Journal of

AoME

ACADEMY OF MEDICAL EDUCATORS

Volume 1
February to December 2026



About the Journal

JAoME is an official journal of the Academy of Medical Educators. It is a diamond open access peer-reviewed journal freely available to readers worldwide, including developing nations. The journal welcomes papers on any aspect of health professions education and is dedicated to advancing the field of medical education through the dissemination of high-quality research, innovation, and scholarly discourse. Our mission is to support educators, researchers, and clinicians in shaping the future of medical education across undergraduate, postgraduate, and continuing professional development.

The Journal of the Academy of Medical Educators (JAoME) is distributed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. Original copyright remains with the contributing author(s) and a citation should be made when the article is quoted, used or referred to in another work. Only non-commercial uses of the work are permitted, and derivatives or adaptations of the work are prohibited.

JAoME is an imprint of Cardiff University Press, an innovative open-access publisher of academic research, where 'open-access' means free for both readers and writers. cardiffuniversitypress.org

Journal DOI
10.18573/ISSN. 2977-5981
Issue DOI
10.18573/jaome.v1

Journal design by Hugh Griffiths

Cardiff University Press

The Journal of the Academy of Medical Educators

Enhancing case-based learning with a simulated multidisciplinary team meeting: A forum theatre innovation

Andrew O'Malley, Alison Anderson, Keiran Brown, Natalie Buchanan, Charlie Chung, Theresa Ferrie, Angela Flynn, Veronica O'Carroll

Abstract

Simulation-based education and interprofessional collaborative practice are essential within contemporary medical curricula. This paper details an educational innovation in the Scottish Graduate Entry Medicine programme, which integrated a simulated multidisciplinary team into existing case-based learning sessions. Using forum theatre techniques, a stroke rehabilitation case was explored by a panel of clinical professionals. Directed facilitation enabled active student participation. Evaluation demonstrated enhanced student engagement, critical reflection on interprofessional roles, and positive regulatory feedback. This approach provides a sustainable framework for embedding clinical simulation to prepare undergraduate students for collaborative practice.

doi.org/10.18573/jaome.12

Accepted for publication 22 September 2026

To cite this article

O'Malley A, Anderson A, Brown K, Buchanan N, Chung C, Ferrie T, Flynn A, O'Carroll V **Enhancing case-based learning with a simulated multidisciplinary team meeting: A forum theatre innovation** *The Journal of the Academy of Medical Educators.* 2026 1(1). doi.org/10.18573/jaome.12

The Journal of the Academy of Medical Educators

Enhancing case-based learning with a simulated multidisciplinary team meeting: A forum theatre innovation

Andrew O'Malley, Alison Anderson, Keiran Brown, Natalie Buchanan, Charlie Chung, Theresa Ferrie, Angela Flynn, Veronica O'Carroll

Author information

Andrew O'Malley
School of Medicine
University of St Andrews
Corresponding author
aso2@st-andrews.ac.uk

Alison Anderson
NHS Fife
Alison.Anderson3@nhs.scot

Keiran Brown
NHS Lothian
keiran.brown@nhs.scot

Natalie Buchanan
NHS Fife
Natalie.Buchanan@nhs.scot

Charlie Chung
NHS Lothian
charlie.chung2@nhs.scot

Theresa Ferrie
NHS Tayside & Centre for Public Health Nutrition Research
University of Dundee
t.ferrie@dundee.ac.uk

Angela Flynn
School of Medicine
University of St Andrews
af238@st-andrews.ac.uk

Veronica O'Carroll
School of Nursing and Midwifery
University of Limerick
veronica.ocarroll@ul.ie

Introduction

This paper describes how the Scottish Graduate Entry Medicine (ScotGEM) programme has addressed the challenge of sustainably embedding simulation-based education and interprofessional learning within an already crowded undergraduate timetable, through a novel educational innovation: integrating a simulated multidisciplinary team (SimMDT), delivered using forum theatre techniques, into an existing case-based learning (CBL) plenary.

Simulation-based education (SBE) has become a cornerstone of contemporary health professions education offering learners the opportunity to experience realistic clinical scenarios and improve confidence in clinical skills,[1] and enhance patient safety. Within undergraduate programs, particularly in accelerated or graduate-entry curricula, there is a drive to embed experiential learning that reflects the complexities of real-world healthcare as well as preparing students for working as part of a wider health and social care team. ScotGEM stands at the forefront of this movement, capitalising on CBL and plenary discussions to foster critical thinking and collaborative skills among learners.

