

# Healthcare Educators NET Conference 2025 - Sustainability of Healthcare Education: Enabling the Future

2 December 2025  
Session abstracts

## Strand 1A: Technology and immersive learning

1Ai, 10:45 - 12:35

### Hybrid simulated practice learning at scale: Building a future-ready healthcare workforce

Lynsey McLeish, Buckinghamshire New University

How can we prepare a sustainable, future-ready healthcare workforce while addressing placement capacity challenges? This session explores the development and delivery of a hybrid Simulated Practice Learning Placement (SPLP) model that combines a 50/50 simulation–clinical approach with large student cohort delivery using a virtual reality platform and bespoke e-learning packages. The model focuses on maintaining contextualised simulation that aligns closely with clinical practice, ensuring authenticity and transferability of skills. Delegates will gain insight into outcomes, lessons learned, and practical strategies to embed hybrid SPL sustainably within healthcare education programmes.

#### Summary:

##### Background and Rationale

Healthcare education continues to face unprecedented challenges in sustaining placement capacity while preparing a workforce that is both competent and adaptable to future healthcare demands. The growing emphasis on sustainability, digital transformation, and scalable educational models has been highlighted across the literature, including the increasing use of virtual reality (VR) and blended learning approaches in health professions education. Internationally, the World Health Organization and Nursing Now campaigns have stressed the importance of innovative approaches to workforce readiness, particularly in contexts where placement availability and clinical exposure are under significant pressure. Against this backdrop, Simulated Practice Learning (SPL) has emerged as a viable alternative to expand capacity, enhance equity of learning experiences, and ensure alignment with professional proficiencies.

##### Innovation and Methodology

This session will present the design, implementation, and evaluation of a hybrid SPL model developed at Buckinghamshire New University. The model combines a 50/50 simulation–clinical split with large-cohort delivery using a virtual reality platform and bespoke e-learning packages. The innovation lies not only in the scale of delivery, but also in the way simulation activities were kept contextualised and mapped directly to professional proficiencies, ensuring authenticity and transferability to clinical practice. Implementation included structured debriefing frameworks, tailored instructions for international students, and consistent mapping to programme annex requirements. Evaluation was conducted using a mixed-methods approach. Quantitative measures included pre- and post-session self-efficacy scales on clinical assessment, observation, and escalation, alongside attendance and completion analytics. Qualitative data were collected through reflective student feedback and facilitator notes, which were thematically analysed to identify strengths, challenges, and perceived impact on learning.

## Key Findings

Preliminary findings indicate significant improvements in learner confidence in conducting A–E assessments, making safe medication decisions, and engaging in structured documentation and record keeping. Students valued the opportunity to practise clinical reasoning in a psychologically safe environment and highlighted the authenticity of contextualised scenarios. Faculty noted reduced duplication of teaching, greater efficiency in resource use, and the potential for scaling up without compromising quality. Importantly, the model demonstrated how simulation can be embedded not as a replacement for clinical experience but as a complementary, sustainable strategy to expand placement capacity.

## Lessons for Delegates

Delegates attending this session will gain:

- A clear overview of the hybrid SPL architecture and weekly flow model.
- Insight into integrating VR and e-learning for large cohort delivery.
- Examples of assessment artefacts, debriefing strategies, and curriculum mapping.
- Practical lessons on staff workload, timetabling, and quality assurance.
- Strategies to ensure simulation remains contextualised and authentic to practice.

## Relevance to the Healthcare Sector

This topic is highly relevant to the healthcare sector given the global challenges of workforce shortages, placement constraints, and the urgent need to prepare future-ready graduates. By sharing a replicable, scalable, and sustainable hybrid SPL model, the session will contribute to ongoing international discussions on innovation in healthcare education and the role of simulation in building and retaining a workforce capable of meeting future health system demands.

**Keywords:** Simulated practice learning. Hybrid education models. Virtual reality in healthcare education. Future workforce development. Sustainable healthcare education.

## 1Aii, 10:45 - 12:35

### Immersive learner experiences using 360video

Professor Jeffrey Lewis and Dr Katie Earing, Cardiff Metropolitan University

The Speech and Language Therapy team at Cardiff Metropolitan University wanted to create bespoke, engaging, interactive resources of specialist learning material. The team used a registered practicing professional dealing in the area of Head and Neck cancer to capture interactions between them and patients. Two scenarios were created using 360 degree capture video footage.

### Summary:

The delivery of this specialist area has proven difficult in relation to the availability of personnel with specialist knowledge and also the timing of delivery within an already full timetable in a busy SLT programme. Finding people and the space in which to deliver information about Head and Neck cancer, in this instance laryngectomy, can sometimes be almost impossible to address. The university's shift to online, flipped learning and the creation of resources that are accessible asynchronously seemed an obvious solution. The team worked with an external practitioner and recruited a patient who would be filmed whilst the particular process was filmed using 360 video. Consent for filming was gained before any work was undertaken. The use of this immersive type of media allows viewers to experience the feeling of "being there" whilst watching the interaction between patient and

speech language therapist. The media was designed to be viewed in VR headsets and also via flat screen technology (screens and phones). A second and third scenario was filmed demonstrating best and poor practice between the practitioner and a patient (in this case the patient was played by an academic member of staff), these situations allow students to observe the two approaches taken and reflect on them from as individuals. The scenarios utilised the new Allied Clinical Health Hub facilities at Cardiff Metropolitan University, as these have been designed for patient facing student activities and also to reflect real world environment, with all the equipment, furniture and space students might experience in health care delivery environments. The scenarios were scrutinised for accuracy and alignment with learning outcomes. Hotspots were added to the footage, that allows viewers to open additional information, images and video, quizzes that adds context, discussion and further knowledge to the scenario. Some offer clarity of process, others pose questions around what might happen next. Students answered questions evaluating the content specifically if it was; (i) helpful (92% agreed or strongly agreed) (ii) easy to use (83% agreed or strongly agreed) (iii) enjoyable (92% agreed or strongly agreed) (iv) positive (92%) or negative (8%) as learning. They were also asked to report in qualitative terms what was most and least enjoyable about them. Comments requested "use of subtitles", "video quality was not amazing" that it "brought the scenario to life", "provided real life context to the scene". The feedback demonstrates they appreciated the innovative to delivery of this area and suggesting it adds authenticity and improves engagement with materials. Further scenarios are being created in other areas to compare student feedback. We believe this is the first scenario of its kind being used in SLT (UK) and the creation of this type of learner content is becoming simpler, cheaper and more intuitive as equipment and software evolve, suggesting that this could be a staple in the future.

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**Keywords:** SLT. Immersive technology. Head and neck cancer. Learning resource. 360.

### 1Aiii, 10:45 - 12:35

#### Telemedicine: Combining technology and active learning pedagogy to create an immersive and authentic experience

Emma Chambers and Jessica Cooper, University of Lancashire

Telemedicine is growing in use as a contemporary approach to healthcare. We developed a five-part simulated placement series for students using Artificial Intelligence, Microsoft

Systems, and active learning pedagogy. Centred around a fictional family tree, the series includes telemedicine calls, community consultations, an immersive session and a moot court, offering an authentic simulated experience. Students explore patient histories and develop digital literacy while reinforcing core skills such as communication, assessment, care planning, and empathy. The evolving family narrative helps students understand the lived experience of care and supports the development of autonomous practice in line with NMC (2018) standards.

### Summary:

Current literature suggests that digital literacy is poor within nursing students NHS England (2023) and WHO (2021a) emphasize the importance of digital literacy in nursing as part of workforce plans. Supporting students' digital development can empower both their academic & practice growth, furthering their preparation for registration. Integrating the use of technology into an authentic simulated experience could enhance the ongoing development of nursing skill within the students. Digital literacy measures are consistently lower within nursing in comparison to other healthcare practitioners (Adynlar et al., 2024; Martzoukou et al., 2022). Lokmic-Tomkins et al., (2022) advocates a multi-dimensional approach to developing digital literacy & Erdat et al., (2023) advocate developing digital literacy through lived experience. Gillaspay & Vasilica (2021) demonstrates that a heutagogical learning design can enhance the development of the digital self-determined nurse. We have incorporated these values throughout our programme, whilst utilising the benefits simulation-based education offers (Saragih, et al., 2024) to develop a robust educational experience for student nurses.

Telemedicine is growing in use as a contemporary approach to healthcare. Therefore, my colleagues & I were asked to develop a simulated session for nursing students using Telemedicine to prepare our learners for the future workforce. We utilised AI, Microsoft systems and active learning pedagogy to create an immersive & authentic experience by creating a family tree. The simulated patients developed into rich stories. This led to the total development of a 5-session series within a simulated placement. The telemedicine series allows students to explore patient histories, engage in telemedicine calls, community consultation, an immersive experience and a moot court.

The use of simulation is an accepted & promoted form of learning within nursing education & has been increasingly recognised as a form of practice education by the NMC (NMC, 2023). Weeks & Buchanan (2023) found that simulated experiences can increase active learning, autonomy & reflection on practice. A systematic review found that scenario-based simulation can increase nursing students' clinical knowledge, practical skill & self-confidence in learning (Saragih et al., 2024). Our sessions aim to provide an authentic practice experience within a simulated setting. They aim to develop students' digital literacy whilst reaffirming fundamental nursing skills such as communication, assessment, care planning, empathy & begin to introduce more autonomous working to year 2 students in line with NMC standards of proficiency. The series allows students to gain insight into the lived experience of a family of patients and participate in the evolving healthcare journey. This builds on previous theoretical and simulation experiences in order to consolidate knowledge and skills to support the early development of autonomous nursing practice.

An ongoing research project aims to evaluate the impact of this series of sessions, with consideration of several themes: creating an authentic experience within a simulated setting, developing digital literacy and ongoing development of nursing skills. A pre & post session survey has undergone data collection and awaiting analysis. Our presentation aims to disseminate knowledge gained from this session development and to share positive practices to further improve future patient care.

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**Keywords:** Simulated practice. Technology. Innovation. Preparedness for future workforce.

### 1Aiv, 10:45 - 12:35

#### Procuring a simulated electronic patient records system for use in Healthcare Education

Clare Grey, Edge Hill University

This session discusses the lessons in procuring an Electronic Patients Records (EPR) system for Simulated Practice Learning (SPL) within a pre-registration nursing programme. It includes the review process, challenges in procurement, and the objectives of reducing the theory-practice gap and developing digital confidence in students. The aims are:

- To understand the benefits of implementing an EPR system for pre-registration nursing education
- Observe the process to procure an EPR system in an education setting
- Discuss some of the challenges and potential solutions involved

#### Summary:

Background: Pre-registration nursing programmes are designed to prepare future nursing staff for the workforce and include a minimum of 2300 hours of clinical practice, up to 600 hours of which can be delivered through Simulated Practice Learning (SPL) (Nursing and Midwifery Council (NMC), 2024). To be included as SPL the experience must be realistic and authentic to practice (NMC, 2024). However literature reports that nursing students comment on a theory-practice gap between what they are taught at their Higher Education Institute (HEI) to what they observe in clinical practice (Mollart et al, 2023). In my HEI an area where student evaluations highlighted this gap was with SPL and the lack of Electronic Patient Records (EPR) system.

EPRs utilise digital software for the documentation of patient healthcare records, and are now used by 91% of National Health Service (NHS) Trusts (NHS England, 2025). The unpublished Phillips Ives Review into nursing and midwifery digital readiness launched in 2022 is reported to say that current models of nursing education does not prepare the future workforce for digitally enabled practice (Devereux, 2024).

Innovation: I set up a working group at my HEI to identify and procure an EPR that could be used within SPL. As the HEI offers various health discipline courses the working group was multi-disciplinary to share the financial implications across courses and to enable more healthcare students to make use of the resource. The multi-disciplinary approach did generate issues as some courses have specific requirements for their areas. This resulted in a separate EPR being obtained for Paramedicine.

Many EPR systems were reviewed by the working group to assess their benefits and challenges to embed within the HEI, and one system was mutually selected for a student and staff trial over two weeks. Staff and students were invited to participate in demonstrations of the EPR system to provide their feedback. The EPR system was also incorporated into planned first year pre-registration nursing skills lessons and pre-registration medical simulation. Student and staff feedback was positive highlighting the benefit of this EPR system to their course.

The EPR system was approved by HEI processes and has been implemented in pre-registration nursing SPL from the September 2024 academic year.

Lessons for Healthcare Educators:

- Understanding the benefits of implementing an EPR system for pre-registration nursing education.
- Observe the process to procure an EPR system in an education setting.
- Understand some of the challenges and potential solutions involved.

Relevance to Healthcare Educational sustainability: The plan for healthcare is to evolve from analogue to digital (Department of Health & Social Care, 2025). Pre-registration healthcare students will be caring for patients in a digitally enabled environments and need to be prepared for this. By procuring an EPR for SPL, students can practise utilising an EPR system and the changes that would have to their clinical work practices in a safe and controlled environment.

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**Keywords:** Electronic patients records. Simulated practice learning. Pre-registration healthcare students. Digital.

## Strand 1B: AI

**1Bi, 10:45 - 12:35**

### **Exploring bias and ethical concerns in AI for Mental Health support**

Athina Ntasioti, Regent College London

As AI technologies increasingly shape mental health care, how do we ensure ethical integrity and fairness? This session explores perceptions of algorithmic bias and ethical concerns surrounding AI-driven mental health tools, drawing on survey findings from students and academic staff. Attendees will gain insight into emerging risks—such as bias, lack of transparency, and data misuse—and consider strategies for responsible AI implementation. The session invites educators, researchers, and practitioners to reflect on inclusive, ethical innovation in AI-enhanced mental health support.

#### **Summary:**

Artificial Intelligence (AI) systems are increasingly being applied in mental health care, including diagnostic tools, chatbots, and predictive analytics aimed at improving accessibility and care delivery (Sogancioglu et al., 2024). While AI holds promise, concerns about algorithmic bias and ethical challenges remain significant barriers to its responsible adoption (Chew and Achananuparp, 2022; Saeidnia et al., 2024). Algorithmic bias occurs when AI systems produce systematically skewed or unfair outcomes due to biases present in the data they are trained on or the way algorithms are designed. Biases in AI can lead to unfair treatment, reduced inclusivity, and compromised patient outcomes (Fazakarley et al., 2024). In addition to bias, ethical concerns include the lack of transparency in decision-making, data privacy issues, and the risk of reductively representing complex human emotions and experiences by turning them into quantifiable data (Dlugatch, Georgieva and Kerasidou, 2023). In light of these concerns, gaining insight into how potential users and professionals perceive these challenges is essential (Antes et al., 2024). This study aims to explore perceptions of bias and ethical concerns related to AI-driven mental health interventions by focusing on the views of students and academic colleagues. Understanding these perspectives is critical to developing AI tools that uphold fairness, transparency, and ethical integrity in mental health services.

The research employs a quantitative survey methodology based on validated instruments developed by Bruner et al. (2023) and Varghese, Sharma and Patwardhan (2024). The survey incorporates multiple-choice, Likert scale, and ranking questions designed to measure perceptions of algorithmic bias, ethical implications, fairness, inclusivity, and transparency in AI applications. A pilot test was conducted with a small sample of students and academic colleagues to ensure clarity, reliability, and validity. Data collection is ongoing, and preliminary findings suggest varying levels of awareness and concern regarding bias and ethics in AI among participants. Early results indicate that while some respondents acknowledge the potential benefits of AI in mental health, many express caution about the risks of biased algorithms and ethical oversights. The full analysis and detailed outcomes will be presented at the conference.

This study highlights the necessity of addressing bias and ethical considerations proactively in the development and implementation of AI tools for mental health. The findings emphasise the need for transparent algorithmic design, inclusive data sets, and continuous ethical oversight to foster trust and efficacy in AI-driven mental health support. Future research should explore intervention strategies to mitigate bias and expand stakeholder engagement, including patients and clinicians, to ensure the ethical integration of AI. Practical applications may involve developing guidelines and training for AI developers and mental health

professionals to promote responsible AI use. By fostering dialogue on these issues, this work contributes to a more equitable and ethical mental health care landscape enhanced by AI technologies.

