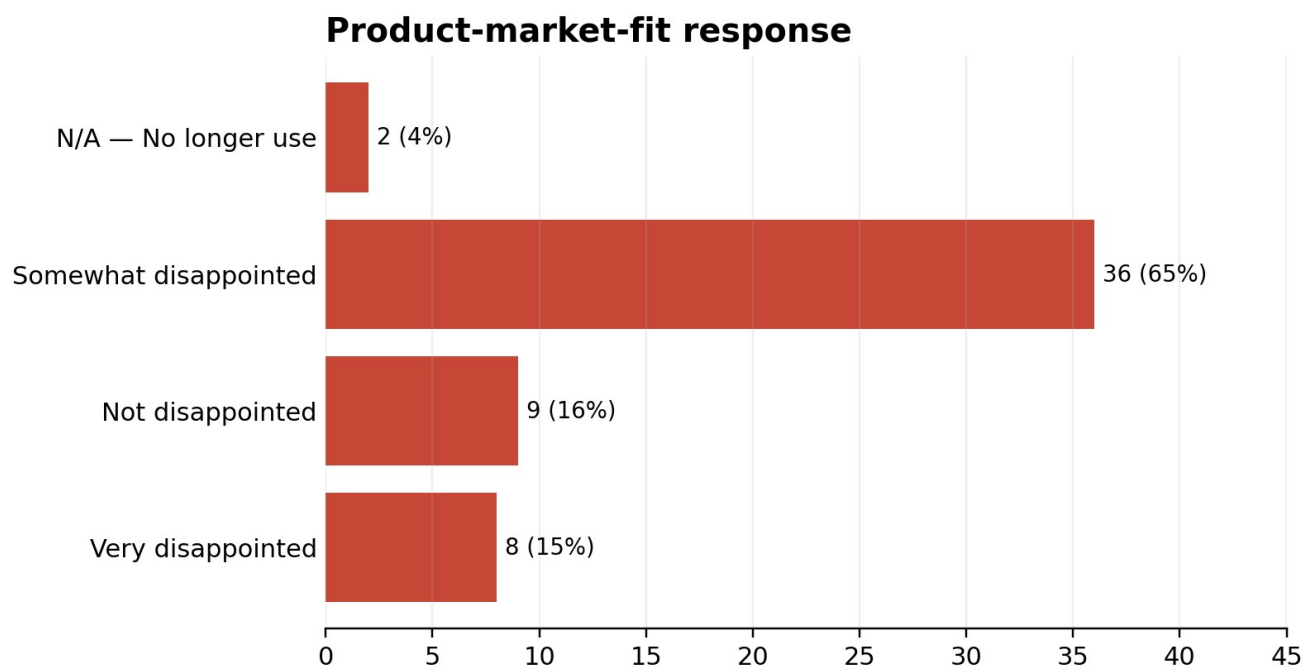


Figure 3. Response to the question: how would you feel if you could no longer use MEKSI?

Recommendation behaviour was also encouraging. Fifteen respondents had already recommended MEKSI, and 36 indicated that they had not yet recommended it but planned to do so. Only four respondents stated that they would not recommend the platform.