Medical education increasingly recognises the importance of familiarising medical students with the multidisciplinary team (MDT) and the interprofessional collaborative practice that they will encounter when they qualify as doctors. Collaborative practice is crucial for improving patient care, safety outcomes, preparing future doctors for integrated healthcare systems[2,3] and sustaining the health and care workforce. The evidence to support the positive impact that SBE has on the quality of care is growing[4] and the value of SBE is increasingly recognised as a technique for improving technical and non-technical skills,[5] particularly teamwork and communication.[3] These are skills which need to be developed for both students as well as qualified staff,[6] yet in already packed medical curricula, it can be challenging to identify sustained ways of embedding SBE over time.

The aims of this paper are threefold: (i) to describe the rationale, design and operational delivery of the SimMDT; (ii) to share reflections and feedback gathered over nine years of iterative delivery; and (iii) to offer a transferable model that interprofessional educators in other settings can adapt for their own curricula.

What we did

ScotGEM

ScotGEM is Scotland's first graduate-entry medical programme, developed to address the evolving healthcare needs of remote, rural, and underserved communities while fostering a new generation of adaptable and resilient medical practitioners.[7] Established through a partnership between three universities and four Scottish health boards, ScotGEM offers a four-year MBChB programme designed for graduates from diverse academic backgrounds.

The programme prioritises community-based medical education with early, significant clinical exposure, including innovative rural and general practice placements. ScotGEM's approach centres on CBL, immersive clinical experiences, and developing leadership, teamwork, and reflective skills. Students engage directly with Scotland's healthcare system, addressing disparities and practising patient-centred care in rural settings through collaborative teamwork.

Case-based learning

CBL is an active learning method that uses real-life scenarios to enhance student engagement and critical thinking skills in health professions education.[8-10] As students research and apply newly acquired information back to the case, students hone their critical-thinking[11] and clinical-reasoning skills,[12,13] while simultaneously increasing student motivation, satisfaction, and engagement.[14]

In ScotGEM, each CBL week follows a consistent structure comprising fixed-membership groups of approximately six students. On day one, a tutor-facilitated opening session introduces the case (typically a presenting complaint, a brief patient narrative and an initial set of observations or investigation results), which acts as a trigger for the subsequent learning. Students are provided with learning objectives to accompany the case, which are mapped to various self-

directed learning packages, clinical placements and aligned lectures or laboratory sessions. The week culminates in a closing tutor-group session in which students present and consolidate their learning, followed by a cohort-wide plenary that integrates the case across professional perspectives, and allows students to review their findings, clarify questions, and share perspectives. These discussions foster idea exchange, reinforce main learning objectives, and allow instructors to address misconceptions and connect content to real-world practice. Plenaries help integrate key concepts, ensuring a thorough and practical learning experience.

To illustrate, the 'left-sided weakness' case (used as the basis for the SimMDT described later in this paper) introduces Elizabeth, an 82-year-old widow with a background of hypertension, untreated hypercholesterolaemia, bilateral shoulder arthritis and a recent smoking history, who collapses with sudden left-sided facial droop while playing poker with friends at a Mexican-themed evening in her local hotel. The case then unfolds through a series of investigations (including occupational therapy assessment) and a management plan, drawing students into the full stroke pathway from acute presentation through to rehabilitation.

Forum theatre

Forum theatre is an interactive theatrical technique used in medical education to enhance communication skills and empathy among healthcare students and professionals. Originating from Augusto Boal's "Theatre of the Oppressed," it involves short scenes depicting challenging situations, which are then replayed with audience participation to explore alternative solutions.[15-17] Studies have shown that forum theatre can significantly increase empathy scores in medical students, particularly when students actively participate as actors.[18] This approach has been successfully employed to address various topics in healthcare education, including professionalism, difficult patient encounters, and patient bias towards healthcare professionals.[15,18,19] Forum theatre creates a safe, dynamic learning environment where participants can practice and refine their communication strategies, ultimately improving patient care and provider-patient relationships.[16,19]

In forum theatre, a facilitator (sometimes referred to as the 'Joker') plays a central role in guiding the process and maintaining a dynamic and participatory environment. The facilitator's key responsibilities include:

1. Framing the context: introducing the themes, purpose, and structure of the session, ensuring that participants understand the aims and feel psychologically safe to engage.

2. Mediating interaction: during the performance, the facilitator invites audience members (known as 'spect-actors') to stop the action and take the place of characters, proposing alternative approaches to the conflict depicted. The facilitator manages these interventions to ensure they are constructive and in keeping with the spirit of the piece.