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**Keywords:** Artificial intelligence. Mental health. Algorithmic bias. Ethics. Diagnostic tools.

**1Bii, 10:45 - 12:35**

### **Building educator readiness for AI simulated patient teaching in early years Medical Education**

Dr Alexander Lawson and Dr Nicholas Eames, Aston Medical School

Co-authors: Dr Claire Stocker, Dr Elizabeth Dunn and Dr Nadia Lascar, Aston Medical School

This session presents a structured approach to preparing educators for the use of Artificial Intelligence Simulated Patients in early-years medical education. It outlines a development model that enabled delivery of diagnostic reasoning tutorials by educators with no prior experience of AI-based simulation. Educator observations and implementation data will be shared, including reported learner engagement and platform constraints. The session examines how simulation pedagogy can be extended to digital formats using existing resources. Delegates will consider strategies for supporting educator readiness at scale and for embedding AI-mediated simulation into curricula in response to evolving regulatory and institutional expectations.

#### **Summary:**

Background: The General Medical Council (GMC, 2025) highlights the importance of safe and effective integration of Artificial Intelligence into healthcare practice. This has prompted increased interest in embedding Artificial Intelligence within undergraduate medical education (Saroja, 2025). Learners are expected to engage with digital technologies, but structured support for educators remains limited (Blanco et al., 2025). Postgraduate programmes have begun implementing Artificial Intelligence across specialties (Kirubarajan et al., 2022), and undergraduate curricula are expected to reflect this development. Artificial Intelligence Simulated Patients represent a shift in simulation delivery, requiring educators to facilitate sessions using unfamiliar tools. Unlike traditional simulation, these platforms operate independently of real-time facilitator input, altering the educator's role from scenario controller to reflective guide. Addressing educator readiness is necessary for curriculum implementation and for preparing learners to enter digitally mediated clinical environments.

Methodology: To support educators with limited experience in Artificial Intelligence Simulated Patient teaching, a structured pathway was introduced. A working group received initial training and explored platform functionality. Cascade training was delivered through peer-led workshops and asynchronous walkthroughs. A session template was developed in accordance with local procedures. Opportunities for individual practice were provided, and tutor notes were revised in response to feedback. Feedback was collected using structured forms and informal discussion, with revisions made iteratively. Educators participated in post-session debriefs, and a focus group was conducted at the end of the academic year. The intervention supported delivery of diagnostic reasoning tutorials to second-year medical students using the SimFlow platform.

Key findings and insights: Educators reported that Artificial Intelligence Simulated Patients could be used with existing simulation-based teaching approaches. Student participation was observed across sessions. Educators noted learners engaged without concern about judgement and that the platform enabled consistent access to simulated cases. One educator stated that students verbalised uncertainty more readily, possibly due to the absence of interpersonal cues. Scenarios could not be modified during sessions, and content control remained with the provider. Alignment between learning outcomes and platform design required attention. Training required allocation of time and coordination across teams. The intervention supported thirty-two tutorials involving twelve educators, none of whom had prior experience with Artificial Intelligence Simulated Patient teaching.

Lessons for healthcare educators: Structured support enabled educators to deliver sessions using Artificial Intelligence Simulated Patients. Familiarity with simulation pedagogy contributed to uptake. Development models including cascade training, responsive materials and peer support may assist educators in using Artificial Intelligence tools in teaching. The model differed from conventional simulation onboarding, requiring adaptation to platform constraints.

Relevance to healthcare education sustainability: Educator development in the use of Artificial Intelligence Simulated Patients supports simulation delivery within existing resource constraints. This contributes to preparation for future healthcare practice and integration of technology into education systems. The model has been retained for subsequent cohorts and is under review for adaptation to other teaching formats.

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**Keywords:** Artificial intelligence. Medical education. Educator development. Technology-enhanced learning. Simulated patients/simulation.

### 1Biii, 10:45 - 12:35

#### Human and machine: Unveiling Nursing Students' experiences with AI tools

Shabana Ali and Joseph Otoo, Buckinghamshire New University

Generative Artificial Intelligence (Gen AI), such as ChatGPT, has emerged as a transformative tool in higher education particularly in nursing education (Michel-Villarreal et al., 2023). These tools are increasingly being adopted by students to assist with academic writing, research synthesis, and critical thinking development (Topaz et al., 2024). However, the integration of AI raises ethical concerns, such as academic integrity, bias, and the potential for over-reliance on AI-generated content (RCN, 2021; Castonguay et al., 2023). Concerns also arise regarding plagiarism (or "ghosting") and adherence to academic regulations, as well as the NMC's standards on integrity and honesty.

### Summary:

**Aim:** To explore the lived experiences of third-year nursing students using Generative Artificial Intelligence (Gen AI) tools in their academic studies.

**Objectives**

1. To identify the benefits and challenges experienced by students using Gen AI tools.
2. To examine the ethical concerns related to Gen AI use, including issues of academic integrity, plagiarism ("ghosting"), bias, and adherence to academic regulations and NMC standards.
3. To provide recommendations for curriculum development that ensures the responsible use of Gen AI tools to supplement digital literacy and ethical decision-making in contemporary nurse education.

**Abstract:** Generative Artificial Intelligence (Gen AI), such as ChatGPT, has emerged as a transformative tool in higher education particularly in nursing education (Michel-Villarrreal et al., 2023). These tools are increasingly being adopted by students to assist with academic writing, research synthesis, and critical thinking development (Topaz et al., 2024). However, the integration of AI raises ethical concerns, such as academic integrity, bias, and the potential for over-reliance on AI-generated content (RCN, 2021; Castonguay et al., 2023). Concerns also arise regarding plagiarism (or "ghosting") and adherence to academic regulations, as well as the NMC's standards on integrity and honesty.

**Design:** This study explored the lived experiences of third-year nursing students who have used Gen AI tools in their academic work. Using purposive sampling, semi-structured interviews gathered qualitative data on how these tools are integrated into students' research processes and the challenges they encountered.

**Findings:** The study identified six interconnected themes illustrating how students engaged with AI tools in their academic work. Academic Support and Guidance emerged strongly, with participants highlighting Tools like ChatGPT and QuillBot helping them understand complex concepts, restructure their writing, and verify assignment frameworks. Efficiency and Time-Saving was also valued, participants consistently described the use of AI tools as a major factor in reducing academic stress and saving time, especially during repetitive/cognitively demanding tasks. Students displayed growing digital literacy and tool use as they began using multiple AI tools beyond ChatGPT, including Grammarly, Unriddle, and others. Participants reported feeling empowered by exploring and adapting different tools for specific academic tasks. For those facing language challenges, Language and Accessibility Support was significant. Non-native English-speaking students expressed that AI tools helped overcome language barriers by offering grammar support and simplifying complex academic terminology. Despite the growing reliance on AI, participants voiced strong ethical awareness and academic integrity. Many were cautious over-relying on AI and expressed a commitment to maintaining originality. Students described efforts to paraphrase, cross-check references, and use AI-generated content as guidance rather than final output. Finally, many reported gains in Confidence and Academic Improvement, noting enhanced performance, stronger feedback, and greater preparedness in their studies through effective AI integration.

**Relevance:** This research will inform curriculum development by promoting responsible Gen AI use, ensuring students develop both technical skills and an understanding of its ethical implications. Educators can leverage these findings to embed Gen AI within nursing education while upholding academic integrity and the professional standards of the NMC.

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**Keywords:** Generative artificial intelligence. Gen AI. Nursing students. ChatGPT.

**1Biv, 10:45 - 12:35**

### **Rethinking assessment in Nursing Education: A case for practical evaluation in the age of Artificial Intelligence (AI)**

Dr Oladayo Bifarin, Christopher Kiely and Tracy Hincks, Liverpool John Moores University

This discussion aims to present a compelling case for adopting alternative assessment strategies in nursing education, moving beyond the traditional essay format, particularly in light of the challenges and opportunities posed by AI. The primary objective is to advocate for a practical assessment model that aligns more closely with the authentic demands of nursing practice and is inherently more resilient to AI misuse. A further objective is to underpin this argument with a relevant educational theoretical framework, specifically social constructivism, demonstrating how this theory supports a shift towards more active, interactive, and context-based evaluation methods.

#### **Summary:**

The contemporary health care landscape presents significant challenges for nursing education. Effective nursing practice hinges on the seamless integration of knowledge, practical skills, communication abilities, sound clinical reasoning, professional values, and reflective practice. Consequently, nursing education programmes continually grapple with ensuring their assessment strategies effectively cultivate and evaluate these multifaceted capabilities. Assessment is recognised as a potent influence on student learning, shaping priorities and study approaches. Therefore, to adequately prepare practice-ready qualified nursing staff, assessment methodologies must transcend traditional formats. The focus needs to shift from merely evaluating information recall to assessing the application of knowledge and skills in contexts that authentically mirror the demands of clinical practice. The theoretical foundation for advocating a shift towards practical, interactive assessment in nursing education lies in social constructivism. This learning theory, significantly shaped by the work of Lev Vygotsky, posits that learning is not a passive absorption of information but an active process wherein individuals construct knowledge and understanding through dynamic interaction with their social and cultural environment. This perspective stands in contrast to more traditional pedagogical models, often implicitly supported by assessment methods like essays, which may view learners as empty vessels awaiting knowledge transmission from an instructor. Nurses and other health professionals develop their competence not in isolation, but through observing experienced practitioners, engaging in discussions with colleagues and academic staff, collaborating within interprofessional teams,

and reflecting upon their clinical encounters. From this theoretical perspective, traditional assessment methods like essays, often completed individually and focusing primarily on the reproduction of learned information. Such assessments tend to emphasise the final product over the dynamic process of learning and meaning-making, offering limited insight into how a student arrived at their conclusions or how they might apply their knowledge in a real-world, interactive situation. In contrast, assessment methods that incorporate collaboration, dialogue, application within authentic contexts, and structured reflection are inherently more congruent with constructivism. These alternative approaches value the social negotiation of meaning, the active construction of understanding through experience, and the ability to articulate and justify one's thinking processes. To effectively prepare nursing learners for the complexities of contemporary practice, assessment methods must actively bridge the gap between academic learning and the realities encountered in the clinical environment. Nursing competence extends beyond mere knowledge possession; it encompasses the skilful integration and application of knowledge, psychomotor skills, clinical reasoning, communication, ethical values, and reflective abilities within complex and often unpredictable patient care scenarios. Authentic assessment aims to mirror these real-world demands by presenting learners with tasks that require them to actively "do" nursing, rather than simply recalling information about it. Building upon these principles, a robust alternative to the traditional essay involves a multi-stage practical assessment centred on the core nursing process. This model integrates patient assessment, care plan development, and justificatory dialogue (*viva voce*). An example of this approach involved teaching learners across child, adult, and mental health specialisms, guiding them through an active learning process supported by detailed instructions delivered via a VLE (Canvas).

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**Keywords:** Authentic assessment. AI. Alternative assessment. Professional education.

## Strand 1C: Placement

**1Ci, 10:45 - 12:35**

### **Building bridges: Multi-faith placements for Pre-Registration Mental Health Nursing Students**

Margaret Rioga, Buckinghamshire New University and Karla Innis, Berkshire Healthcare NHS Foundation Trust

The Building Bridges: Multi-Faith Placements offered a unique opportunity for nursing students to gain invaluable experience in diverse religious and cultural settings. This innovative placement program enhanced students' understanding of the varied spiritual needs of patients, fostering a holistic approach to mental health care. By engaging with multiple faith communities, students developed cultural competence and empathy, essential skills for effective nursing practice. The program not only broadened their perspectives but also prepared them to deliver inclusive and respectful care, advancing the quality and scope of nursing placements in mental health.

#### **Summary:**

**Background:** The integration of multi-faith placements for pre-registration mental health nursing students addresses the growing need for culturally competent care in diverse communities. Current literature (Forrester-Jones et al., 2018; Milner et al., 2020) highlights the importance of understanding patients' spiritual needs to provide holistic mental health care. Recent trends show an increasing recognition of the role of faith in mental health recovery (Grim & Grim, 2019; Jankowski et al., 2018), with international relevance as healthcare systems globally strive to improve inclusivity and patient-centered care.

**Research Methodology:** This research employed a qualitative approach, to assess the impact of multi-faith placements on nursing students' cultural competence and empathy. Data was collected from pre-registration mental health students participating in placements across various faith communities, including churches, mosques, synagogues, and temples.

**Key Findings:** The study revealed that multi-faith placements significantly enhanced nursing students' understanding of diverse spiritual needs, leading to improved patient care. Students reported increased confidence in addressing mental health issues within different cultural contexts and a greater ability to engage with underserved groups. The placements also reduced self-stigma among students, promoting better mental health disclosure and help-seeking behaviors.

**Lessons Learned:** Conference delegates will learn about the benefits of multi-faith placements in fostering cultural competence and empathy among nursing students. The session will highlight practical strategies for implementing such placements, including collaboration with local faith communities and the importance of co-designing programs with stakeholders. Delegates will gain insights into overcoming barriers to effective multi-faith engagement and the positive impact on student learning and patient care.

**Relevance to Healthcare Sector:** This topic is highly relevant to the healthcare sector as it addresses the need for inclusive and culturally sensitive mental health care (NHS Employers, 2021). By integrating multi-faith placements into nursing education, healthcare providers can better meet the spiritual and emotional needs of diverse patient populations. This approach not only enhances the quality of care but also supports the development of a more resilient and empathetic nursing workforce.

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**Keywords:** Cultural competence. Empathy. Inclusivity. Holistic care. Multi-Faith engagement.

## 1Cii, 10:45 - 12:35

### Investigating the barriers faced by Biomedical Science Undergraduates in completing a placement year

Dr Kathryn Dudley, University of Wolverhampton and Dr Amreen Bashir, Aston University

Biomedical Scientists are an essential group of healthcare professionals in the NHS and private settings. However, the work of Biomedical Scientists is poorly understood and the profession is often overlooked for central funding. Students on BSc Biomedical Science courses can complete an optional placement year in the NHS, allowing them to complete the Institute of Biomedical Science (IBMS) Registration Training portfolio and obtain Health and Care Professions Council (HCPC) registration. This research sought to identify the barriers faced by Biomedical Science students when deciding whether to complete a placement year, with a view to developing strategies to address this inequity.

## Summary:

Students on BSc Biomedical Science courses can complete an optional placement year, choosing between a paid industrial sandwich placement or an unpaid NHS laboratory placement. NHS placements enable students to complete the Institute of Biomedical Science (IBMS) Registration Training Portfolio, facilitating Health Care Professions Council (HCPC) registration as a Biomedical Scientist. The West Midlands Applied Biomedical Science programme addresses NHS workforce demands by integrating laboratory placements into the degree programme. Around 40 students annually gain practical experience, supported by five universities and NHS Training Officers. Whilst placements are known to improve graduate employability across all sectors (Little and Harvey, 2006; Bullock, Hejmadi and Lock, 2012; Bashir et al., 2024), for Biomedical Science courses these placements provide

an essential route to HCPC registration. Completion of the IBMS Registration Training portfolio and registration with the HCPC leads to highly skilled graduate employability rates of almost 100% (Aslam, Beard and Hepburn, 2023).

Some students may be deterred from applying for an unpaid laboratory placement due to financial pressures, the inability to continue with part-time work and the travel costs of commuting. This study sought to identify the barriers biomedical science students face when completing a placement year, with a view to developing strategies which promote inclusivity to overcome these. A Jisc Online Surveys questionnaire was distributed to level 5 and 6 Biomedical Science students across four universities: Aston, Coventry, Wolverhampton and Keele. The questionnaire contained Likert scale and free-text responses which assessed student perceptions on the importance of placement opportunities, as well as identifying factors which were important when pursuing a placement year. Likert scale data was analysed quantitatively, and a Mann Whitney U test was used to infer significance, whereas free text responses were analysed using thematic analysis.

