

Reflections and learning from SESAM 2026

Key takeaways for MED, Lothian



1

Simulation is moving from education into system improvement

- Simulation adds greatest value when embedded in how organisations learn, improve and make decisions.
- Translational examples show direct impact on patient safety, service redesign and governance.
- Visible leadership, champions and mechanisms turn learning into meaningful change.
- Simulation faculty are partners in organisational improvement, not just educators.

What this means for MED

Strengthen links with quality improvement, patient safety and governance.

Position simulation as a tool for system learning as well as workforce education.

2

Relationships matter more than technology

- Human relationships are the most important driver of effective learning.
- Psychological safety, facilitation, mentoring, storytelling and debriefing create environments where learners can engage and learn.
- Key skills: icebreakers, signposting, checking understanding, balancing challenge with support.
- Mentoring requires flexibility between supportive and directive approaches.

What this means for MED

Continue to prioritise faculty development in facilitation, debriefing, communication and mentorship.

Recognise these as core capabilities, not supplementary skills.

3

Inclusivity is a design principle, not an add-on

- EDAI must be embedded across simulation design, facilitation, research and technology.
- Go beyond representation—examine how practices may unintentionally exclude.
- Value diverse perspectives, cultural humility and equity-focused debriefing.
- Inclusion is an ongoing practice requiring critical reflection.

What this means for MED

Weave EDAI through faculty development, curriculum design, debriefing and scholarship.

Embed inclusion as a continuous practice, not a separate initiative.

4

Innovation should solve real problems

- Use technology because it solves a real educational need, not because it is new.
- Strong examples addressed clear learning needs (e.g., AI for assets, digital prescribing, access).
- Simple, low-cost approaches (e.g., VEMS) can be highly effective through good design.
- Focus on learning impact, not novelty.

What this means for MED

Continue to experiment with AI, XR and digital innovation.

Ensure technology must demonstrably add value to learning, patient safety or system improvement.

5

We need to prepare learners for a more complex world

- Learners face misinformation, mistrust, pandemics, polarisation, inequity and complex interprofessional environments.
- Trust is a critical resource in future crises.
- Simulation should prepare learners for difficult conversations, uncertainty and ethical tensions.
- Realism includes social, relational and cultural dynamics—not just clinical tasks.

What this means for MED

Develop simulation scenarios that address misinformation, mistrust, cultural complexity, conflict and communication under uncertainty.

Prepare clinicians for the realities of future practice.

THE BIG PICTURE

People first. Inclusion built in. Purposeful innovation. Preparing for the realities of tomorrow.



1. Simulation is moving from education into system improvement

One of the most consistent messages was that simulation creates its greatest value when it becomes part of how healthcare organisations learn, improve and make decisions, rather than existing as a standalone educational intervention. Translational simulation examples demonstrate how simulation expertise can contribute directly to patient safety, service redesign and organisational governance.

Impactful programmes require visible leadership, dedicated champions and mechanisms to ensure learning leads to meaningful change. The emerging vision is that simulation faculty are not simply educators, but partners in organisational improvement. **This suggests an opportunity for MED to strengthen links with quality improvement, patient safety and governance structures, positioning simulation as a tool for system learning rather than solely workforce education.**

2. Relationships matter more than technology

Despite extensive discussion of AI, XR and emerging technologies, the conference repeatedly returned to a simple truth: human relationships remain the most important determinant of effective learning. Psychological safety, facilitation skills, mentoring, storytelling, clinical debriefing and workshop design all centred on how educators create environments where learners feel able to engage, contribute and learn. Sessions highlighted the importance of thoughtful icebreakers, effective signposting, checking understanding, and balancing challenge with support. Storytelling was reframed as an educational intervention that should serve the learner rather than the storyteller, while mentoring discussions emphasised flexibility between supportive and directive approaches. **This suggests MED should continue prioritising faculty development in facilitation, debriefing, communication and mentorship, recognising these as core capabilities rather than supplementary skills.**