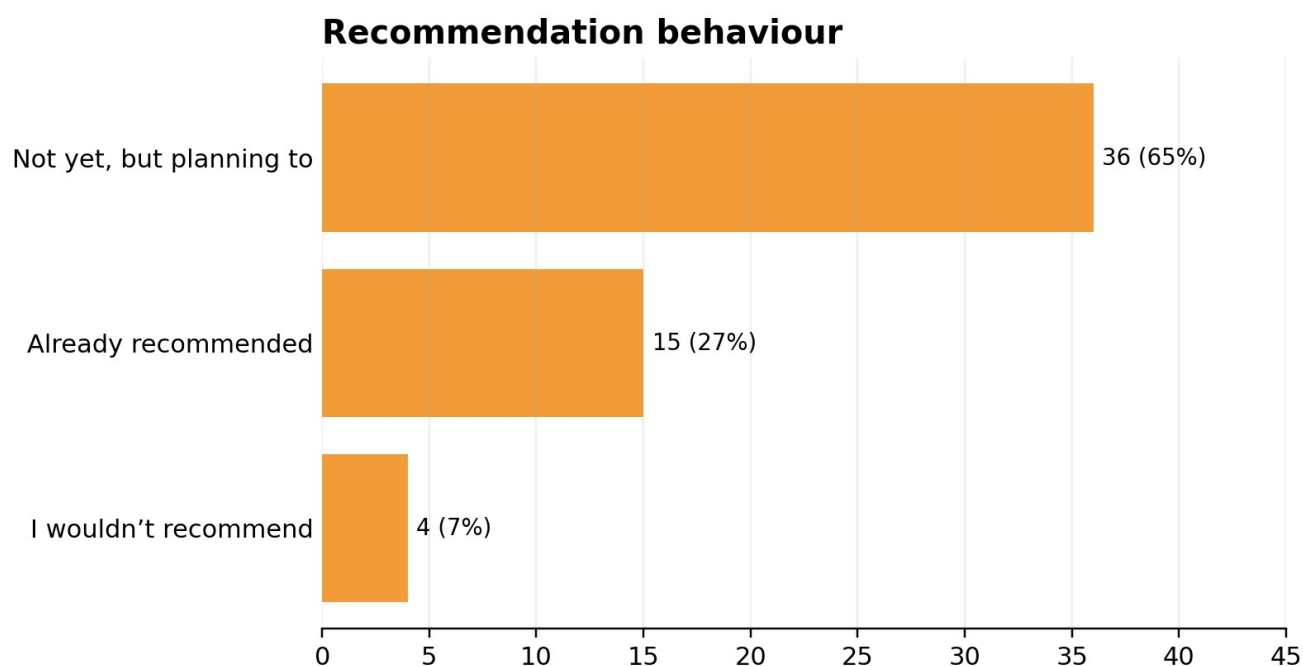


Figure 4. Student recommendation behaviour and intent.

6. Educational Value

Three benefits dominated responses: practice-based learning, anytime access and consultation-skills development. The pattern is important: students did not describe MEKSI only as a content repository. They

described it as a practice environment where they could interact with a patient, test clinical reasoning and receive immediate signals about progress.

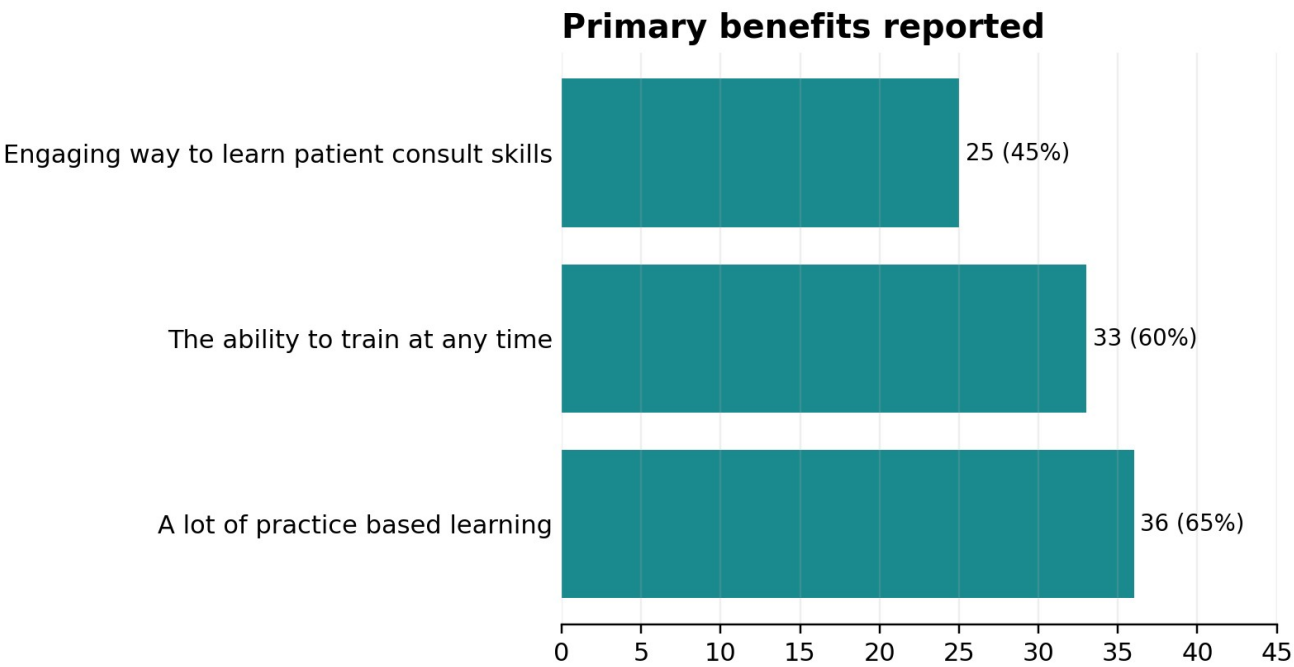


Figure 5. Primary benefits reported by respondents. Multi-select responses are counted separately.