A total of 107 students completed the questionnaire. Students who declared a disability were less likely to undertake an unpaid placement compared to their peers ( $p=0.013$ ). Of those students who declared caring responsibilities, 33.3% chose not to apply for a placement year compared to 18.2% of those who did not have caring responsibilities ( $p=0.020$ ). Participants reported that funding was important when deciding whether to pursue a placement (88.8%). Thematic analysis revealed several recurring themes deterring student placement applications, including financial support and placement availability within their geographical area. Students valued the importance of professional recognition following the placement and the development of technical and transferable skills.

Students reported that financial constraints deter students from applying to placement positions. Despite the need to increase the Biomedical Scientist workforce, the strategies to increase training opportunities are not well established. Equity in placement funding from centralised sources is key to ensuring Biomedical Scientists can excel in their professional careers.

As a profession, Biomedical Scientists are unique being the only HCPC registered profession without access to centralised funding. This research demonstrates that access to funding is essential to ensure a sustainable Biomedical Scientist workforce in the future. Whilst the IBMS Long term Workforce plan acknowledges this issue, the solutions to address this are not currently available (IBMS, 2023).

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**Keywords:** Biomedical. Scientist. IBMS registration portfolio. Placement. Barriers. Employability.

### **1Ciii, 10:45 - 12:35**

#### **A digital clinical placement for Midwifery learners focusing on bereavement education**

Dr Christine Furber and Dr Anne Leyland, University of Salford

At this presentation you will hear about an innovative digital clinical placement for midwifery learners. This novel placement was developed to enhance learning about bereavement. It was noted that bereavement education was not preparing learners well for practice as new midwives, hence different pedagogy was sought. This presentation provides information on the development, implementation and mixed- method evaluation of a bereavement digital clinical placement and its highlighted strengths and how this has enhanced learner's confidence, skill development and knowledge and understanding of bereavement support. Insights into digital learning will also be outlined.

#### **Summary:**

Background: A significant challenge in midwifery practice is providing support for bereaved women / birthing people. Maternal and neonatal mortality are not unusual in the UK maternity services (Knight et al 2023) and recent reports (Ockendon 2022, Kirkup 2022) highlight that bereavement support maybe insensitive and lacking compassion. Despite being integral to midwifery education (NMC 2019), learners often report their bereavement instruction as inadequate and lacks preparation for real life scenarios (Doherty et al 2018). Delivering effective bereavement education to midwifery learners is challenging and mainly consists of role play and classroom-based learning, and is inconsistent across programmes (Leyland and Choucri 2024). Learners need to develop effective knowledge and skills to be able to deal with emotional and psychological loss (Leyland Choucri 2024). Ideally, service users who have experienced bereavement related to childbearing should be involved to help learners understand parents' psychological distress and needs (Qian et al 2021). Other key stakeholders include specialist bereavement midwives and obstetricians (Doherty et al 2018).

It is imperative that education providers consider new ways to deliver bereavement education related to perinatal loss to ensure that midwives are equipped to support parents and families who are bereaved. This innovation is a pioneering 3 - day digital bereavement clinical placement (DCP) that was delivered to 90 learner midwives from two universities in September 2024. The virtual programme delivered engaging interactive content that was co-created by clinical bereavement specialists and service users. Content included personal case studies (service users), discussions with expert professionals followed by facilitated groupwork using coaching style discussions across clinical assessment, immediate postnatal care, future pregnancies and policy. Learners were encouraged to provide written reflections on their learning and were provided with expert feedback. Continuity between each day was facilitated with the SBAR model. There was an emphasis on self-care and psychological support throughout the placement. Ethics favourable opinion was obtained to evaluate the DCP using mixed- methods.

The evaluation included anonymised pre and post DCP surveys to explore self-assessed competency changes in confidence in supporting bereaved families. The results demonstrate that participants indicated that their knowledge and confidence post DCP increased. Qualitative data from focus groups with facilitators and students indicate that the DCP demystified bereavement care, showcased effective multidisciplinary collaboration, asserted the power of the voice of the service user, and provided insight of the online learning experience of students on a virtual clinical placement.

The lessons learned were that large numbers of learners were able to access normally 'difficult to experience' scenarios and hear from specialist healthcare professionals who do not have capacity for all learners to experience bereavement care in practice (Morgan et al 2024). The digital experience enabled learners to develop knowledge and confidence and acquire insight into potential of digital capability (Topol 2019).

This novel placement is important for healthcare learning due to the potential for consistency of learning for large groups of learners. The DCP is sustainable due to funds from tariffs for clinical practice learning.

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**Keywords:** Digital clinical placement. Bereavement education. Mixed methods. Midwifery education.

### 1Civ, 10:45 - 12:35

#### Innovative multi-professional AHP Student led placement model in Social Care sector

Priya Anand, WY AHP Faculty

The session will present the IMPPaCT placement model, a multi-professional, student-led initiative in care homes, co-developed by the West Yorkshire AHP Faculty. Whilst embedding leadership and education into Physiotherapy & Occupational Therapy placements, students will co-create a falls prevention toolkit designed to train care staff members, aligned with the NHS 10-year Plan (GOV.UK 2025). The model fosters peer supervision, enhances care staff confidence, and promotes patient-centred outcomes. It expands placement capacity while preparing workforce-ready graduates, with community-based learning by long-arm supervision. IMPPaCT exemplifies sustainable innovation in AHP education and highlights the vital role of AHPs in social care.

#### Summary:

The evolving demands of the healthcare workforce call for innovative, sustainable, and inclusive placement models that prepare Allied Health Professionals (AHPs) for complex, community-based roles. The IMPPaCT (Innovative Model Promoting Patient Care in Community through Training) placement model responds to this challenge by embedding leadership, education, and inter-professional collaboration into student-led placements within care homes. Developed through the West Yorkshire AHP Faculty—a strategic partnership of NHS organisations, HEIs, VCSEs, and local authorities—IMPPaCT aligns with national priorities such as the NHS Long Term Plan and the Prevention Programme, while addressing placement capacity and workforce readiness (GOV.UK 2025). Recent literature highlights the need for integrated, community-focused education models that reflect the full scope of AHP practice (Jackson et al. 2022; NHS England 2019). Internationally, there is growing recognition of the value of multi-professional learning environments in enhancing patient outcomes and professional identity (Mohammed, Anand and Ummer, 2021). The NICE guideline outlines comprehensive falls assessment and prevention strategies for older adults, reinforcing the clinical relevance of student-led falls prevention initiatives in care homes (NICE 2025). IMPPaCT contributes to this discourse by positioning care homes as rich learning environments where students from Physiotherapy and Occupational Therapy co-design and deliver falls prevention toolkits tailored to staff needs. This approach not only improves patient safety but also elevates the visibility of AHPs in social care settings. The innovation is implemented as a pilot placement involving four students (two per profession) under a peer supervision and long-arm supervision model. Students conducted needs assessments with care home staff, developed evidence-based training modules, and evaluated outcomes related to staff confidence and patient care. Qualitative feedback from students and educators, alongside pre- and post-placement surveys, indicated increased

learner confidence, enhanced understanding of holistic AHP roles, and improved staff engagement in falls prevention strategies ( AHP PBL 2023)

Conference delegates will gain insight into:

- How leadership, research and education can be embedded into placement design.
- Strategies for expanding placement capacity in underutilised settings.
- The value of multi-professional collaboration in student learning and service improvement in social care setting.
- Practical tools for implementing peer and long-arm supervision models.
- Recognizing AHP workforce development within social care sector.

This topic is highly relevant to the healthcare sector as it addresses critical workforce challenges: placement shortages, the need for community-based learning, and the preparation of graduates for integrated care systems. IMPPaCT offers a replicable model that supports the development of resilient, adaptable, and collaborative AHPs equipped to lead change in diverse settings.

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**Keywords:** Allied Health Professionals (AHPs). Workforce development. Social care. Multi-professional education. Placement innovation.

## Strand 1D: Simulation-based learning

**1Di, 10:45 - 12:35**

### **Virtual reality transforms cardiology and 3D anatomy education for veterinary students: An action research project**

Dr Caroline Taylor, Harper Keele Vet School

Virtual Reality (VR) has the potential to transform veterinary and medical education, particularly in the conceptualisation of 3D cardiac anatomy and disease. We demonstrated the effect on learning with a group of fourth year veterinary medicine students at Harper Keele Veterinary School. Leaps in understanding occurred, using specific echocardiology dog models. The VR environment provided a safe, low pressure, low risk situation for simulation. Haptic feedback was possible with mixed reality and life-like dog models augmenting the VR experience. Pathology can also be simulated without the need for cadaver material.

#### **Summary:**

Virtual reality is an emerging technology in medical education (1). Veterinary medicine students need to practice hands on ultrasound scanning before qualification. However, use of live animals in education should follow the principle of the 3Rs in use of animals in research - Replace, Reduce and Refine(2) so alternatives are sought. Simulators are often used in veterinary surgical training(3).

We assessed whether a virtual reality (VR) dog model was a beneficial and realistic learning opportunity for teaching echocardiology to veterinary students. An action research approach(4) was utilised. A trial teaching session using the VR device and application was done in a practical class, followed by a post session survey to find out if the experience was beneficial, compared to other forms of teaching and what could be improved. Open questions, in a follow up questionnaire, provided more detailed qualitative results, to expand on positive and negative themes identified in the survey.

Key benefits were clearer understanding of 3D cardiac anatomy, with an ultrasound 'slice' seen in real time, aiding conceptualisation of moving valves and ultrasound images. The learning tool provided a safe, low pressure, low risk environment for students to practice ultrasound, being able to learn from their mistakes, and collaborate with peers. Veterinary students greatly value being able to use animal models in practicals, but the VR option provides an extra chance to practice, particularly when scaling to larger cohorts. Pathological models are included in the application, enhancing learning, compared to the alternative. Challenges were identified, such as occasional motion sickness. This was mitigated by creating a more realistic seated position, with lifelike dog model for haptic feedback. Future studies plan to assess the headset-free option to prevent this problem. Further resources and scenarios can be created within the device/app for repeatable simulations and for clinical cases to be integrated into learning.

There is a growing availability of VR models in human healthcare to understand 3D anatomy(5,6). Other healthcare educators may find the human model option helps students to gain an advanced understanding of heart valve movement and anatomy, particularly how that relates to ultrasound images. This is without needing cadaver material, ultrasound machine, or human models in a classroom, or a clinical or lab space, giving more flexibility for delivery. Integration of VR materials needs to be carefully integrated, with future headset free options being potentially more intuitive and inclusive to all.

VR enables learning can be done in a more relaxed, controlled way, with potential to add pathology at the click of a button to put theory into practice, helping to reduce the time pressure in practical classes when using live animals(7). VR could be incorporated into healthcare education to explain 3D anatomy more accurately for patients and healthcare professionals, supporting life long learning, without need to visit a teaching facility. It can also be an efficient way to assess competency in emergency scanning protocols as well as echocardiology, including disease assessment, without the need for human models, both important trends within healthcare education(8).

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**Keywords:** Virtual reality. Echocardiology. Veterinary. Ultrasound. Simulation.

### 1Dii, 10:45 - 12:35

#### Innovation: A simulated night shift to enhance simulated practice learning

Jenny Stewart and Mark Hodgkiss, University of Chester

Introduction: Simulated Practice Learning (SPL) has now been permanently adopted by the NMC and has become routine in some approved HEI's.

Innovation: A 12 hour night shift was designed in collaboration with the charity Shelter and included in the first year SPL experience. The theme and learning aims for the shift were public health and homelessness.

**Learning Points:** The shift could be improved by including more structured activities towards the end the shift. **Conclusion:** The night shift was a success and there are plans for this to be permanently adopted as part of the first year SPL experience

### **Summary:**

**Introduction:** The COVID pandemic led to the creation of the NMC emergency standards which allowed for up to 600 hours clinical placement hours to be replaced by Simulated Practice Learning [SPL] (Harrison et al, 2024). Initially implemented to respond to decreased placement capacity during the pandemic, these standards were later permanently adopted by the NMC (2023) and can now be used by approved education institutions.

**Innovation:** Clinical authenticity is important for student nurses during simulated learning activities (Parker & Grech, 2018). It was therefore decided that giving first year student nurses the opportunity to experience a night shift during their SPL experience would be a useful learning experience for them. The theme for the 12 hour night shift was public health and homelessness. We collaborated with Shelter and by doing so we were able to help the learners gain a greater understanding of the concept of 'home'. Shelter (2025) identify a home as being a fundamental human need, as essential as education or healthcare. People experiencing homelessness are known to have complex health needs, which are often compounded by poor access to healthcare (Elwell-Sutton et al., 2017). The aim of the night shift was for our student nurses to consider how people become homeless and how homelessness may impact on their physical and mental health. The night shift included a handover, a three hour workshop led by Shelter and a night walk around the city to consider the practicalities of being homeless.

**Student Feedback:** The feedback was overwhelmingly positive from students, with many commenting that they had been apprehensive about the shift but that they had really enjoyed taking part. Some students had food delivered late on in the shift which was not planned for. However, we decided that nurses working a night shift do have meal breaks and therefore it could be argued that the ordering of food added authenticity to the experience.

**Learning Points:** There are a range of important practical considerations that must be considered and addressed in order for the night shift for be successful and safe. These included student numbers, staffing, appropriate location, risk assessments and student reasonable adjustment needs. The shift could be improved by including more structured activities towards the end the shift at 6am.

**Conclusion:** SPL is now a recognised and established part of nurse education programmes. To offer the learners an authentic experience a night shift was included in the four-week SPL experience at our HEI. The themes of public health and homelessness were identified as the focus of the night shift. By collaborating with Shelter, we were able to support a charity and share expert knowledge with our students. To ensure a successful and safe night shift experience, several practical considerations were taken into account and planned for. The SPL night shift was a success and there are plans in place for this to be permanently adopted as part of the first year SPL experience offered in the programme.

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**Keywords:** Nightshift. Simulated practice learning. Homelessness.

**1Diii, 10:45 - 12:35**

### **Blending anatomy, physiology, and pathophysiology with simulation-based education to enhance bioscience application**

Scott Colton, Birmingham City University

This presentation highlights the integration of an anatomage table within simulated practice learning to enhance student engagement, understanding and application through interactive, life-sized representations of human anatomy. By simulating real-world clinical scenarios and applying anatomy, physiology, and pathophysiology, this approach bridges the gap between theory and practice, fostering critical thinking and confidence in the application of knowledge. Additionally, it will discuss how this approach addresses challenges faced by students and educators, ultimately enhancing overall student outcomes and experiences in nursing practice.

#### **Summary:**

Anatomy, physiology, and pathophysiological knowledge and its application in clinical practice are integral elements of undergraduate education across healthcare courses (Fell et al., 2016). The literature has identified for several years that nursing students face challenges in acquiring knowledge of anatomy, physiology, and pathophysiology, which can be attributed to their prior learning in bioscience-based subjects and the mode of delivery of the content (Yeeles et al., 2024). Additionally learners perceive this subject as challenging to learn which in turn will limit their engagement within the subject (McVicar et al., 2015) as well as learners perception of challenges, academics also have several challenges such as space limitations and the importance of anatomy and physiology in Nursing Practice (Satoh Et al., 2023) A challenge that also has been reported in consideration of clinical practice placement where there is inconsistency in clinical practice placement supporting the learning of bioscience (Fell et al., 2016). To address the challenges learners face in developing applied bioscience concepts, an innovative teaching and learning approach was designed to support learning to apply bioscience concepts practically, utilising common clinical encounters. This was achieved by developing a blended, clinical simulation-based education experience that incorporated applied bioscience as part of the simulation experience. Simulation has long been employed to develop critical thinking and knowledge acquisition (Svelling et al., 2021; Lei et al., 2022) and therefore provides an ideal approach for developing applied bioscience concepts. To enhance the application and realism of the bioscience concepts, an anatomage table (AT) was utilised as part of the simulation, which

added increased fidelity to the application of bioscience due to the AT providing a life size digital human anatomy representation which could be dissected and manipulated to explore and apply critical concepts in context to the simulation. The implementation of a blended, clinical simulation-based education experience has yielded valuable lessons. Using the anatomage table enhanced student engagement and understanding by providing an interactive representation of human anatomy. Simulating real-world clinical scenarios bridged the gap between theory and practice, making bioscience concepts more relatable. Additionally, this approach highlighted the need for adaptability in teaching methods to address challenges faced by students and educators alike. Overall, this approach fosters critical thinking and student confidence in applying bioscience knowledge in clinical settings. This presentation will explore the underpinning pedagogical approach and how healthcare educators can adopt blended approaches to simulated practice. It will also discuss how adopting such an approach can address challenges in understanding and applying nursing practice concepts, as well as enhance overall student outcomes and experiences.