3. Maintaining ethical boundaries: the facilitator ensures respectful dialogue, intervenes to prevent harmful or oppressive contributions, and preserves the dignity of all participants.

4. Encouraging critical reflection: after interventions, the facilitator leads discussion, encouraging participants to reflect on the implications of each proposed strategy, its feasibility, and its ethical dimensions.

5. Balancing power: they work to equalise power between performers and audience, disrupting traditional hierarchies and empowering participants to envision and rehearse social change.

Overall, the facilitator in forum theatre acts as a mediator, provocateur, and guide to ensure the process remains participatory, critical, and focused on transformation.

SimMDT

Bringing these elements together (CBL plenaries and forum theatre-inspired techniques) provided an opportunity to address the well-documented need for more integrated, interactive, and context-specific learning experiences in medical education via a simulated multidisciplinary team (SimMDT).

Building on the weekly CBL case 'left-sided

weakness', we repurposed the plenary session into a SimMDT. In our adaptation, forum theatre is enacted live by a panel of practising clinicians rather than by actors, video clips or pre-recorded vignettes. We recruited experienced clinical professionals and briefed them on their roles, ensuring accurate representation of diverse perspectives. Invitations were extended to local clinicians who could draw on real-life anecdotes and experiences that would align with the students' clinical placements. The professionals included in our SimMDT panel were a physician, nurse, pharmacist, speech and language therapist, physiotherapist, occupational therapist and dietitian. The panel is seated together at the front of a standard tiered lecture theatre (or, in hybrid and virtual deliveries, displayed together on a shared video conferencing platform), with roving microphones for student interventions and, in hybrid mode, a dedicated audio-visual technician and back-up meeting link.

Each member of the SimMDT prepared broad talking points and potential points of conflict or decision-making. To maintain fidelity, minimal scripting was provided to guide the discussion, but improvisation was encouraged to reflect authentic clinical practice. This structure allowed flexibility for learners to pose questions and shape the direction of the discussion according to the forum theatre format. An informal pre-session huddle (approximately one hour) is held before the plenary to align on running order and contingency arrangements.

The whole cohort of approximately 70 students participates in-person as a single audience. Students are prepared through the preceding CBL week on the case, a brief written orientation circulated one week in advance explaining the forum theatre format and how to intervene, and a short verbal restatement of these expectations at the start of the session.

The SimMDT plenary runs as a single 90-minute session: approximately 10 minutes of theoretical framing on the role of the MDT, 5 minutes orienting students to the forum theatre method and the rules of engagement, around 60 minutes of simulated MDT discussion with student interventions, and a final 15 minutes of structured debrief. Within this framework, panellists improvise in the manner of an authentic MDT meeting, which preserves the unpredictability and realism that students find engaging.

In SimMDT, the facilitator is a senior clinician-educator with experience in both simulation-based education and small-group facilitation who is responsible for framing the session, managing 'spect-actor' interventions from the student audience, protecting psychological safety and leading the closing debrief; in our setting this is typically a member of the ScotGEM academic team familiar with both the CBL case and the panel members.

What we found

Feedback from students in the module evaluation questionnaire indicated support for the simulated MDT approach, with one respondent noting that they liked the SimMDT session because it "allowed us to see how an MDT works" and another feedback point stating that "everyone really gained a lot of insight from it. Nice for teaching to take a different approach." Discussions with staff following the event elicited that students enjoyed the "real-life" feel of the interaction and the opportunities for direct engagement.

The UK medical regulator, the General Medical Council (GMC) attended the SimMDT as it was highlighted by the faculty as an example of quality education. In their published feedback[20] they noted that the outcomes for the session were clearly communicated to the students, and that the session "focused on students' clinical skills (assessment, investigation, and management of care) and communication skills (how do the healthcare team interact effectively with each other to provide good patient care)".

Members of the SimMDT, the facilitator and the course leaders also noted that the SimMDT outperformed traditional plenaries in that students were motivated to ask more questions, challenge assumptions, and reflect on the roles of different healthcare professionals.

The SimMDT has now been delivered annually for 9 years and has been delivered in in-person, hybrid and virtual formats. Providing a remote attendance option allowed clinicians to participate

despite challenging schedules. Additionally, the logistics and ease of scheduling experts contributed to a more consistent and higher-fidelity experience, effectively simulating how modern MDTs often operate across multiple sites or via teleconference.