Open-text comments reinforced this interpretation. Students valued the ability to practise when peers were unavailable, the realism of patient responses, the progress bars and the interactive nature of the consultation. These features appear to address a genuine unmet need in OSCE preparation: repeated, structured practice without requiring another student, tutor or simulated patient to be present.

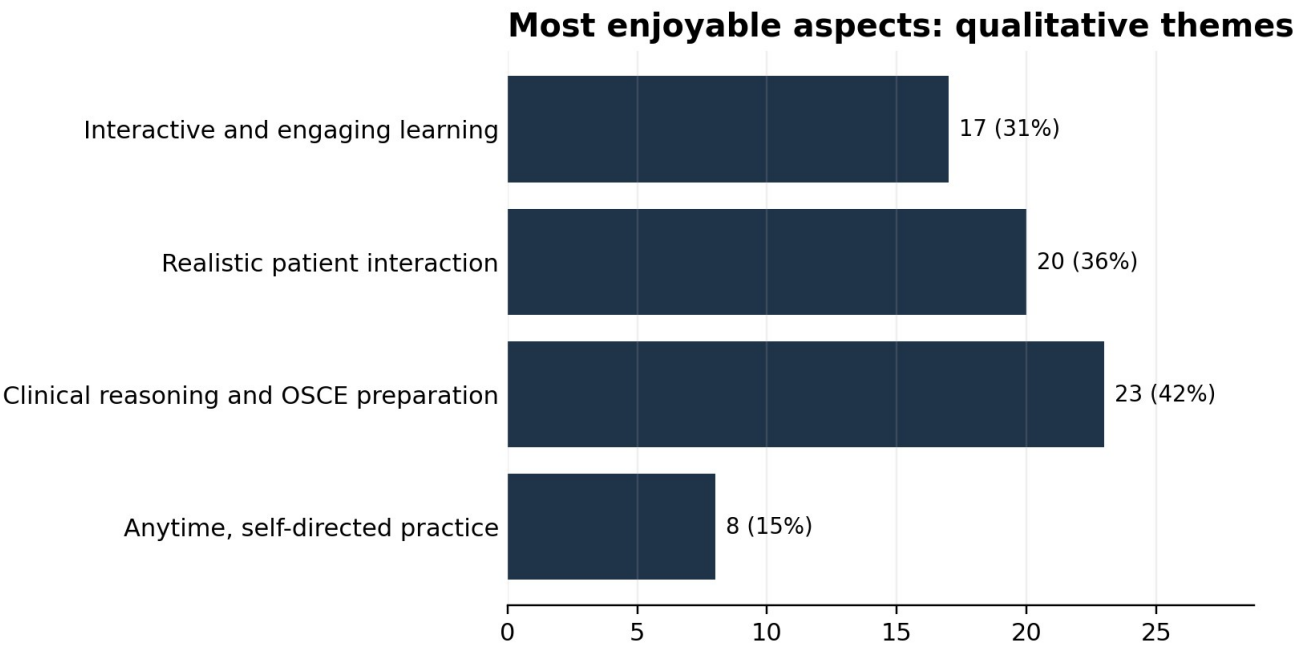


Figure 6. Thematic coding of most enjoyable aspects of using MEKSI.

7. Platform Experience and Improvement Priorities

The survey also provides a clear development roadmap. The most frequent request was for more detailed feedback after case completion, including missed questions, exemplar responses, differential diagnosis guidance and clearer management feedback. This is educationally significant: students were not merely asking for more content, but for stronger formative assessment.