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**Keywords:** Anatomy. Physiology. Simulation. Engagement. Blended learning.

**1Div, 10:45 - 12:35**

### **Bridging theory and practice: Immersive simulation in Occupational Therapy Education**

Mary Archer and Dr Terri Grant, University Of Worcester

Simulation is used as a teaching method to provide practical opportunities in authentic environments to improve the transfer of knowledge and application of skills (Svinicki and McKeachie, 2014). The use of simulation in healthcare often focuses on performance of

medical skills and procedures (Sangster et al., 2025). However, simulation in occupational therapy (OT) must provide different learning opportunities which are specific to the profession.

An immersive simulation program using simulated patients was introduced for first-year pre-registration MSc OT students. This presentation will explore the unique challenges of design and implementation within course curricula and student evaluation of their experiences.

### **Summary:**

Since the COVID-19 pandemic, the increased demands on the workforce have led to placement deficits and backlogs, posing challenges in ensuring healthcare students gain real-life experiences to apply their knowledge (RCOT, 2021; Layne et al., 2021). As a result, higher education institutions need to look at innovative ways to support students to develop skills for practice (RCOT, 2021).

Practical opportunities in authentic environments can improve the transfer of knowledge and application of skills (Svinicki and McKeachie, 2014). The benefits of using simulation within nursing, medical and other healthcare professional courses has long been discussed (Layne et al, 2021). However, the way in which simulation is used in occupational therapy education varies (Grant et al, 2021) and until recently only limited evidence has been available. The use of simulation in healthcare often focuses on performance of technical and medical skills and procedures (Sangster et al., 2025). However, simulation in occupational therapy must provide learning opportunities specific to the profession.

Simulation needs to reflect the skills occupational therapists use, with the central focus being on occupation, person-centred care, holistic interventions and an interpersonal dynamic between the therapist and client (Sangster et al., 2025). An immersive simulation program with simulated patients was introduced for first-year pre-registration MSc occupational therapy students to prepare them for practice. Simulations were planned through-out the academic year and graded according to level of complexity and outcomes expected of the student relevant to their level of study. Through this program, students collaborated to navigate and solve problems in supportive simulated environments, fostering a sense of belonging within the cohort by experiencing the role of an occupational therapist. Whilst there were clear learning outcomes for each simulation, students were not assessed, making the learning environment inclusive, supportive and accessible.

Students valued having simulation integrated within the curriculum to help them prepare for placement. Key learning points from students' experiences of simulation include, using active listening skills to build rapport, managing time and expectations of clients, using reflective practice to aid personal development and using professional reasoning to implement interventions in authentic environments. This presentation will explore how the simulation programme was designed and implemented within course curriculum, the creation of authentic environments relevant to occupational therapy, and student feedback on their experiences.

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**Keywords:** Immersive simulation. Occupational therapy education.

## Strand 1E: Creativity and story telling

1Ei, 10:45 - 12:35

### **Bridging creativity and clinical practice: Evaluating a pilot creative health placement within Nutrition and Dietetics Higher Education**

Laura Graham, University of Chester

This pilot study evaluates the first known creative health placement for BSc Nutrition and Dietetics students, delivered at the University of Chester. Eighteen Level 6 learners were divided into two groups: one completed the creative health placement, the other a traditional placement. Wellbeing was assessed using the Warwick-Edinburgh Mental Wellbeing Scale (WEMWS) pre- and post-placement. Additional feedback and follow-up data were collected from the creative health group. Findings are expected to show improved wellbeing, increased awareness of holistic care, and enhanced readiness to apply non-medicalised, person-centred approaches, which supports NHS goals for integrated, preventative, and holistic healthcare education.

#### **Summary:**

**Objective:** There is growing recognition of the positive impact that non-medicalised, creative approaches can have on physical and mental health (All-Party Parliamentary Group on Arts, Health and Wellbeing, 2017). These interventions, often delivered through arts, cultural, or nature-based activities, are increasingly used to support wellbeing and promote a more holistic model of care (NHS England, 2023). At the University of Chester, creative health placements have already been successfully embedded in nursing and medical education, where students gain practical experience in applying these approaches to support both patient and practitioner wellbeing (Ridgway et al., 2024). Despite this progress, such placements have yet to be introduced into allied health professional training. Specifically, Nutrition and Dietetics programmes do not currently incorporate creative placements into formal clinical education. This pilot study aims to address that gap by introducing the first known creative health placement within the BSc Nutrition and Dietetics programme at the University of Chester. The objective is to explore student perspectives on the placement experience and assess its impact on wellbeing, awareness of creative health strategies, and readiness to apply holistic approaches in practice.

**Methods:** The study involved 18 Level 6 students enrolled in the BSc Nutrition and Dietetics programme. Participants were randomly assigned to one of two groups: one group (n=9) undertook a one-week creative health placement, while the control group (n=9) completed a traditional placement within a private, independent, or voluntary organisation (PIVO) or a clinical setting. To evaluate changes in mental wellbeing, all students completed the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) before and after their respective placements (Tennant et al., 2007; Clarke et al., 2011). Those who completed the creative health placement also completed a post-placement evaluation. Additionally, a follow-up questionnaire was distributed after an 11-week clinical placement to assess whether students were able to transfer creative health knowledge and skills into clinical practice. This mixed-methods approach provided both quantitative and qualitative insights into the potential value of the placement.

**Results (Anticipated):** It is hypothesised that students who completed the creative health placement will report improved mental wellbeing compared to peers in the traditional placement group. These students are also expected to demonstrate increased awareness and understanding of creative health approaches and social prescribing (World Health Organisation, 2019). Furthermore, participants are anticipated to show greater readiness to

deliver holistic, person-centred care in clinical settings. Improved self-awareness and wellbeing, alongside enhanced confidence in signposting to non-medical services, are also expected outcomes.

**Conclusions:** This pilot study aims to highlight the importance of integrating creative health placements within allied health education. Incorporating such placements into Nutrition and Dietetics curricula may better equip future practitioners to deliver person-centred, preventative care aligned with NHS priorities. This approach supports the NHS Long Term Workforce Plan (NHS England, 2023) and echoes recent calls for more creative, integrated models of learning across healthcare education (Ridgway et al., 2025).

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**Keywords:** Innovative placements. Non-medicalised. Holistic. Person-centred.

**1Eii, 10:45 - 12:35**

### **The development of reflective skills for Pre-registration Nursing participants through participation at a four-week art workshop**

Chloë Weekes-Dyer and Hazel Cowls, University of Plymouth

High-quality pre-registration nurse education is integral to the development of a sustainable and competent global nursing workforce. It is recognised that higher education can provide significant personal and professional growth for pre-registration nurses. The introduction of art-based pedagogy into the classroom can encourage creativity, observation skills and critical thinking skills through questioning and problem solving. This interactive session will explore research undertaken at the University of Plymouth which investigated whether developing a social network or community of practice for pre-registration nurses using the creative arts enabled them to develop their emotional resilience, critical thinking and problem-solving skills.

#### **Summary:**

High-quality pre-registration nurse education is integral to the development of a sustainable and competent global nursing workforce (Aiken et al., 2014). It is recognised that higher education can provide significant personal and professional growth for pre-registration nurses. However, pre-registration nurses can also experience high levels of stress (O'Flynn Magee et al., 2022) as they may be challenged by new pedagogy experiences in the classroom as well as in clinical practice (Aryuwat, 2023). The introduction of art-based pedagogy into the classroom can encourage creativity, observation skills and critical thinking skills through questioning and problem solving (Tasdelen Bas et al., 2022).

The aim of this study was to explore whether developing a social network or community of practice for pre-registration nurses using the creative arts enabled them to develop their emotional resilience, critical thinking and problem-solving skills.

Methods: Participants were drawn from a convenience sample of pre-registration nurses based at one HEI campus. A total of 13 participants enrolled in a four-week art workshop. Participants attended a weekly one-hour workshop. The following themes provided structure to the workshop: self, loved ones, your environment and your profession. An anonymised evaluation questionnaire was used to collect data. Ethical approval obtained from the University Faculty Research Ethics and Integrity Committee (Project ID 5269).

Of the 13 participants, 12 responded to the evaluation questionnaire (response rate of 92%). Most participants (92%) reported they were more self-aware by attending the workshops and completing home practice, enabling mindful time both on and off campus. Participants felt that their ability to think critically had improved, having been offered the opportunity to be creative, which in turn benefited their academic work.

Participants valued the space and time to meet other participants, to share their experiences, and to reflect on the themes discussed at each workshop. Providing an inclusive learning environment for participants enabled them to become comfortable with reflective practice, and to explore creative ways to support their wellbeing. Participants wrote positively about the environment being calm, welcoming, and that it felt like a safe space to talk openly and freely without judgement. Comments included participants feeling that the time and space for creativity encouraged their reflective abilities without the constraints of written work, and participants building a community "to talk about learning experiences, emotions and engage with participants from other years, creating a positive and enthralling experience". Participants noted that they felt more comfortable with the process of reflection and felt more able to engage with their academic studies after attending each workshop.

Lessons for healthcare educators: The use of the creative arts-based pedagogy (ABP) within nurse education can encourage student interaction, facilitating a sense of community and comfort amongst nursing students (Perry & Edwards, 2021). This research has provided a space for participants to form a community of practice and a sense of belonging that in turn could support their wellbeing.

Relevance to sustainable healthcare: Reducing attrition, developing skills to promote resilience, supporting a community of practice, flexible curriculum models, reflective practice and promoting a sense of belonging.

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**Keywords:** Creative arts. Social network. Art-based pedagogy.

**1Eiii, 10:45 - 12:35**

### **Luminize: Using patient storytelling to build compassionate, equity-driven Medical Education**

Zaina Chaudhry, Rowan-Virtua School of Osteopathic Medicine, Malaika Jawed, Columbia University and Cyanna Padmore, Robert Wood Johnson

Luminize is a student-led initiative that uses real patient narratives to spotlight healthcare disparities and bring compassionate education to life. This session explores how narrative storytelling can be harnessed to humanize interprofessional training, foster cultural humility, and build lasting empathy in future clinicians. Join us to learn how this scalable, digital platform empowers learners and educators alike to center patient voice, challenge bias, and reimagine sustainable healthcare education with heart.

## Summary:

Across healthcare systems globally, patients from marginalized communities continue to experience structural disparities that result in poorer health outcomes, lower trust in providers, and decreased engagement with the healthcare system. While health professions education has increasingly incorporated cultural competence frameworks, these efforts often remain decontextualized and fail to meaningfully incorporate the lived experiences of those most impacted by inequity. There is an urgent need for compassionate, sustainable, and human-centered approaches that bring patients' voices into the heart of training future clinicians. Luminize is a student-led innovation that responds to this gap through the lens of narrative equity. This initiative collects, curates, and publishes patient stories that highlight real experiences with healthcare disparities including racial bias, language barriers, socioeconomic exclusion, and system-level neglect. Luminize serves as a digital platform that both shares these narratives with learners and invites reflection on the broader implications of power, privilege, and patient agency in clinical care. A focused literature review of 12 peer-reviewed studies grounded Luminize's theoretical and pedagogical design. Foundational works in narrative medicine (Charon, 2001; DasGupta & Charon, 2004), cultural humility (Tervalon & Murray-García, 1998), and bias in clinical practice (Chapman et al., 2013) were paired with recent scoping reviews on patient storytelling, digital health equity, and narrative science communication (Park et al., 2021; Quah et al., 2023; Dudley et al., 2023). Collectively, these works affirm that storytelling is a powerful tool for fostering empathy, promoting reflection, and translating knowledge in a way that improves provider–patient connection. Luminize utilizes a qualitative, narrative-based methodology, including semi-structured interviews with patients who have experienced healthcare disparities. Stories are transcribed, de-identified, and thematically analyzed to identify recurring patterns such as marginalization, provider miscommunication, and patient resilience. These stories are then published through a digital blog and shared via social media to encourage broad, low-cost access. All participants provide informed consent, and interviews are conducted using trauma-informed and dignity-centered frameworks.

This session will explore the design, implementation, and early outcomes of Luminize, focusing on its potential to act as a replicable model for embedding patient voice into healthcare curricula. It will also present feedback from early learner engagement, which suggests increased empathy, deeper awareness of systemic bias, and greater comfort with discussing structural determinants of health.

Conference delegates will:

- Explore the theory and practice of narrative medicine and its connection to compassionate education
- Learn how to ethically engage in patient storytelling as pedagogy
- Understand how learner-led innovation can support sustainable, equity-driven education
- Leave with actionable strategies to integrate narrative reflection into their own educational environments

Aligned with the Compassionate Education theme, Luminize offers a low-cost, scalable approach to training future clinicians who are not only skilled but self-aware, empathetic, and justice-oriented. By placing the patient story at the center of healthcare education, we move closer to a system that is not only clinically effective but profoundly human.

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**Keywords:** Narrative medicine. Health equity. Patient voice. Cultural humility. Medical education. Innovation.

**1Eiv, 10:45 - 12:35**

### **Embedding digital innovation in Health Education: Looking through the lens of a patient**

Ruth Wood, Manchester Metropolitan University

This presentation explores how embedding digital innovation through the integration of Virtual Reality (VR), interactive whiteboards, and accessibility-focused solutions, in a curriculum can revolutionize nursing education. Delegates will assume the role of students and experience a newly designed VR module, using Oculus VR headsets and interactive whiteboards, simulating the process of moving and handling a patient. This hands-on, immersive experience offers a first-person view of how such activities feel from the perspective of a patient. By doing so, it fosters empathy, helping students understand the profound impact of their actions on patient dignity and well-being building emotional intelligence.

#### **Summary:**

This presentation explores how embedding digital innovation through the integration of Virtual Reality (VR), interactive whiteboards, and accessibility-focused solutions, in a curriculum can revolutionize nursing education. By embedding these technologies into a curriculum at scale, I have created an environment that offers students flexible, active learning opportunities while aligning with the latest simulation evidence base. The project focuses on promoting real-world experiences and aims to address key challenges in nursing education, especially those related to complex and technical skills acquisition in a safe, controlled, and engaging environment. The core of this initiative stems from the desire to bridge the gap between traditional clinical training and the emotional and psychological aspects of patient care.

Through this approach, students are encouraged to engage with nursing care delivery from a patient's perspective, facilitating crucial discussions around best practice and compassionate care. As part of the session, delegates will assume the role of students and experience a newly designed VR module, using Oculus VR headsets and interactive whiteboards, simulating the process of moving and handling a patient.

This hands-on, immersive experience offers a first-person view of how such activities feel from the perspective of a patient. By doing so, it fosters empathy, helping students understand the profound impact of their actions on patient dignity and well-being. Nursing educators and clinicians will gain insights into how this innovative curriculum model, developed in partnership with an NHS Trust's moving and handling team, could be applied within their own areas of practice. This collaborative effort led to the creation of a comprehensive library of training videos, demonstrating both correct and incorrect techniques, underpinned by current policies and frontline expertise. However, traditional methods of instruction, while valuable, did not adequately address the emotional and compassionate aspects of care.