3. Inclusivity is a design principle, not an add-on

EDAI emerged throughout the conference as a thread running across simulation design, facilitation, research and technology. Participants were challenged to think beyond representation alone and consider how educational practices themselves may unintentionally exclude or disadvantage learners. Discussions highlighted cultural differences in communication, the limitations of universal "best practice" models, the need to value perspectives beyond the Global North and the importance of cultural humility. Other sessions explored equity-focused debriefing, VR to better understand discrimination, and strategies for embedding inclusion without tokenism. The common message was that inclusion is an ongoing practice requiring critical reflection rather than a checklist. **This creates an opportunity for MED to weave EDAI considerations through faculty development, curriculum design, debriefing and scholarship rather than treating them as separate initiatives.**

4. Innovation should solve real problems

The conference offered a balanced perspective on innovation. While AI and extended reality generated considerable interest, presenters consistently cautioned against adopting technology simply because it is new. The strongest examples were those where technology addressed a clearly defined educational need, whether generating simulation assets, creating

digital prescribing environments or enhancing access and inclusivity. Equally powerful were demonstrations showing that simple, low-cost approaches such as VEMS could achieve excellent outcomes through thoughtful design. Across both high- and low-tech examples, the focus remained on learning rather than novelty. **This suggests MED should continue to experiment with AI, XR and digital innovation, while maintaining a clear principle that technology must demonstrably add value to learning, patient safety or system improvement.**

5. We need to prepare learners for a more complex world

Several sessions highlighted emerging challenges that healthcare professionals must navigate, including misinformation, mistrust, pandemics, social polarisation, inequity and increasingly complex interprofessional environments. Sylvie Briand's discussion of the "infodemic" was particularly powerful, emphasising that trust may be one of the most important resources in future healthcare crises. This broadens the scope of simulation from practising clinical skills to preparing professionals for difficult conversations, uncertainty, competing narratives and ethical tensions. The conference challenged educators to think about realism not only in clinical tasks but also in the social and relational dynamics learners encounter in practice. **This suggests opportunities to develop simulation scenarios focused on misinformation, mistrust, cultural complexity, conflict and communication under uncertainty, helping prepare clinicians for the realities of modern healthcare.**

6. Strong scholarship is essential for sustainable progress

A recurring concern was the gap between simulation innovation and the evidence supporting it. Many presentations relied heavily on participant satisfaction and self-reported outcomes, while validity evidence, behavioural impact and patient outcomes were often less developed. There was also a strong emphasis on reflexivity, methodological rigour and the importance of critical feedback in shaping research. Alongside enthusiasm for innovation came a call to resist scaling interventions prematurely before sufficient evidence exists. The conference reinforced that high-quality simulation requires not only creativity but also robust scholarship. **This suggests MED should continue strengthening evaluation strategies, prioritising validity evidence, implementation science and outcome measures that extend beyond learner perceptions to demonstrate meaningful impact.**

Overarching message

Perhaps the most important insight from SESAM was that the future of simulation is not primarily about new technologies or increasingly sophisticated modalities. Instead, it is about using simulation to strengthen relationships, improve systems, promote equity, build trust and generate meaningful organisational learning. Technology will remain important, but only insofar as it helps achieve these broader aims. **For MED, the challenge is less about doing more simulation and more about embedding simulation more deeply into how the organisation learns, improves and cares for patients.**

Key reading

Psychological Safety, Communication & Faculty Development

[Not just ‘what you say’ but ‘how you say it’: co-creating psychological safety through micro-communication skills in simulation-based education - Journal of Healthcare Simulation](#)

A peer-reviewed article examining human factors, teamwork, communication and learning within complex systems.

[Social evaluative threat across individual, relational, and collective selves - ScienceDirect](#)

A review exploring how perceived judgement and evaluation affect behaviour, stress and performance at individual and group levels.

Goffman's Impression Management

[Impression Management - an overview | ScienceDirect Topics](#)

A summary of Erving Goffman's sociological theory describing how people manage identity, credibility and social impressions during interactions.

[Embracing the tension between vulnerability and credibility: ‘intellectual candour’ in health professions education](#)

A Medical Education paper examining educational conversations, feedback and learner engagement.

[Critical design choices in healthcare simulation education: a 4C/ID perspective on design that leads to transfer](#)

A conceptual paper describing how simulation can be designed to improve transfer of learning into clinical practice, using the Four-Component Instructional Design (4C/ID) framework to guide educational decisions.