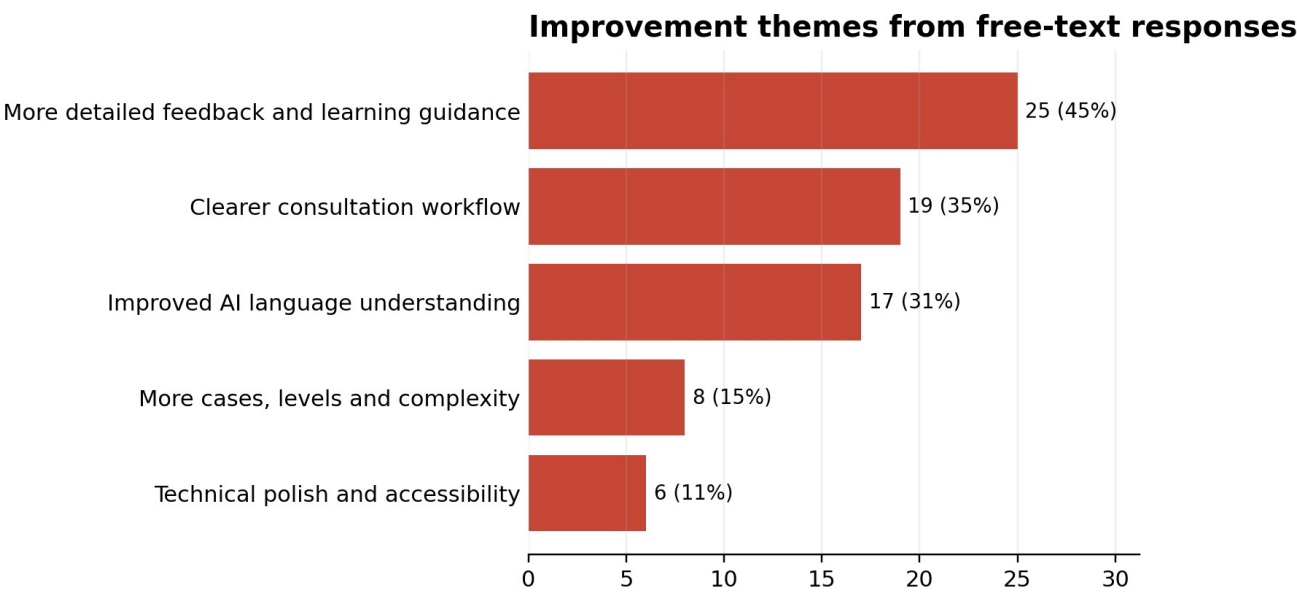


Figure 7. Major improvement themes identified in free-text responses.

The second major theme was AI language understanding. Respondents reported occasional difficulty when the system did not recognise reasonable phrasing or when management statements were interpreted as history-taking questions. This suggests that natural-language tolerance and clearer task separation will be important for scaling.

Improvement priority	Evidence from survey responses	Implication
Feedback depth	Repeated requests for clearer feedback, missed items and exemplar answers	Develop richer end-of-case formative reports.
Question recognition	Comments about phrasing, keywords and AI understanding	Expand accepted phrase variants and improve recovery prompts.
Case library	Requests for more cases, scenarios and levels	Create cases by year level, specialty and difficulty.
Workflow clarity	Comments about history, examination, investigations and management sections	Make station phases explicit or configurable.
Technical polish	Comments about speed, screen fit, lost work and app format	Prioritise reliability and responsive design before broad deployment.

8. Qualitative Feedback Themes

Theme 1: MEKSI enables flexible, self-directed practice

Students repeatedly highlighted that MEKSI made OSCE practice possible without needing a peer, tutor or scheduled session. This flexibility is particularly relevant for geographically dispersed students, students on placement, and students preparing outside semester teaching hours.

"The realistic nature of it and ability to practice from anywhere."

"The ability to OSCE practice at anytime."

"That we can do it at any time."

Theme 2: The interaction is engaging and motivating

The progress bars, live responses and simulated patient interaction were perceived as enjoyable and motivating. Several respondents described satisfaction in seeing progress indicators update as they worked through a consultation.

"The bars showing progress motivated me to think broader."

"Feeling the satisfaction of achieving the flags as I progress through consultation."

"It was a fun and interactive way to consolidate my learning."

Theme 3: Feedback is the highest-value improvement opportunity

Many students wanted a clearer learning summary after each case. They wanted to know what they missed, how to improve, and how differential diagnoses and management could be better expressed.

"Please explain the gaps in my knowledge after the case is complete."

"More detailed feedback with investigations listed and important questions to ask."

"Better feedback after the case is complete. How to interpret the evaluation."

Theme 4: AI understanding is good but not yet consistently robust

Students generally valued the AI interaction, but some noted that reasonable clinical phrasing was not always recognised. This is an expected early-stage limitation for open-ended clinical simulation and should be addressed through broader phrase mapping and clearer prompts.

"More sensitive AI response to questions and different phrasing."

"There are still a lot of questions that the system does not understand."

"Could be improved to detect a wider variety of ways of answering a question."

Theme 5: Learners want more cases and tailored difficulty

Respondents requested more cases, levels and specialty coverage. Some specifically wanted cases tailored to junior versus senior medical students.

"Increase the number of cases."

"Different levels of complexity so pre-clinical students can use the best of it."

"More scenarios would be amazing."