The format has evolved iteratively over the nine years of delivery in direct response to student, panel and faculty feedback. Early iterations relied more heavily on improvisation; in response to first-year student feedback that key decision points were sometimes missed within the conversational flow, we now ask panellists to signpost junctures more overtly (for example, by pausing to name a decision before discussing it). During the COVID-19 pandemic the SimMDT was delivered fully virtually via video conferencing; this required clearer turn-taking conventions, a named technical facilitator, and the use of the chat function as an additional channel for student interventions. The virtual experience proved sufficiently successful that elements of it (notably remote panellist participation) have been retained in the current hybrid model.

What we learned

Designing and delivering the SimMDT has underscored the importance of balancing authenticity with explicit pedagogical structure. While the improvised dialogue between experienced clinicians heightened realism, first-year learners sometimes struggled to recognise the intended decision points; accordingly, we now brief panellists to articulate key junctures more overtly without compromising the conversational flow. Assembling a fully representative stroke-rehabilitation team proved feasible but required early scheduling and, on occasion, remote participation to accommodate rota constraints; these measures have secured consistent attendance by allied health professionals and preserved the credibility of the exercise. Technical contingencies (e.g. a back-up meeting link and a designated technical facilitator) have been included as standard after isolated audio-visual failures reminded us that even minor disruptions detract from learning.

Our reflections also highlight scalability and sustainability considerations. Once faculty were familiar with the forum theatre method, the format transferred readily to other case-based learning scenarios, yet it remains labour-intensive and therefore depends on workload recognition and the cultivation of a wider pool of trained facilitators.

It should be noted that the evaluation evidence presented here is predominantly qualitative and narrative in nature, drawn from free-text responses in the module evaluation questionnaire, informal post-session discussions with panellists and faculty, and the GMC's published quality-assurance commentary; no bespoke quantitative (e.g. Likert-scale) instrument has been conducted to date, and addressing this is a stated priority for future evaluation cycles. We plan to embed a bespoke question on the plenary within the University's end-of-year module evaluation questionnaire, supplementing existing narrative feedback with quantitative data and enabling longitudinal comparison across cohorts.

A further factor contributing to the sustainability of the SimMDT has been the professional value perceived by participating healthcare staff. Several contributors highlighted that the session offered a rare and meaningful opportunity to showcase their clinical reasoning, professional identity, and decision-making processes directly to medical students. This visibility was seen as both professionally affirming and educationally worthwhile, enhancing engagement and encouraging continued involvement across successive iterations of the exercise.

By documenting these operational lessons and outlining the next steps for interprofessional integration and formal evaluation, we hope to offer colleagues a realistic blueprint for embedding a sustainable, team-based simulation within the undergraduate curriculum and for evidencing its contribution to graduates' preparedness for collaborative clinical practice.

Conclusion

The SimMDT demonstrates that combining CBL with forum theatre offers a practical and sustainable means of bringing the realities of interprofessional collaborative practice into the undergraduate medical curriculum. Over nine

years of iterative delivery, the format has proved adaptable across in-person, hybrid and virtual modalities, has been positively received by students, panellists, faculty and the UK medical regulator, and has continued to evolve in response to feedback. The principal contribution of this paper is to describe, in sufficient operational detail, how such a session can be designed, prepared and delivered; we hope that the model proves transferable to other interprofessional educators seeking to embed authentic team-based simulation within their own curricula, and we look forward to strengthening the evidence base for its impact through more structured quantitative evaluation in future cohorts.

References

1. Alrashidi N, Pasay An E, Alrashedi MS, Alqarni AS, Gonzales F, Bassuni EM, et al. Effects of simulation in improving the self-confidence of student nurses in clinical practice: a systematic review. BMC Med Educ. 2023;23(1):815. https://doi.org/10.1186/s12909-023-04793-1 PMid:37904153 PMCid:PMC10614341

2. Chandrashekar A, Mohan J. Preparing for the National Health Service: the importance of teamwork training in the United Kingdom medical school curriculum. Adv Med Educ Pract. 2019;10:679-88. https://doi.org/10.2147/AMEP.S203333 PMid:31686942 PMCid:PMC6709809

3. Stroud J, Jenkins K, Bhandary S, Papadimos T. Putting the pieces together: The role of multidisciplinary simulation in medical education. International Journal of Academic Medicine. 2017;3(1). https://doi.org/10.4103/IJAM.IJAM_44_17

4. Donoghue A, Navarro K, Diederich E, Auerbach M, Cheng A. Deliberate practice and mastery learning in resuscitation education: A scoping review. Resusc Plus. 2021;6:100137. https://doi.org/10.1016/j.resplu.2021.100137 PMid:34223392 PMCid:PMC8244416