Equity, Diversity, Accessibility and Inclusion (EDAI)

[The role of simulation in Equity, Diversity, Accessibility, and Inclusivity – EDAI | Springer Nature Link](#)

A special collection examining equity, diversity, accessibility and inclusion in simulation-based education.

[Simulation in Healthcare](#)

A paper discussing diversity and representation issues within simulation technology and educational tools.

Simulated Participants and Simulated Patients

[ASPE Website](#)

An international professional organisation supporting educators who work with simulated and standardised patients.

[The Association of Standardized Patient Educators \(ASPE\) Standards of Best Practice \(SOBP\)](#)

A consensus document setting out standards for recruiting, training and supporting simulated participants.

Translational Simulation & Systems Improvement

Eve Purdy – Translational Simulation Resource

Link: https://www.linkedin.com/posts/eve-purdy-2300ab299_simulation-translationalsim-teamculture-activity-7385218871777091584-lrf9

A professional reflection on translational simulation, team culture and organisational learning. [[chat](#) | [Txt](#)]

Extended Reality (XR)

Utstein Report on Extended Reality in Healthcare Simulation

Link: [Utstein Report PDF](#)

An international consensus report outlining priorities and recommendations for future XR research and implementation in healthcare simulation.

Visually Enhanced Mental Simulation (VEMS)

Mental Rehearsal in Surgery

Link: [BJS Open article](#)

A research paper examining the role of mental rehearsal and cognitive practice in procedural performance.

Mental Practice in Medical Education

Link: [JGME article](#)

A paper exploring the educational use of mental practice and rehearsal techniques in healthcare training.

Recommendations for the Design and Delivery of Visually Enhanced Mental Simulation

Link: [Bond University publication](#)

A practical guide describing principles for designing and delivering VEMS activities.

Artificial Intelligence

NotebookLM

Link: [NotebookLM](#)

A Google AI platform that enables users to analyse, interrogate, summarise and generate content from uploaded source - you can use it to type up audio transcripts for free !

Learning Objectives in Simulation-Based Education GPT

Link: [Custom GPT](#)

A custom AI tool designed to generate simulation learning objectives using educational frameworks.

Autonomous AI Agents

Link: [Harvard Business School article](#)

An article examining the emerging concept of AI systems that can undertake tasks with increasing levels of autonomy.

AI-Generated Image Bias

Link: [British Journal of Anaesthesia article](#)

A paper investigating bias and stereotyping within AI-generated medical imagery.

AI Bias and Healthcare Education

Link: [PMC article](#)

A paper exploring bias, fairness and responsible use of artificial intelligence in healthcare education and associated fields.

What ideas could we test out ?

1. Simulation as a strategic improvement capability, not just an educational intervention

Key takeaway

One of the strongest themes was the growing use of simulation as an organisational improvement tool. Examples from Dublin demonstrated simulation faculty sitting on governance and review groups (e.g. sepsis, emergency department flow, patient safety reviews), allowing simulation to be used proactively to identify latent safety threats and test improvements before implementation.

What made us stop and think?

The idea that simulation units should have a formal role in organisational governance rather than operating solely as education departments.

Drivers supported

- Embedding simulation into organisational priorities
- Translational simulation
- System improvement
- Work-as-done

Golden threads

- Governance, reporting and improvement
- Collaboration and co-design
- Sustainability

Could we test this in Lothian?

Yes.

What would need to be true?

- Representation of MED within patient safety and quality structures
- Clear mechanism for escalation of simulation findings
- Agreement that simulation data contributes to organisational learning

2. Clinical debriefing as organisational learning

Key takeaway

Presentations on clinical debriefing showed that successful programmes rely on visible leadership, dedicated champions and feedback loops demonstrating that debrief findings lead to real change.

What made us stop and think?

Many successful programmes had permanent staff roles whose responsibility included sustaining debriefing activity.

Drivers supported

- Psychological safety
- Speaking up
- System improvement
- Faculty development

Golden threads

- Sustainability
- Governance
- Collaboration

Could we test this in Lothian?