In response, I conceptualized the integration of a digital empathy layer into the training content, including short videos narrated from the patient's point of view. These videos showcase the emotional and physical effects of moving and handling, emphasizing the

importance of compassion and empathy in nursing tasks. The empathy videos are accessible in three formats: group-based viewing via interactive whiteboards, VR headsets for immersive experiences and smartphone access for individual reflection. This multimodal approach ensures all learners, including neurodiverse individuals, can engage meaningfully with the content. The VR experience, in particular enables students to recognize when empathy is needed, visualizing what empathy looks like in practice, and reflecting on how their own body language and tone influence the patient experience. The content reaches over 18,000 learners in the university and NHS Trust settings. This large-scale digital transformation project serves as the foundation for the development of a new pedagogical model, Wood's 2025 Taxonomy of Digital Experiential Learning©, which is blending digital empathy to create a holistic approach to education. Moving mandatory training beyond mere compliance to a more transformational educational experience, preparing students to provide safe, humane patient care. Fostering clinical competence and emotional intelligence. A research study assessing the impact on learning outcomes is currently underway.

**References:**

Wood's 2025 Taxonomy of Digital Experiential Learning© is currently awaiting publishing

**Keywords:** Inclusive. Digital. Empathy. Emotional Intelligence.

## Strand 2A: Simulation and nursing

**2Ai, 14:50 - 16:40**

### **The impact of introducing a 'Virtual Ward' simulation into final year Adult Student Nurses curriculum**

Stephanie Banfield, Chloe Saygili, Hannah Gray and Sarra Anderson, Canterbury Christ Church University

Virtual Wards within the NHS leverage technology to provide hospital-level care at home. A five-day Virtual Ward simulation was introduced for final-year nursing students, combining face-to-face and remote learning. Using their Virtual Learning Environment (VLE), students engaged in role-play exercises, virtual ward rounds, and expert-led sessions to refine skills in teamwork, delegation, and communication. Evaluative surveys showed improvements in confidence and problem-solving abilities, highlighting the success of the initiative. Future adaptations will refine the model to enhance time management and team coordination, ensuring nursing students are equipped for the digital transformation of healthcare.

#### **Summary:**

The development of Virtual Wards within the NHS is an ongoing initiative aimed at enhancing and integrating technology into healthcare provision in order to provide hospital care to patients at home (NHS England, 2023). Newly Registered Nurses are expected to graduate with digital literacy skills and an awareness of emerging innovations in healthcare delivery (Harerimana, Duma and Mtshali, 2022). To foster engaging and forward-thinking learning opportunities, the concept of a Virtual Ward simulation was introduced. The primary objectives were to develop teamwork skills, strengthen digital literacy, and consolidate theoretical learning in practice. Additionally, it sought to address areas in which students frequently report low confidence—particularly communication with the multidisciplinary team (MDT) (Marriott, Weller-Newton and Reid, 2024).

Over five days, final-year adult student nurses were allocated into small groups and assigned an evolving patient caseload within their 'Virtual Ward.' Making innovative use of the students' Virtual Learning Environment (VLE) to provide structured and interactive scenario-based simulations. The week followed a hybrid model, incorporating both face-to-face and remote learning experiences. In-person sessions included role play exercises to simulate patient assessments, hospital discharges, and service-to-service handovers.

In addition to direct patient engagement simulations, students also experienced elements of remote working. For instance, virtual ward rounds were conducted, alongside phone calls to relatives, which encouraged students to refine their communication skills in different formats. Experts from clinical practice facilitated virtual 'drop-in' sessions, offering professional insights and guidance. These consultations provided students with an opportunity to seek advice regarding their patients, shaping care plans and informing appropriate referrals. Furthermore, both virtual and in-person debriefs allowed students to reflect on their experiences in a safe, supportive, and non-judgmental space (INACSL Standards Committee, 2016). To evaluate the impact of the Virtual Ward experience, students participated in pre- and post-week surveys. These surveys incorporated Likert-style questions (Likert, 1932) to facilitate statistical analysis, as well as open-ended questions to provide deeper insights into students' perceptions. Thematic analysis (Braun & Clarke, 2022) was used to assess qualitative responses, ensuring a comprehensive evaluation of the learning outcomes.

Findings from the simulation demonstrated that the hybrid 'Virtual Ward' approach was effective in consolidating students' knowledge and developing their delegation and problem-solving skills. Moreover, it was evident that students' self-perceived confidence in interacting with patients, relatives, and MDT members across various communication platforms had improved after participation. While initial feedback has highlighted the success of the 'Virtual Ward' in enhancing essential nursing skills, there is potential for further research to explore additional benefits. Specifically, the impact on time management, delegation, and teamworking skills warrants further investigation. Future iterations of the 'Virtual Ward' may refine and expand its scope, ensuring continuous innovation in nurse education and preparing students for the digital transformation of modern healthcare.

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**Keywords:** Simulation. Virtual. Nurse. Undergraduate.

**2Aii, 14:50 - 16:40**

### Simulation for Student Nurse Associates

Christine Hylands, Lisa Woods and Suzanne Potter, Liverpool John Moores University

Discover how simulated practice learning is revolutionising nursing education for Student Nursing Associates. This session will explore innovative simulation techniques that bridge the gap between theory and practice, enhancing clinical skills and confidence. Perfect for educators and healthcare professionals committed to excellence in nursing training.

### Summary:

Background: The Nursing Associate role was introduced in England to address the growing demands on the healthcare system and to bridge the gap between healthcare assistants and registered nurses. Officially launched in 2019, this role aims to enhance the capacity of the nursing workforce and improve patient care outcomes (NMC,2019). The integration of simulated practice learning in nursing education has gained significant traction in recent years. This approach provides a safe, controlled environment where students can develop

and refine their clinical skills without the risk of harming patients (McLeish & Cartwright, 2025, NMC 2024). While significant focus has been given to the use of simulation in pre-registration nursing qualifications, there has been less consideration of its application in the newer Nursing Associate training.

**Key finding:** This innovation highlights the development and delivery of simulated practice for Nursing Associate students during their first year of training. Pre- and post-session evaluations have demonstrated how simulation has significantly enhanced key areas such as knowledge and understanding, clinical skills, critical thinking, communication, and patient interaction. Internationally, simulation is recognised as a valuable tool for bridging the gap between theoretical knowledge and practical application, ensuring that Nursing Associates are well-prepared for real-world clinical scenarios.

**Lessons learnt:** Delegates will learn one example of the implementation of Simulation to enhance the nursing associate role. They will see the challenges to implementation but also the evaluation from the students currently on the programme.

This topic is highly relevant to the healthcare sector as it addresses the critical need for well-prepared Nursing Associates who can deliver safe and effective patient care. Simulation-based learning not only enhances clinical skills and confidence but also promotes a culture of continuous learning and improvement. By incorporating simulation into Nursing Associate training, we can ensure that these professionals are better equipped to meet the demands of modern healthcare environments, ultimately improving patient outcomes and reducing the burden on healthcare systems.

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**Keywords:** Student nurse associate. Simulation. Preparedness.

#### **2Aiii, 14:50 - 16:40**

##### **Embedding innovative Simulated Practice Learning (SPL) into programmes of study: Transforming nurse education by enabling digital innovation**

Anne-Marie Borneuf, Manchester Metropolitan University

To showcase how a novel Simulated Practice Learning (SPL) Spoke placement has been designed, implemented and embedded into Pre-Registration nursing curricula for students, using mixed modality technologies and simulation pedagogy. The SPL Spoke placement is an innovative curriculum framework that has been mapped against hard to achieve practice outcomes to improve student placement experience and instil confidence in learners to ensure smooth progression through their practice learning summative assessment.

This presentation will share insights and challenges utilising a Recursive style of leadership to transform curricula, embed SBE into the curriculum and enable digital innovation.

### Summary:

In response to the Covid 19 national emergency in healthcare education, I have successfully embedded, using a Recursive Leadership approach, a Simulated Practice Learning (SPL) placement into the nursing curricula using multi modal simulation technology and teaching pedagogy across Pre-Registration curricula within the School of Nursing and Public Health (SoNaPH). In the last four years our SPL placements have reached approximately 3250 pre-registration nursing students and as we head into our fifth year of delivery, we will have engaged over 4500 students in this innovative curriculum.

The SPL Spoke placement, that I have led on, is an innovative curriculum framework that has been mapped against practice learning outcomes to improve student practice learning experience, instil confidence in student nurses when they return to their hub placement within the practice arena and ensure smooth continuation through the practice learning summative assessment. This was achieved by undertaking an appraisal on those hard to achieve practice outcomes in high-risk modules across our teaching portfolio. There was close collaboration with practice learning partners, students and technological service colleagues to design, implement and evaluate a simulation-based education (SBE) curriculum. This reflective and collaborative approach enabled academic and technical services teams to utilise a wide variety of simulation modalities and technologies which comprise of

- livestreaming software for peer assisted debriefing,
- responsible Artificial Intelligence (AI),
- Virtual Reality (VR),
- 360 Immersive environments such as our Computer Assisted Virtual Environment (CAVE),
- digital interactive community online maps,
- meta-human software,
- table-top and gamification simulation modalities,
- simulated wards as well as use of our social care community flat.

Post Covid 19, we have seen our institutional National Student Survey (NSS) scores consistently rise with Simulation emerging as a very strong theme for student satisfaction and excellent quality teaching, with students wanting more Simulation teaching methods being used in the curriculum. Following an evaluation using the university's internal evaluation tool, there are early indicators from one of our Level 4 modules that embedding simulation in to the curriculum has had a noteworthy impact by contributing to improving module performance by 27.5%. This in turn has had a positive impact on student continuation rates for some modules as well as the programme leading to sustained positive student outcomes.

Simulation Practice Learning is now fully embedded within all our preregistration curricula and sustained, with the skills of the academic and technical services teams being enhanced. There are a number of pedagogical and patient safety research informed teaching activities currently in progress to further evaluate our successes and understand our wider impact. Recursive leadership conceptually centres on systems thinking (Senge 1990) double loop learning (Arygis & Schon as cited in Hammond 2013), reflection (Schon 1983) and Adaptive Leadership (Heifetz 1994). As indicated earlier, a recursive leadership style was used to transform the curriculum and enable staff and students to embrace technology and become better prepared and digitally ready for practice. This presentation will share insights and challenges to utilising a Recursive style of leadership to embed SBE into the curriculum and enable digital innovation.

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**Keywords:** Recursive leadership. Simulation based education. Digital innovation. Healthcare curriculum. Student outcomes.

### 2Aiv, 14:50 - 16:40

#### Learning to lead: Simulated practice - preparing the future Nurses

Melanie Rushton, University of Salford

This session aims to showcase an innovative project which utilises simulation and a variety of scenarios to increase leadership skills and confidence for student nurses. Attendees will gain insights about the research project which showed a significant increase in confidence levels. This approach helps to prepare the learners for their future roles as registered nurses.

### Summary:

Background: The NMC Future Nurse Proficiencies (2018) state that student nurses at the point of registration must be competent in leadership and delegation, co-ordinating and managing complex nursing and integrated care needs of people. Previous research by Francis (2013) and Keogh (2014) identified that registered nurses were ill-prepared in their delegation and management skills. Equally, ill-prepared student nurses can also experience challenges in leadership as newly qualified nurses which potentially increase their anxiety and stress (Smythe and Carter 2022). Health Education England (2018) highlighted stress and burnout in newly qualified nurses in the first year of being a qualified nurse referring to the 'flaky bridge'. Newly qualified nurses often feel unprepared for the leadership responsibilities expected of them, thus strengthening leadership skills early can improve job satisfaction and retention of staff. Simulation provides an opportunity for student nurses to develop their delegation and management skills in a safe environment and Silva et al (2022) found that learning in a simulated environment reduced the student's anxiety and increased their self-confidence. This study aimed to increase the student nurse's confidence in leadership by the simulated experience of co-ordinating patient care, developing leadership and management skills, in preparation for their transition to newly qualified nurses.

Research methodology: A concurrent sequential explanatory mixed methods design was used (Creswell & Plano Clark, 2018), combining quantitative and qualitative methodologies to understand the effect of simulation on the students' confidence in leadership and delegation. Ethical approval for the study was granted by our institution (approval number HSR1718-071). Quantitative data was gathered, assessing confidence in leadership skills, using a pre and post questionnaire (adapted Casey Fink validated survey instrument), (Casey- Fink, 2006). A convenience sample of 140 third-year adult nursing students was

selected. Following quantitative data collection, four focus groups were conducted to explore experiences of leadership skills and confidence, related to simulation and clinical practice experience. Thematic analysis of the data identified key insights regarding confidence in leadership related skills. Triangulation of all data provided a comprehensive understanding of how the simulated experience allowed the student to develop leadership skills including delegation and communication skills, ahead of their transition to registered nurses.

**Key findings:** Quantitative data from pre and post the simulated shift showed a significant increase in confidence levels in skills associated with leadership. Qualitative findings revealed three main themes, barriers from the perceived culture and control of staff in practice, and the usefulness of simulation in building confidence in leadership skills. In the main there was a positive shift in confidence for students and a realisation of elements of their practice that needed further development.

**Relevance to healthcare education sustainability:** This topic is highly relevant to the healthcare sector as it addresses the need to develop leadership skills which will better prepare students for their role as registered nurse and ultimately enhance patient care. This approach to developing leadership skills has a positive impact on student nurse education and preparation for their leadership as registered nurses, becoming more resilient and effective as a workforce.

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**Keywords:** Simulation. Leadership. Student nurse education. Clinical skills. Preparation for clinical practice.

## Strand 2B: Sustainability

**2Bi, 14:50 - 16:40**

### **Reducing the carbon footprint in clinical skills teaching: An integrative approach using SuSQI methodology and a Laboratory Assessment Efficiency Framework (LEAF)**

Dr Dola Akanmu, Sara Stevenson-Baker and Melanie Maddison, King's College London  
NHS England's Net Zero commitment by 2040 underscores the urgent need for healthcare educators to raise awareness of environmental impacts. At King's College London, the Clinical Skills Sustainability Project Group (CSSPG), an interdisciplinary team aim to reduce its carbon footprint in clinical skills education, with authentic clinical practice. Using Sustainable Quality Improvement (SusQI) methodology and a Laboratory Efficiency Assessment Framework (LEAF), objectives include -embedding sustainability across curricula, refining waste streams, and improving recycling initiatives and integrating the Gloves off campaign. By aligning teaching practices with these goals, educators can cultivate environmentally responsible clinicians equipped to lead sustainable healthcare delivery.

#### **Summary:**

**Background:** The climate crisis presents an urgent challenge to healthcare systems worldwide. The National Health Service (NHS) has committed to becoming the world's first net zero national health service by 2040, prompting a critical need to embed sustainability into healthcare education (NHS,2022) (1). Clinical skills teaching, essential for nursing, midwifery, medicine, and physiotherapy students, generates significant environmental impact using single-use plastics, energy-intensive equipment, and consumables. Embedding sustainability is essential to prepare clinicians to deliver safe and effective care, in environmentally responsible ways, both in education and practice. The Clinical Skills Sustainability Project Group (CSSPG) an interdisciplinary team of academics, students and professional services staff, aims to reduce the carbon footprint of clinical skills education while maintaining the authenticity of practice for replication in real clinical settings

**Methodology:** This project employs an integrative approach using the Sustainable Quality Improvement (SusQI) methodology (2) and a Laboratory Efficiency Assessment Framework (LEAF) (3). LEAF is a certification, which recognises energy-saving practices, affirmed through our award that sustainability is working in practice. The Simulation Centre plays a key role in balancing resources by refining waste streams, ethical procurement, using asset management software, and repurposing items via local networks. Embedding core principles of sustainable healthcare into how we educate students, ensures these values are part of their professional foundation. Through the application of SuSQI methodology, audits of clinical waste from skills sessions identified over 100 distinct items, primarily single-use plastics and personal protective equipment. Unused or improperly discarded items were also present. Interventions included recycling initiatives, integration of the Royal College of Nursing's Gloves Off campaign, co-creation of induction materials and embedding sustainable education across the curriculum.