5. Sollid SJM, Dieckman P, Aase K, Soreide E, Ringsted C, Ostergaard D. Five Topics Health Care Simulation Can Address to Improve Patient Safety: Results From a Consensus Process. J Patient Saf. 2019;15(2):111-20. https://doi.org/10.1097/PTS.0000000000000254 PMid:27023646

6. Dawe J, Cronshaw H, Frerk C. Learning from the multidisciplinary team: advancing patient care through collaboration. Br J Hosp Med (Lond). 2024;85(5):1-4. https://doi.org/10.12968/hmed.2023.0387 PMid:38815972

7. Graham F, Dowell J, Flynn A, Gupta S, MacFarlane AD, O'Malley A, et al. Development and innovation in a new distributed medical programme: Scottish Graduate Entry Medicine (ScotGEM). Frontiers in Medicine. 2025;12. https://doi.org/10.3389/fmed.2025.1586851 PMid:40727524 PMCid:PMC12301851

8. Thistlethwaite JE, Davies D, Ekeocha S, Kidd JM, MacDougall C, Matthews P, et al. The effectiveness of case-based learning in health professional education. A BEME systematic review: BEME Guide No. 23. Med Teach. 2012;34(6):e421-44. https://doi.org/10.3109/0142159X.2012.680939 PMid:22578051 PMCid:PMC13097326

9. Sutyak JP, Lebeau RB, O'Donnell AM. Unstructured cases in case-based learning benefit students with primary care career preferences. Am J Surg. 1998;175(6):503-7. https://doi.org/10.1016/S0002-9610(98)00076-2 PMid:9645782

10. Koh D, Chia KS, Jeyaratnam J, Chia SE, Singh J. Case studies in occupational medicine for medical undergraduate training. Occup Med (Lond). 1995;45(1):27-30. https://doi.org/10.1093/occmed/45.1.27

11. Sapeni MA-AR, Said S. The effectiveness of case-based learning in increasing critical thinking of nursing students: A literature review. Enfermería Clínica. 2020;30:182-5. https://doi.org/10.1016/j.enfcli.2019.07.073

12. Cen XY, Hua Y, Niu S, Yu T. Application of case-based learning in medical student education: a meta-analysis. Eur Rev Med Pharmacol Sci. 2021;25(8):3173-81.

13. Tsekhmister Y. Effectiveness of case-based learning in medical and pharmacy education: A meta-analysis. Electronic Journal of General Medicine. 2023;20(5). https://doi.org/10.29333/ejgm/13315

14. Kaur G, Rehncy J, Kahal KS, Singh J, Sharma V, Matreja PS, et al. Case-Based Learning as an Effective Tool in Teaching Pharmacology to Undergraduate Medical Students in a Large Group Setting. J Med Educ Curric Dev. 2020;7:2382120520920640. https://doi.org/10.1177/2382120520920640 PMid:32435693 PMCid:PMC7223199

15. Brett-MacLean P, Yiu V, Farooq A. Exploring Professionalism in Undergraduate Medical and Dental Education through Forum Theatre. Journal for Learning through the Arts: A Research Journal on Arts Integration in Schools and Communities. 2012;8(1). https://doi.org/10.21977/D9812660

16. Middlewick Y, Kettle TJ, Wilson JJ. Curtains up! Using forum theatre to rehearse the art of communication in healthcare education. Nurse Educ Pract. 2012;12(3):139-42. https://doi.org/10.1016/j.nepr.2011.10.010 PMid:22094107

17. Boal A. Theatre of the Oppressed. London: Pluto Press; 2000.

18. Sevrain-Goideau M, Gohier B, Bellanger W, Annweiler C, Campone M, Coutant R. Forum theater staging of difficult encounters with patients to increase empathy in students: evaluation of efficacy at The University of Angers Medical School. BMC Med Educ. 2020;20(1):58. https://doi.org/10.1186/s12909-020-1965-4 PMid:32093709 PMCid:PMC7041274

19. Rizk N, Jones S, Shaw MH, Morgan A. Using Forum Theater as a Teaching Tool to Combat Patient Bias Directed Toward Health Care Professionals. MedEdPORTAL. 2020;16:11022. https://doi.org/10.15766/mep_2374-8265.11022 PMid:33241117 PMCid:PMC7678028

20. General Medical Council. Annual Quality Assurance Summary; ScotGEM. 2025. https://www.gmc-uk.org/cdn/documents/scotgem-annual-quality-assurance-summary---2025_pdf-116155588.pdf

Declarations

Funding: N/A

Conflicts of Interest: N/A

Ethical Approval: Not required.

Authors Contributions: Conceptualisation, methodology, writing (original draft), review & editing.