Already underway, but we could strengthen feedback mechanisms showing teams what changed as a result of debriefing.

What would need to be true?

- Protected faculty time
- Leadership sponsorship
- Visible organisational response to learning

3. Storytelling

Key takeaway

Multiple sessions explored storytelling in education and debriefing.

What made us stop and think?

The challenge to ask: *"Am I telling this story for the learner or for me?"*

There was significant discussion about balancing vulnerability and credibility ("intellectual candour"), and recognising when stories create productive reflection versus unnecessary emotional exposure.

Drivers supported

- Faculty development

- Coaching and mentoring
- Psychological safety

Golden threads

- Inclusivity
- Knowledge and scholarship

Could we test this in Lothian?

Yes – Schwartz rounds ? More experienced members talking about their mistakes ?

What would need to be true?

- Faculty development time
- Safe spaces for practice and reflection

4. Inclusion is a practice, not a project

Key takeaway

EDAI featured throughout SESAM rather than being confined to dedicated sessions.

What made us stop and think?

Several presenters challenged the idea of universal "best practice", arguing that educational recommendations often reflect assumptions from the Global North and may not translate globally.

Debra Nestel's suggestion to move from "best practice" toward "guiding principles" felt particularly powerful.

Drivers supported

- Psychological safety
- Interprofessional learning

Golden threads

- Inclusivity
- Collaboration

Could we test this in Lothian?

yes

What would need to be true?

- Routine inclusion review of programmes
- Faculty development around cultural humility
- Diverse voices in programme design

5. Equity-focused simulation and debriefing

Key takeaway

Several sessions explored simulation as a means of understanding discrimination, power and inequity.

What made us stop and think?

Using VR to experience discrimination from different perspectives, and the concept of "debriefing with an equity lens".

Drivers supported

- Psychological safety
- Real-world practice

Golden threads

- Inclusivity
- Collaboration

Could we test this in Lothian?

Potentially through pilot debriefing approaches and EDAL-focused faculty development.

What would need to be true?

- Facilitator capability
 - Organisational support
 - Safe learning environments
-

6. AI is becoming a practical design tool

Key takeaway

AI was presented less as a replacement for educators and more as a productivity tool.

What made us stop and think?

Groups were creating simulation resources, interfaces and educational tools in minutes using generative AI.

The possibility of a simulated HEPMA environment for Foundation doctors appeared particularly relevant.

Drivers supported

- Digital integration
- Preparing people for real roles

Golden threads

- Digital integration
- Sustainability

Could we test this in Lothian?

Yes.

What would need to be true?

- Digital expertise
 - Governance around AI use
 - Information governance safeguards
-

7. AI literacy is now a faculty development issue

Key takeaway

Several sessions highlighted risks around AI bias.

What made us stop and think?

Examples of AI-generated images reinforcing stereotypes related to gender, age and ethnicity.

The message was not "don't use AI", but "educate people to use it responsibly".

Drivers supported

- Faculty development
- Preparing people for future practice

Golden threads

- Digital integration
- Inclusivity

Could we test this in Lothian?

Yes.

What would need to be true?

- AI literacy training
 - Guidance for responsible use
-

8. Simple often beats sophisticated

Key takeaway

One of the most memorable workshops was VEMS (Visually Enhanced Mental Simulation).

What made us stop and think?

Highly effective learning using cardboard, marker pens and simple visual cues.

Drivers supported

- Faculty development

Golden threads

- Sustainability
- Joy
- Knowledge and scholarship

Could we test this in Lothian?

Yes

What would need to be true?

- Faculty familiarisation
 - Identification of suitable use cases
-

9. Preparing learners for mistrust and misinformation

Key takeaway

WHO's Sylvie Briand highlighted misinformation and mistrust as major drivers of pandemic vulnerability.

What made us stop and think?

The possibility of simulating interactions with patients whose beliefs are shaped by misinformation or loss of trust.

Drivers supported

- Preparing for real-world practice
- Communication skills

Golden threads

- Inclusivity
- Collaboration

Could we test this in Lothian?

Yes.

What would need to be true?

- Scenario development
- Simulated participant training
- Skilled debriefing