**Insights:** Streamlining waste processes by switching from high- to low-temperature incineration for non-infective waste achieved a 75% reduction in carbon emissions and an 87% cost saving. To build on this, the impact of the interventions is evaluated. Students played a key role in the auditing of waste, materials analysis of plastics and root cause analysis to understand the key drivers in unsustainable waste disposal, reinforcing the value of co-production in sustainability initiatives. Resource allocation for teaching was

continuously reviewed by the Simulation team, guided by educator feedback to ensure high-quality learning while minimising waste. Unused and recovered supplies, including single-use items, were repurposed to support advanced procedural training. Sustainable practices were embedded at every level, aligned with learning outcomes and requirements. These findings illustrate that sustainability is not merely theoretical but is being successfully implemented in learning and in the skills laboratory.

**Lessons for healthcare educators:** Embedding sustainability across the curriculum through strategic messaging and discipline-specific case studies fosters carbon literacy, institutional transformation, and its integration as a core academic value.

**Relevance to Healthcare Education Sustainability:** This project demonstrates how structured, evidence-based frameworks can embed sustainability into clinical education. By aligning teaching practices with the NHS's net zero goals, educators can cultivate environmentally responsible clinicians equipped to lead sustainable healthcare delivery. The initiative also highlights the importance of institutional commitment, interdisciplinary collaboration, and student involvement in driving meaningful change.

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**Keywords:** Sustainable healthcare education. Clinical skills. Carbon footprint. SusQI. LEAF Certification.

## 2Bii, 14:50 - 16:40

### Embedding climate and community into Dental Education

Dr Vitalia Kinakh, The University of Manchester

Education for Sustainable Development (ESD) prepares students to become responsible global citizens. NHS England's Net Zero commitment and the General Dental Council's 2025 curriculum reforms now require social and environmental sustainability to be embedded in dental education. Service Learning (SL), a community-based teaching approach, offers a practical method to achieve this. Using a mixed-methods case study at the University of Manchester, this study explores how SL fosters students' understanding of sustainability, enhances clinical and communication skills, and strengthens civic responsibility. Delegates will learn how SL can provide a flexible framework for embedding sustainability in healthcare education.

### Summary:

**Background:** Education for Sustainable Development (ESD) aims to empower students and staff to become responsible global citizens who contribute to a more sustainable and equitable world (HEA, 2021). In 2020, NHS England committed to 'Delivering a Net Zero National Health Service,' aligning environmental sustainability with improved health

outcomes (NHS, 2020). The General Dental Council has released a new curriculum framework mandating that from 2025 undergraduate dental curricula to embed both social and environmental sustainability. This aligns with the University of Manchester's strategic goals and broader global trends in healthcare education. Higher Education Institutions (HEIs) offering healthcare disciplines, such as dentistry, are uniquely positioned to lead this shift by embedding sustainability into teaching, operations, and community outreach. Over the last two decades Service Learning has gained traction in HEIs as a modern teaching and learning (T&L) approach (Hood, 2009; Aramburuzabla et al., 2019; Leal Filho et al, 2024). SL is a T&L approach which allows students to apply knowledge and skills obtained at university to real-life problems in the community. SL is employed in several disciplines including medicine (Stewart and Wubben, 2015) and dentistry (Lautar and Miller, 2007; Gainza-Cirauqui et al., 2022); business and environmental disciplines. SL helps foster the development of a sense of civic responsibility and caring for the environment (Brondani, 2012, Thew et al., 2021).

**Research Questions:** - How SL helps educate dental students about and for Sustainable Development? - How students who participate in SL benefit? - What could be prospective applications of SL at the UK dental school to enhance sustainability teaching?

**Methods:** A two-tiered mixed-methods approach was used. The first tier involved a review of the literature. The second tier utilised a case study analysing how SL projects within dental education and specifically SL at the UoM Dental school influences students' sustainability mindset and professional identity.

**Findings:** The findings indicate that SL enhance student's understanding of social and environmental issues. Students who engage in SL reported improved clinical skills through treating underserved populations—such as children, low-income families, and asylum seekers—at university dental clinics. Exposure to diverse dental conditions and patient demographics broadened diagnostic and treatment competencies. Students developed cultural competence, communication, teamwork, and empathy by engaging with varied communities. There are some difficulties arising in the reciprocal relationships that exist between the students, educators and community partners and sustained participation requires ongoing motivation.

**Takeaways for conference delegates:** Participants will learn – a) how SL can serve as an adaptable model for embedding ESD within healthcare curricula; b) how integrating SL not only supports academic and professional development but also encourages students to become proactive contributors to sustainable healthcare practices; c) how reflective practice can be used to capture student learning and development in the absence of formal assessment.

**Relevance to healthcare:** This work addresses a growing imperative within healthcare: the need to deliver high-quality care that is socially responsible and environmentally sustainable. By embedding ESD into dental education, we are equipping future practitioners to tackle the dual challenges of health inequality and climate change.

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**Keywords:** Service-learning. Sustainable healthcare education. Curriculum models. Dental students. Skills.

**2Biii, 14:50 - 16:40**

### **Sustainable solutions in Healthcare Education: Repurpose, recycle, reduce waste a clinical audit**

Heather Guttridge, Queens University Belfast

Nursing and Midwifery clinical skills education generates significant clinical waste due to single-use and sterile-packaged items. This waste audit aims to identify materials suitable for reuse, repurposing and recycling, with the potential to reduce waste and innovation of products. The vision is to enhance both the learning experiences and the environmental sustainability of healthcare education. The outcomes support carbon footprint reduction, align with Net Zero 2040 goals, and reduce material costs.

#### **Summary:**

Background and significance of your research or innovation: It is necessary to undertake an audit of the waste stream, identifying the amount of waste, types of materials involved and the route through the waste pipeline. This audit will enable the development of a strategy to prioritise interventions with greatest impact to ensure we focus our activities and resources appropriately. Teaching clinical skills in healthcare disciplines requires the use of large numbers of items in sterile packaging that cannot be reused and produce large amounts of waste. This waste cannot be recycled through normal waste streams as it must be labelled as clinical waste and incinerated. We have the responsibility to not only integrate sustainability into their operational practices but also educate the next generation of healthcare professionals on the importance of applying a sustainability lens in their practice environments (Bathish et al, 2022).

Research methodology: The project involved a waste audit of current clinical waste for the purpose of reuse repurposing and recycling alongside waste reduction. Key findings or insights The project has identified common waste materials in clinical skills items: cellulose, polypropylene, PMMA, PVC, polyethylene, nitrile and ABS.

In May 2025 alone, Queen's University Belfast clinical skills lab used 485 dressing packs and 805 syringes, and the lab produced 64 bags of clinical waste. Each dressing pack has 8 plastic components which equates to 3882 plastic items in one month. A major challenge to recycling clinical skills lab waste is the frequency of items composed of multiple materials, such as laminated tissue included in dressing packs consisting of cellulose, polyethylene, and an adhesive. This is a recycling dilemma which requires innovative solutions and requires planning and further collaboration. Identification of gaps for future research or policy development and possible curriculum changes. It may be possible to redesign these resources into reusable teaching aids and other products.

Lessons for healthcare educators: The long-term benefit will be reducing waste from single-use items within clinical skills labs. The intention is to reduce waste, facilitate reuse and possibly reduce costs of materials within the labs, highlighting waste streams which can be recycled and reused correctly. We hope to benefit from reducing CO2 and our carbon footprint, enhancing the concord of the NET Zero commitment for Zero emissions by 2040 using a holistic approach. Furthermore, we hope to enhance the student experience through further projects of co-designing new teaching resources identified and in turn enhance sustainability through changes in operational policies.

Relevance to healthcare education sustainability: Findings will inform collaborative engagement with pharmacy, medicine, and dentistry, supporting scalable, sustainability conscious approaches across healthcare education. Each clinical skills environment may consider their own waste and broaden sustainability efforts, this can be expanded across the

university, UK, Ireland and worldwide therefore having a quantifiable impact within the environment.

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**Keywords:** Sustainability. Carbon emissions. Healthcare. Education. Collaboration.

## 2Biv, 14:50 - 16:40

### Embedding sustainability into the Occupational Therapy curriculum

Kate Ottywill, Nottingham Trent University

This presentation showcases how Nottingham Trent University has embedded sustainability into its Occupational Therapy curriculum, aligning with RCOT's professional standards and NTU's strategic vision. Drawing on the World Federation of Occupational Therapists' sustainability principles and the UN Sustainable Development Goals, the curriculum integrates themes such as occupational justice, climate change, and nature-based therapy. Practical teaching methods and innovative placements in green social spaces support students in developing sustainability-focused competencies. This session offers valuable insights for educators seeking to embed sustainability meaningfully into health and social care programmes.

### Summary:

Background: This presentation explores the inclusion of sustainability within the Occupational Therapy curriculum at Nottingham Trent University, aligning with both the Royal College of Occupational Therapists learning and Development standards (RCOT 2019) and the NTU Strategy, University Reimagined (NTU 2021). As Occupational Therapists, RCOT, the professional body is explicit in the need to include within the curriculum the five guiding principles for sustainability in occupational therapy practice, education and scholarship as defined by the World Federation of Occupational Therapists. These principles advocate for understanding sustainability from an OT perspective, mitigating environmental damage, supporting service users in adapting to climate related challenges, addressing community-level unsustainability, and developing professional competence in sustainability focused interventions. NTU's "University, Reimagined" strategy places sustainability at the heart of its educational mission. All courses are now expected to incorporate sustainability-related learning outcomes, align with relevant United Nations Sustainable Development Goals (SDGs) (United Nations, 2015), and foster UNESCO sustainability competencies. These strategic commitments provide a strong foundation for embedding sustainability within the OT curriculum (Wagman et al 2020). The presentation will explore how we embraced sustainability within the curriculum design using the above as a guide as well as some of the practical ways we have taught the content such as occupational justice, global and local challenges of climate change, the move to a more community based approach, nature based occupational therapy (Bryant et al, 2022) and lastly how we are generating practice based learning around the theme of sustainability through diverse placements within green social spaces such as community gardens.

Lessons for healthcare educators: The key insight for educators is that sustainability should not be treated as an add-on, but as a core competency within occupational therapy education. By aligning curriculum content with professional and institutional sustainability

frameworks, educators can equip students to become agents of change in both practice and policy. This integration fosters critical thinking, ethical awareness, and a deeper understanding of the environmental determinants of health. While focused on OT, the methods and principles can inform sustainability integration in other health and social care programmes, making it broadly relevant to the education sustainability theme. The presentation will encourage attendees to think about how sustainability is embedded in other health professions' curriculum alongside practical ways of mapping its inclusion.

**Relevance to healthcare education sustainability:** This abstract aligns with the theme of education sustainability by demonstrating how occupational therapy curricula can be strategically adapted to meet evolving environmental and professional demands. It responds to national priorities, including the NHS Long Term Plan (NHS 2019) and RCOT's mandate to embed sustainability in professional education. By integrating sustainability principles into curriculum design, this work supports the development of future practitioners who are equipped to deliver environmentally responsible, community-focused care. It also reflects Nottingham Trent University's institutional commitment to embedding sustainability across all programmes, offering a replicable model for educators seeking to align their teaching with broader sustainability goals.

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**Keywords:** Occupational therapy. Sustainability. Curriculum design.

## Strand 2C: Support and preparation

2Ci, 14:50 - 16:40

### Oral health education in Undergraduate medical curricula: A scoping review of student preparedness

Dr Rania Farajallah, Qatar University

Background: Oral health is vital for overall well-being; however, integrating oral health education into undergraduate medical curricula presents challenges. To explore the preparedness of medical undergraduates in oral health education by identifying their knowledge, self-confidence, level of training, assessment methods, barriers, and enablers. A scoping review will explore the preparedness of medical undergraduates in oral health education by identifying their knowledge, self-confidence, level of training, and assessment methods used. Additionally, identify barriers and enablers to offer recommendations for the future development of medical undergraduate education.

#### Summary:

Background: Oral health is vital for overall well-being; however, integrating oral health education into undergraduate medical curricula poses challenges. Recognizing the importance of including oral health education for undergraduate medical students is essential, given the critical role oral health plays in overall health, as it is connected to systemic diseases, pregnancy outcomes, oral cancers, and even psychological effects. A significant educational gap persists due to the limited oral health education available in undergraduate medical training and its unstructured content. This inadequate education, which lacks clear assessments and evaluations of undergraduate medical students' confidence and preparedness regarding oral health, negatively impacts future doctors. Without proper oral health training, doctors may join practice without the necessary oral health diagnostic skills and may miss crucial treatment opportunities. With the global healthcare systems' shift toward patient-centered care models and holistic treatment plans, neglecting essential oral health education will leave healthcare lacking comprehensiveness and increase healthcare disparities.

Purpose: To explore the preparedness of medical undergraduates in oral health education by identifying their knowledge, self-confidence, level of training, and assessment methods used. Additionally, identify barriers and enablers to offer recommendations for the future development of medical undergraduate education.

Method: The PRISMA scoping review guidelines and the Joanna Briggs Institute (JBI) methodological framework are followed, utilizing the Preferred Reporting Items for Systematic Reviews Extension for Scoping Reviews (PRISMA-ScR) guidelines. Four databases (PubMed, Scopus, ERIC, and Embase) were searched, and a thematic synthesis was conducted to achieve the outcome. A narrative description and quantitative and qualitative analyses were employed to obtain the results.

Results: A total of 1,071 articles were retrieved. After title and abstract screening, 196 articles remained; six papers were automatically removed as duplicates. And 46 articles were selected after full-text screening. Three were excluded due to wrong populations, two were removed for incorrect objectives, and nine could not be retrieved from the database. Finally, 32 met the inclusion criteria. While studies have indicated that medical curricula are overloaded with numerous topics beyond oral health and lack adequate faculty expertise in oral health matters, they also demonstrate that using educational content and methods related to oral health in any setting significantly enhances knowledge and skills.

Preparedness was not systematically assessed across the studies, with most students reporting a sense of unpreparedness for oral health. An interprofessional approach involving dental-affiliated faculty positively influenced self-confidence and increased medical students' comfort during routine clinical oral health examinations.

**Conclusion:** This scoping review identified 32 studies addressing oral health education in undergraduate medical education. The results were variable regarding knowledge, training, and self-confidence, but general results showed limited knowledge, skills, and self-confidence in oral health diagnostic and examination skills, and minimal preparedness for oral health. A collaborative interprofessional approach to oral health problems has improved outcomes and should be considered. However, overloaded Curricula, competing priorities, and faculty lacking expertise are the most common factors that hinder integration and should be addressed.

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**Keywords:** Education. Medical students. Oral health. Preparedness. Undergraduate.

2Cii, 14:50 - 16:40

## A conceptual educational support model for Under-graduate Students in Higher Educational Institutions in England

Associate Professor Margaret Rioga, Buckinghamshire New University

This PhD study explores undergraduate students' experiences of academic stress and their engagement with educational support services during the transition to university life. Using a qualitative approach, data were collected through semi-structured interviews and focus groups with students from diverse disciplines. Interpretative Phenomenological Analysis revealed key stressors such as academic workload, time management, and performance pressure. While some students benefited from tutoring, counselling, and peer mentoring, others faced barriers including stigma, lack of awareness, and doubts about effectiveness. The findings highlight the need for more accessible, inclusive, and student-centred support services to better address student well-being in higher education.