9. Discussion

The survey findings suggest that MEKSI is addressing a real gap in medical student learning: access to repeatable, low-stakes OSCE practice. Existing alternatives named by respondents were largely peer practice, OSCE banks, textbooks and websites. These resources remain useful, but they do not replicate the same conversational practice environment or provide instant progress feedback in the same way.

The strongest educational interpretation is that MEKSI should be positioned not as a replacement for clinical teaching, but as a scalable rehearsal environment. It can help students practise the mechanics of history-taking, communication and diagnostic reasoning before higher-stakes in-person practice. This framing is likely to be more credible for medical educators and AMSA stakeholders than claiming that AI simulation can replace tutors or simulated patients.

The findings also identify a clear next stage for development. The first version of MEKSI appears to have succeeded in engagement, access and realism. The next version should strengthen feedback, calibration, and curriculum alignment. This is the difference between an engaging practice tool and a rigorous formative learning platform.

10. Recommendations

Build a structured end-of-case feedback report

Include missed history items, clinical reasoning gaps, differential diagnosis prompts, investigation interpretation and management advice.

Develop case levels for junior and senior students

Create clearly labelled cases for pre-clinical, early clinical and final-year learners.

Improve AI recognition of valid clinical phrasing

Expand accepted question variants and provide helpful prompts when students ask clinically reasonable questions the system cannot classify.

Separate consultation phases where appropriate

Offer optional sections for history, examination, investigations, diagnosis and management to reduce confusion.

Prepare an AMSA-facing publication version

Use anonymised aggregate findings, remove raw identifiers, include limitations and clearly state that this was an evaluation rather than a controlled research study.

Plan a prospective research pilot

For publishable academic research, collect ethics/consent documentation, pre/post confidence ratings, usage analytics and OSCE outcome comparisons where feasible.

11. Publication Readiness

This work is suitable for publication as a professional evaluation report, AMSA partner report, conference poster, sponsor update or educational white paper, provided identifiers are removed and permissions are obtained for use of aggregated survey findings and quotations. It should not yet be presented as a peer-reviewed effectiveness

study because the current dataset is observational, self-selected and does not include a comparison group or validated pre/post outcome measures.

Publication pathway	Readiness	Required next steps
AMSA/MEKSI public report	High	Anonymise, obtain permissions, final design review.
Conference poster or showcase	Moderate to high	Frame as student evaluation; include limitations.
Medical education white paper	High	Add literature background and partner commentary.
Peer-reviewed research article	Emerging	Requires ethics pathway, prospective design and stronger outcome measures.

12. Limitations and Conclusion

The findings should be interpreted in light of several limitations. The survey sample was self-selected, the questionnaire was not a validated psychometric instrument, and several respondents contributed more than one response. Results therefore indicate perceived value and development priorities rather than definitive learning outcomes.

Despite these limitations, the survey provides a strong early signal. Students valued MEKSI because it made OSCE practice more accessible, interactive and realistic. The most important next step is to transform this engagement into a stronger educational feedback loop. With improved post-case feedback, broader case coverage and refined AI response handling, MEKSI could become a valuable scalable adjunct to medical student clinical-skills preparation.

Appendix A - Survey Instrument

14. 1. Timestamp
15. 2. Email address [excluded from report]
16. 3. How would you feel if you could no longer use MEKSI!?
17. 4. Have you recommended MEKSI to anyone?
18. 5. How did you discover MEKSI?
19. 6. What would you likely use as an alternative if MEKSI were no longer available?
20. 7. What is the primary benefit that you have received from MEKSI?
21. 8. What type of person do you think would benefit most from MEKSI?
22. 9. How can we improve MEKSI to better meet your needs?
23. 10. What was the best / most enjoyable aspect of using MEKSI?

Appendix B - Anonymised Representative Comments

The following comments were selected to illustrate recurring themes. Direct identifiers have been removed.

Theme	Representative comment
Improvement	There was no feedback for the case, so there was no way to learn from what we missed.
Improvement	Clearer feedback - exemplar answers.
Improvement	Please explain the gaps in my knowledge after the case is complete.
Improvement	More detailed feedback reports.
Improvement	More clarity around the differential diagnoses section.
Enjoyable aspect	The realistic nature of it and ability to practice from anywhere.
Enjoyable aspect	The progress bars challenged me to continue thinking about what questions could be asked.
Enjoyable aspect	Being able to practice OSCEs with a response from a simulated patient.
Enjoyable aspect	Interactive and an enjoyable way to learn.
Enjoyable aspect	Really good tool to practice differentials and cluster questions.

Prepared by MEKSI. This report is an original AMSA-oriented evaluation format and does not reproduce official AMSA templates or logos.