### Summary:

The transition to university life is a critical developmental period often marked by academic, social, and emotional challenges. Globally, there is growing concern about the mental health of university students, with studies reporting high levels of stress, anxiety, and depression (Beiter et al., 2015; Stallman, 2010). These issues are compounded by academic pressures, time management difficulties, and social isolation (Andrews & Wilding, 2004). In response, universities have expanded educational support services, yet student engagement with these services remains inconsistent (Hunt & Eisenberg, 2010). This study addresses a gap in the literature by exploring undergraduate students' lived experiences of academic stress and their interactions with institutional support services. While quantitative studies have documented prevalence rates, fewer have qualitatively examined how students perceive and navigate these services (Kitzrow, 2003). The research is positioned within the broader discourse on student mental health and institutional responsibility, with international relevance as higher education systems worldwide grapple with similar challenges (Eisenberg et al., 2013). A qualitative methodology was employed using Interpretative Phenomenological Analysis (IPA). Data were collected through 6 semi-structured interviews and 2 focus groups with a diverse sample of undergraduate students from various disciplines at a UK university. This approach enabled a deep exploration of students' personal narratives and meaning-making processes. Key findings revealed that students experience stress primarily due to academic workload, performance expectations, and time constraints. While some students reported positive outcomes from accessing tutoring, counselling, and peer mentoring, others faced barriers such as stigma, lack of awareness, and doubts about service effectiveness (Gallagher, 2012). Students expressed a desire for more personalized, proactive, and visible support systems, and emphasized the importance of peer networks and informal support. Conference delegates will gain insights into:

- The multifaceted nature of student stress in higher education.
- How students perceive and engage with institutional support services.
- Barriers to help-seeking and strategies to overcome them.
- Practical recommendations for designing inclusive, student-centered support systems.

This topic is highly relevant to the healthcare sector, particularly for professionals working in student mental health, counselling, and academic support. As mental health becomes a central concern in healthcare policy, understanding the educational context is essential for early intervention, mental health literacy, and cross-sector collaboration (Regehr et al., 2013). The findings advocate for a holistic, preventative approach to student well-being that aligns with broader healthcare goals.

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**Keywords:** Undergraduate stress. Educational support services. Mental health. Higher education. Student wellbeing.

### 2Ciii, 14:50 - 16:40

#### The impact of a newly implemented Mental Health simulated space on Pre-registration Learners' experience

Faye Cody, Jessica Johnston and Professor Kate Knight, University Of Chester

We have created an innovative, multi-functional Mental Health simulated space consisting of an inpatient room, de-escalation area and medicines management room with the opportunity to transform the entire space into a debrief area. The session will emphasise the importance of delivering Mental Health simulation in an authentic environment utilising the correct equipment and providing a safe space for students to learn ahead of their placements and future nursing careers. We will explore and share how we have encouraged our Mental Health academic staff to transform their teaching by moving out of the classroom into the newly implemented simulation suite.

### Summary:

The creation of an innovative simulated Mental Health space emerged from the concern that our current simulation suites had been designed with Adult Nursing students in mind. Attoe et al suggests that 'Mental health simulation has an important role as an effective and engaging training modality in bridging the gap between education and clinical practice'(1). Statistically, our Mental Health Nursing student numbers are increasing at our University, meaning it's vital to prepare those students for practice. Current mental health students had reported feeling that they were lacking in a sense of student identity and belonging. The space has been designed with immersion as a priority, ensuring all equipment is anti-

ligature, rooms are realistic, and ongoing training is being provided to those delivering simulation in this space to ensure the mental health scenarios and environment are as authentic and safe as possible. Mental Health academics working at the University were concerned that students could complete their three years of training having had no or limited exposure to certain scenarios and emergencies that commonly occur within mental health settings. This space hopes to offer these learning opportunities that students need ahead of qualifying as registered Mental Health Nurses. The multi-functional space consists of a community and de-escalation area (alternatively can be used as a debrief area), a secure inpatient bedroom and lockable medicines management room. From September 2025-March 2026, we will be conducting a service evaluation that has been granted ethical approval of the space we have created using Braun and Clarke's methodology(2) which will provide users of the space an opportunity to evaluate and feedback their learning experiences. We anticipate that learners who use this space will be better orientated to mental health areas prior to practice placements, that their confidence will improve and that this space will improve learners' experiences within practice simulation.

The expected impact of implementation and use of this space will contribute to the continually increasing number of mental health student applications, improved NSS scores and as a priority overall student satisfaction. We are hopeful that the space will encourage interprofessional education and collaboration across the University's Social Work department and Medical School, of which is already in planning and development. We have carried out a Higher Education wide search and expect that this is an innovation within simulated teaching. It is the first of its kind to authentically replicate an immersive mental health clinical area inclusive and considerate of specialised equipment, risk assessment and the exposure to senses (visual, auditory and olfactory) that students would expect to encounter in practice settings. By attending this session, delegates can hope to understand the importance of mental health focused simulation, in an authentic environment which mirrors those that students will experience on placement and once qualifying. We hope to demonstrate to delegates that there is currently a significant gap in research and teaching of specific Mental Health simulation; one which we hope to encourage others to close the gap and continue to promote.

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**Keywords:** Mental Health Nursing Simulation. Innovation. Immersive. Authentic.

**2Civ, 14:50 - 16:40**

## **Unlocking digital identity: A novel LinkedIn audit to prepare future Healthcare professionals**

**Dr Ananya Thakur, University Hospitals of North Midlands Foundation Trust**

LinkedIn is a key tool for career development, yet many medical students and doctors underutilise its potential. This study audited profiles using a 130-point scoring tool to assess completeness and branding consistency, revealing widespread gaps in reflective sections and professional identity representation. Delegates will gain insights into current patterns of digital professionalism among medical students and doctors. The session highlights opportunities for healthcare professionals to better leverage LinkedIn, providing insight into how profile completeness and strategic use of narrative elements can support career development and professional identity-building.

### **Summary:**

**Background:** Digital professionalism is now central to employability and career development in healthcare. LinkedIn, the world's largest professional networking platform, is increasingly used to assess career readiness, showcase achievements, and foster mentorship. For healthcare professionals, LinkedIn can enhance credibility, visibility, reputation management, and referrals [1–3]. Evidence from wider recruitment research shows that applicants with complete profiles are more likely to receive interview callbacks, while incomplete profiles may be perceived as unprofessional or ambiguous [4]. Despite these recognised benefits, little is known about how medical students and doctors present themselves on LinkedIn. While prior studies have examined general use among surgeons [5], no research has quantified profile completeness and branding consistency in this group. This study therefore provides the first quantitative evidence of LinkedIn profile completeness among medical students and doctors, addressing an important gap in understanding how LinkedIn supports professional identity-building for the future healthcare workforce.

**Methods:** A cross-sectional audit of LinkedIn profiles was conducted between July–August 2025. Medical students and doctors were recruited via LinkedIn outreach and consented to inclusion. A structured audit tool was developed to assess profile completeness (0–100) and branding consistency (3–30) across ten domains, including photo, banner, headline, “About” section, education, experience, skills, and recommendations. Profiles were independently reviewed by three evaluators. Mann-Whitney U tests and Spearman's correlation were used for statistical analysis.

**Results:** Sixty-seven profiles were reviewed (27 medical students, 40 doctors). Median overall score was 42% (IQR 35–51%), with no significant difference between students and doctors (44% vs 40%,  $p=0.30$ ). Profile completeness was lowest in reflective and narrative-driven domains: “About” (10%, IQR 0–25%) and “Recommendations” (0%, IQR 0–0%). Branding scores also showed weakness in banners, summaries, and recommendations (median 33%). A strong positive correlation was found between completeness and branding ( $p=0.70$ ,  $p<0.001$ ), suggesting that users with fuller profiles articulated clearer professional identities.

**Lessons for Delegates:** Findings reveal a systemic gap in digital professionalism across both groups. While most participants uploaded photos and listed experience, very few engaged with narrative sections that showcase values, career goals, and reflective identity. This pattern suggests LinkedIn is often used passively, limiting its potential to support career progression, networking, and employability.

**Key takeaways:**

1. Recognising that underutilisation of LinkedIn may disadvantage future healthcare professionals in employability, visibility, and networking.
2. Encouraging completion of reflective sections (“About”, recommendations) to strengthen professional storytelling.
3. Promoting peer endorsements and recommendations as part of career development [6].

**Relevance to Healthcare Workforce Development:** A future-ready healthcare workforce requires more than clinical knowledge; it requires the ability to build and sustain a professional digital identity. By quantifying gaps in LinkedIn profile completeness, this study highlights missed opportunities for employability, career development, and workforce sustainability. Embedding digital professionalism training into healthcare curricula—including reflective online identity-building—could strengthen employability, ease transitions into practice, and improve retention across the healthcare sector.

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**Keywords:** LinkedIn. Digital professionalism. Healthcare professionals. Medical students. Workforce development

## Strand 2D: Surgical and neuroscience

**2Di, 14:50 - 16:40**

### **Bridging the gap: A hands-on suturing workshop for Medical Students to enhance surgical skills training**

Omar Abdelmohsin, Plymouth University Hospitals

This hands-on suturing workshop addresses a key gap in medical education by providing essential surgical skills training to medical students during their clinical rotations. With limited practical exposure in the standard curriculum and high costs for postgraduate courses, students often feel underprepared. Our workshop significantly improved student confidence and competence in basic suturing techniques, as shown by pre- and post-session surveys. This low-cost, high-impact initiative equips future doctors with foundational skills, enhancing their clinical readiness and contributing to better patient care outcomes across the healthcare system.

#### **Summary:**

**Background:** Despite the growing demand for surgically competent medical graduates, formal surgical skills training remains limited in many undergraduate medical curricula. Most medical students receive minimal hands-on exposure to basic surgical techniques, often relying on costly external courses after graduation to gain practical experience (1,2).

**Methods:** We implemented a hands-on suturing workshop for medical students from two medical schools. The training was delivered either as weekly sessions during clinical rotations across various surgical specialties or as full-day intensive workshops. The sessions covered essential suturing techniques and instrument handling, facilitated by surgical trainees and consultants. Participants completed pre- and post-workshop surveys to assess self-reported confidence and competence in basic surgical skills. Data were analyzed to evaluate the workshop's impact and identify barriers to surgical training.

**Findings:** Survey responses indicated a significant lack of confidence in surgical skills prior to the workshop. Post-workshop data showed marked improvement in students' confidence and understanding of suturing techniques. A recurrent theme was the limited surgical exposure within the core curriculum and the financial burden of pursuing skills training independently post-graduation (3,4).

**Limitations:** Limitations included self-reported outcomes, variability in prior experience, and a relatively short follow-up period to assess long-term retention of skills.

**Conclusion:** Integrating structured, accessible surgical skills workshops into undergraduate medical education addresses a critical gap in training. This initiative enhances student competence, reduces dependence on costly postgraduate courses, and contributes to producing more well-rounded, confident future doctors. Improving surgical literacy among medical graduates is highly relevant to the healthcare sector, where early competence can translate into better patient care and more efficient clinical training pathways (5,6).

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**Keywords:** Medical education. Surgical skills training. Suturing workshops. Undergraduate curriculum. Clinical competence.

**2Dii, 14:50 - 16:40**

### **Redifing neurosurgical training: A consensus-driven QIP**

Dr Husain Ahmed, Newcastle upon Tyne Hospitals NHS Foundation Trust

Simulation is a vital tool in surgical education, yet neurosurgical trainees in the North East of England lack structured simulation access. This session explores the development of a dedicated regional neurosurgery simulation programme, informed by trainee feedback and supported by £10,000 in educational funding. Attendees will gain insight into the identified training gaps, the implementation process using high-fidelity models, and the potential for wider replication. This initiative aims to enhance operative preparedness and offers a scalable model for improving simulation equity across surgical specialties.

#### **Summary:**

**Background:** Simulation is an essential component of surgical training, offering a safe environment for trainees to develop their technical and decision-making skills. Despite its evidenced effectiveness, access to structured simulation programmes remains uneven across different regions. To date, no dedicated neurosurgical simulation programme has been established in the North East of England, highlighting a notable gap in the local training infrastructure.

**Objective:** This study aimed to assess the current state of neurosurgical training in the North East, identify gaps in simulation exposure, and develop a structured simulation programme tailored to trainee needs.

**Methods:** A structured questionnaire was disseminated to neurosurgical trainees across the North East of England, including senior house officers, registrars, and fellows. The survey evaluated perceptions of training quality, access to simulation resources, theatre exposure, and confidence in independent practice.

**Results:** Twelve responses were received (6 registrars, 5 SHOs, 1 fellow). The average satisfaction with current training was 62%, while the perceived usefulness of simulation training scored 90%. Over 58% of respondents reported inadequate access to theatre time, and 50% felt underprepared for independent practice. Nearly all participants expressed interest in formal teaching sessions, highlighting bypass procedures, aneurysm clipping, and skull base approaches as priority areas for simulation training.

Conclusion: In response to the identified needs, approximately £10,000 in funding was secured from the department educational funds to establish a dedicated neurosurgery simulation suite and procure high-fidelity models from UpSurgeOn. A structured regional simulation programme is currently under development, with implementation planned by the end of 2025. Post-implementation evaluations will assess the programme's impact and inform future iterations. This initiative addresses a critical gap in neurosurgical training and offers a scalable model for enhancing simulation access in surgical specialties.

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**Keywords:** Neurosurgery. Simulation. Education. Training. North-East.

### 2Diii, 14:50 - 16:40

#### Use of a digital cadaver (Anatomage) to support and enhance neuroscience content for learning and teaching of Undergraduate Nurses in large group settings

Liz Taylor, Hannah Mosley, Scott Colton and Andrew D. Powell, Birmingham City University

Undergraduate student nurses recognise the importance of bioscience, but do not always see the relevance of it to their clinical practice. Enhanced knowledge and understanding of bioscience are related to improved patient care and outcomes. Neuroscience content can be particularly challenging for students. This presentation provides an overview of an innovative approach to teaching and learning of neuro anatomy, physiology, and pathophysiology using a Digital Cadaver (Anatomage) for third year undergraduate student nurses.

### Summary:

Background: Undergraduate nursing students recognise the importance of bioscience content, but do not always see the relevance of it to their clinical practice (Montayre and Sparks, 2017). Bioscience is a generic term that is usually applied within nursing curricula for content relating to anatomy, physiology, pathophysiology, and pharmacology (Barton et al., 2021). There is evidence undergraduate nurses find bioscience particularly challenging (Barton et al., 2021; Craft et al., 2017). Despite this, having sound bioscience knowledge and understanding is necessary for nurses to be able to articulate and escalate physiological patient concerns to the wider MDT, and communicate about complex health needs with patients (Perkins, 2019). Enhanced level of nurse education has been shown to have statistical significance on patient mortality (Cho et al., 2015). It has been shown that neurological assessment skills are suboptimal in nurses (Kerr et al., 2016) which may result from neurological examinations being more complex and challenging (Shin et al., 2017). The development of digital technologies has enabled more innovative and engaging bioscience classroom content (Thompson et al., 2020) and e-learning can improve neurological assessment competencies (Shin et al., 2017).

This presentation presents an overview of how a digital cadaver was used in class teaching and learning from a tutor perspective. The aim is to promote teaching and learning advancements through use of digital cadavers in large group sessions and to demonstrate

the potential impact on student knowledge, learning and engagement. As part of our 3rd year undergraduate nursing programme, we used the digital cadaver to explore neuro anatomy, physiology and pathophysiology.

**Key findings:** Using a Digital Cadaver for teaching and learning of bioscience is resource intensive, but feasible approach for academics to enhance and develop teaching materials at large scale. Pilot work suggests learners found the digital cadaver in a large group setting beneficial. Students self-reported an increase in knowledge and were able to see the relevance of content to clinical practice. This suggests that using a digital cadaver promoted engagement and interest in a complex bioscientific topic for undergraduate student nurses, which may also be applicable to other healthcare disciplines.

**Lessons for healthcare educators:** Digitally enhanced learning using a digital cadaver may have benefits for student knowledge, attainment, and retention which may enhance the application of bioscience knowledge in clinical practice.

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**Keywords:** Bioscience. Anatomage. Student engagement. Neuroscience. Undergraduate nursing.

**2Div, 14:50 - 16:40**

### **Cutting deep: Exploring perspectives of cadaver-based learning in Paramedic Education**

**Meg Atkinson and Angus Thain, Nottingham Trent University**

Concerns regarding paramedic skill competency? This study explores cadaver-based learning (CBL) as a vital pedagogical solution. A survey of 87 participants within the paramedic profession revealed an overwhelmingly positive perception of CBL, with participants praising its ability to improve anatomical knowledge, clinical skill competence and confidence. Crucially, the hands-on nature of CBL was found to be especially beneficial for neurodiverse learners, bridging the theory-practice gap through tactile, multi-sensory engagement. This research strongly recommends integrating CBL into paramedic curricula to enhance training and improve the future profession's competence and confidence

#### **Summary:**

**Background:** The increasing complexity of UK paramedic practice (HCPC 2021; Peate 2015) requires robust anatomical knowledge and proficiency in complex procedural skills (Deakin et al. 2009; Lim et al. 2014). However, concerns persist regarding skill competency (Voss et al. 2014) and the limitations of traditional pedagogical methods (Holland et al. 2011; Maani et al. 2024), prompting exploration of alternative approaches like cadaver-based learning (CBL). Despite CBL's demonstrated efficacy in medical education (Asante et al. 2021; Elliot 2022; Lim et al. 2014), its perceived value among paramedics remains largely unknown. This study addresses this gap by exploring paramedic perspectives on CBL's potential within paramedic education.

**Methods:** A mixed-methods design was employed using an online survey of participants within the paramedic profession. Quantitative analysis of Likert-scale responses (descriptive/inferential statistics) was integrated with thematic analysis of qualitative data from open-ended questions to understand perceptions of CBL within paramedic education.

**Results:** Participants (n = 87) demonstrated a strong positive valuation of CBL, particularly those with prior exposure (94% finding it beneficial or valuable). 'Strongly agree' was the modal response for CBL enhancing anatomical understanding, clinical skills, confidence and knowledge retention. Crucially, 76% (34 strongly agreed, 32 agree) endorsed CBL as an essential component of paramedic education.

**Discussion and Conclusion:** Participants emphasised CBL's unparalleled ability to enhance anatomical understanding, refine clinical skills and improve knowledge retention through direct, tactile interaction. This hands-on method effectively bridges the expanding theory-practice gap in paramedic education. Furthermore, the exposure to cadaveric material provided invaluable opportunities for the repeated practice of high-risk, low-frequency procedures. This practice, in turn, helps to automate skills and reduce cognitive load, enabling paramedics to focus on critical decision-making under pressure and ultimately supporting optimal performance. The study's finding that 29% of participants identified as neurodivergent underscores the critical need for inclusive pedagogical methods. The findings, supported by both neurophysiological evidence and participant feedback, highlight the significant potential of CBL to address these educational disparities. Participants with

learning differences universally praised the kinaesthetic and tactile nature of CBL, noting its effectiveness in consolidating complex theoretical knowledge. By providing a multi-sensory and practical learning environment, CBL offers a more effective learning experience for a diverse student body. While logistical and ethical considerations exist, this study concludes that CBL offers significant potential to enhance paramedic training, bridge the theory-practice gap, and ultimately improve paramedic competence and confidence. Increased integration of CBL into PE curricula is strongly recommended.

**Keywords:** Cadaver-based learning. Paramedic education. Neurodiversity. Skill competency. Pedagogical methods.

## Strand 2E: Student experience

2Ei, 14:50 - 16:40

### **‘We are afraid of asking and it not being reasonable’: Veterinary Student experience of neurodiversity support in the clinical learning environment**

Dr Sabine Töttemeyer and Helena Ivey, University of Nottingham, Dr Kirstie Pickles, Harper Keele Veterinary School and Olivia Cormier, Oxford Brookes University

During their studies, veterinary students spend approximately 20 weeks of self-organized practical placements and the whole of final year in clinical practice. This is a fast-paced, dynamic, sensory-stimulating, and often unpredictable environment, to which some students and in particular neurodivergent (ND) students struggle to adjust. Traditional university support plans for ND students are often not applicable to this environment. This qualitative study highlights that ND veterinary students often enjoy the clinical environment but rarely feel that it is a psychologically safe environment where they can discuss their needs and reasonable adjustments with staff.

#### **Summary:**

Introduction: Students with neurodivergent (ND) conditions are impacted in day-to-day life and face considerable challenges navigating higher education, leading to frustration, low wellbeing, and contributing to mental health conditions such as depression (Clouder et al 2020). This is potentially exacerbated in the fast-paced, dynamic, sensory-stimulating, and often unpredictable clinical learning environment (CLE). Veterinary students spend the whole of final year and approximately 20 weeks of self-organized placements in CLEs. The limited support for ND students currently offered by universities lacks evidence base, focusses on teaching delivery and assessment and is mostly not applicable to the CLE that vet students encounter. Prior to final year clinical rotations, ND students are encouraged to confidentially disclose their challenges, needs and coping strategies to university staff leading the rotations. However, staff reluctance to engage in neurodiversity awareness training reinforces the stigma of ‘being different’, which reinforces reluctance of students to disclose learning differences and prevents access to support (Clouder et al 2020). Our recent scoping review demonstrated a lack of publications investigating the experiences of ND veterinary or veterinary nursing students in the CLE (Pickles et al in press).

Research question: What is the experience of support in the CLE for neurodivergent veterinary students? Methodology: Neurodivergent veterinary students (years 3-5) were invited to participate in semi-structured interviews investigating their experience of support in CLEs, followed by reflexive thematic analysis of interview transcripts (Braun & Clark, 2021).

Results: Nine ND students with a range of neurotypes (autism spectrum condition, attention deficit hyperactivity disorder, dyslexia, dyspraxia) participated in semi-structured interviews. Reflexive thematic analysis identified three overarching themes and ten subthemes:

- (1) Successful neurodiversity support,
- (2) Poor accessibility of support for neurodivergent students,
- (3) What good neurodiversity support in the CLE could look like.

ND students valued support provided by individual CLE staff members, informal ND peer support with some clinical placements providing a particularly positive teaching environment. However, all participants reported that the university was unable to support their ND-needs when in CLEs. Many participants described some rotation supervisors as unapproachable, lacking awareness of the lived experience of ND, which acted as a barrier to disclosure.

Feedback was often perceived as inaccurate or mismatched their own perception. Especially when focused on social interactions, feedback was a particular source of distress. Participants suggested more explicit communication of positive intent to support ND students to feel confident performing the role of veterinary surgeon given the correct environmental support.

Discussion: Neurodivergent veterinary students often enjoy CLEs but rarely feel that the CLE is a psychologically safe environment where they can discuss their needs and reasonable adjustments with neurodiversity aware staff.

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**Keywords:** Neurodiversity. Healthcare professions student. Clinical learning environment. Support

**2Eii, 14:50 - 16:40**

### **Navigating distress: Supporting Veterinary Students through emotionally challenging learning experiences**

Dr Elly Vesty, Harper and Keele Veterinary School

Veterinary students often face emotionally intense situations as part of their professional training, some of which can provoke significant distress. This session explores findings from a study on student anxiety surrounding a compulsory abattoir visit, revealing key stressors and emotional responses. We'll discuss how compassionate curriculum design can help students navigate these experiences safely and meaningfully. We will explore how healthcare educators can embed emotional literacy and psychological safety into training, ensuring students are supported in both their academic and emotional development.

### **Summary:**

**Navigating Distress: Supporting Veterinary Students Through Emotionally Challenging Learning Experiences** Veterinary students are routinely exposed to emotionally challenging experiences as part of their professional training (Islam, 2025). Whilst these encounters - such as euthanasia, difficult client interactions and clinical trauma - are essential for developing competence, they can also provoke significant distress. The veterinary profession has one of the highest rates of suicide and burnout (Office for National Statistics, 2022) and the psychological safety and self-compassion needed to tackle this should be an integral part of their education. This presentation focuses on an abattoir visit, which is a key encounter in the Veterinary Medical curriculum and that often elicits strong emotional responses (Wigham, 2024). This is a compulsory component of UK veterinary curricula, mandated by the Royal College of Veterinary Surgeons (RCVS). At the Harper and Keele Veterinary School, this visit takes place at the end of year two of the programme.

Drawing on findings from a cross-sectional study of 73 UK veterinary students, we explored sources of stress and anxiety in anticipation of student's first abattoir visit. Three principal stressor categories emerged: witnessing the slaughtering process, exposure to aversive sensory stimuli (e.g., sounds, smells, and sights), and experiencing unpleasant psychological or physical reactions. These stressors were often compounded by feelings of uncertainty, fear of emotional overwhelm, and concern about personal coping capacity. The study highlights a critical tension in veterinary education: how to ensure students are adequately prepared for emotionally intense experiences without desensitising or disengaging them and without causing unnecessary psychological harm. Under the theme of compassionate education, this presentation will explore how educators can support students through structured, empathetic preparation that acknowledges emotional vulnerability as part of professional growth. We will consider strategies for embedding compassion into curriculum design, including pre- and post-visit reflective exercises, facilitated peer discussions, and guided expectation-setting. These approaches aim to normalise emotional responses, foster psychological safety, and enhance the pedagogical value of potentially distressing experiences, such as abattoir visits. Importantly, they also support students to reconcile the ethical and emotional complexities of working with animals in diverse contexts. By centring student wellbeing and emotional literacy, healthcare educators can create learning environments that are not only academically rigorous but also emotionally supportive. This presentation invites attendees to reflect on how compassionate education can be integrated into their own curricula to ensure that students are not merely exposed to difficult experiences but are meaningfully supported in navigating them.

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**Keywords:** Veterinary medicine. Abattoir. Psychological safety. Distress. Anxiety.

#### 2Eiii, 14:50 - 16:40

##### **“No one has ever paid me this much attention before.”: Improving inclusion of disabled and neurodiverse students in Biomedical Education**

Dr Timothy Fulton, Queen Mary University of London

With rising numbers of students declaring disabilities and mental health conditions, inclusive education is more important, and more challenging, than ever. This session explores a student-centred approach to support planning within biomedical programmes, featuring a bespoke workflow and the introduction of a “School Disability Officer” role. Through collaborative meetings and weekly drop-ins, students co-create practical, empowering adjustments tailored to specialist learning environments, in addition to creating a community

of learners who support one another. Delegates will gain insights into fostering inclusive cultures, improving student experiences, and driving institutional change.

### **Summary:**

Universities are legally obligated by the Equalities Act (2010) to ensure equal access to education for all students. However, with increasingly limited resources, delivering truly inclusive education presents a significant challenge. One of the key challenges to achieving this is the increasing number of students with additional access requirements or special educational needs and disabilities (SEND). In UK Secondary Education, 19.5% of students are recorded as SEND, and this figure continues to rise (1). This trend is mirrored in Higher Education, where the number of students declaring a disability or specific learning difference has increased by 47% between 2014/15 and 2019/20 and continues to increase (2,3). Notably 21.6% of students disclosed a mental health condition in 2023/24, quadrupling in frequency compared to 2013/14 (4)

Traditionally, students who declare a disability or neurodiversity are supported by university professional services, who produce a Student Support Statement or Summary. This is then shared with academic schools for implementation. Unfortunately, these summaries are often too generic or impractical, especially in science and healthcare programmes where students engage in specialist environments such as anatomy centres and laboratories. As a result, reasonable adjustments are often inconsistently or ineffectively applied, and this results in students being unable to access their programmes of study (5).

To address this issue, we developed a bespoke, school-level workflow that places students at the centre of all discussions about their support needs. This model fosters direct collaboration between students, academic staff, and Professional Services. Together, we co-create tailored reasonable adjustments that are both practical and suited to the specific demands of biomedical programmes.

The approach empowers students by providing agency in shaping their support while recognising their individuality. Every student with a support summary is invited to a meeting to discuss their specific challenges and needs. Weekly informal drop-in sessions provide ongoing dialogue about support needs. Students reflect on experiences, update support plans and share successes such as attending workshops or enjoying practical classes. This continuous feedback loop helps staff and students refine support strategies and highlight good practices. Beyond individualised support, drop-ins have created a learning community where students support one another, share experiences across programmes and years, and help manage their conditions. By centering students in conversations about their needs, we have fostered a supportive community where students celebrate each other's achievements and advocate for inclusive practices. This initiative has influenced broader institutional change, with other schools adopting similar models and implementing adjustments such as quiet corners and larger scale estate modifications which are now standard practice. This session will offer delegates insights into how student-centered support planning can enhance individual experiences and foster inclusive cultures across institutions. Attendees will be empowered to engage in meaningful conversations with students, recognising that while perfection is not always possible, viewing students as individuals, rather than through the lens of a generic support summary, can significantly improve their educational journey.

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**Keywords:** Neurodiversity. Inclusion. Reasonable adjustments. Co-creation.

**2Eiv, 14:50 - 16:40**

### **What is the clinical learning experience of neurodivergent Veterinary Students?**

Dr Sabine Töttemeyer and Helena Ivey, University of Nottingham, Dr Kirstie Pickles, Harper Keele Veterinary School and Olivia Cormier, Oxford Brookes University

Neurodiversity celebrates the natural variations in human neurological function, which can manifest in a wide range of conditions, and confer both strengths and challenges. Neurodivergent students can face considerable challenges navigating higher education, leading to frustration, low wellbeing, and contributing to mental health conditions such as depression. Clinical learning environments (CLEs) may contribute additional challenges due to learning occurring in a fast paced, busy work environment, which may also have concomitant commercial interests. Understanding neurodivergent student experiences in such environments will inform the provision of better support.

#### **Summary:**

Background: Neurodiversity refers to the natural variations in human neurological function, which can manifest in a wide range of conditions [1]. Students with neurodivergent (ND) conditions are impacted in day-to-day life and can face considerable challenges navigating higher education, leading to frustration, low wellbeing, and contributing to mental health conditions such as depression [2]. Clinical learning environments (CLEs), which are pivotal to healthcare profession education, may contribute additional challenges due to learning occurring in a fast paced, busy work environment, which may also have concomitant commercial interests. This study aimed to address the current lack of research into the experiences of neurodivergent vet students in clinical learning environments (CLE's). Understanding their experiences will inform the provision of better support.

Research question: What is the experience of neurodivergent veterinary students in the CLE? Methodology Neurodivergent veterinary students (years 3-5) were invited to participate in an online survey and follow up semi-structured interviews investigating their

experience of CLEs. Mixed-method analysis of responses was conducted of survey responses and reflexive thematic analysis of interview transcripts [3].

Results: Survey responses were collected from 41 neurodivergent students identifying as autistic, dyslexic, ADHD and/or dyspraxic. Enablers of participation in CLEs included 'quiet areas', 'breaks', 'personal items', and 'supportive staff'. Barriers included 'overstimulation', 'lack of clear information', 'specific challenges/requirements', 'lack of breaks', 'unsupportive staff' and 'fear of stigma'. Participants emphasised the potential negative impact that feedback focusing on social interactions can have on neurodivergent students.

Nine semi-structured interviews were analysed using reflexive thematic analysis, identifying four overarching themes:

- (1) Individual neurodivergent identity;
- (2) Self-management strategies,
- (3) Barriers to self-advocacy and disclosure and
- (4) Impact on wellbeing and mental health.

Neurodivergent veterinary students identified as having diverse needs, which varied in different CLE environments. Though most students reported self-management coping strategies, those were not always sufficient. Students experienced barriers to self-advocating or disclosing their neurodivergence. These barriers included external stigma and internal factors reducing self-efficacy. Decreased self-advocacy and disclosure in turn led to reduced student wellbeing and worsened mental health.

Discussion: Neurodivergent veterinary students often enjoy CLEs but rarely feel adequately supported or prepared to advocate for their needs. A psychologically safe environment through reasonable adjustments and neurodiversity aware staff in combination with support to develop self-advocacy would allow ND students to be at their best in the CLE.

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**Keywords:** Neurodiversity. Healthcare professions student. Clinical learning environment.