



# The Beacon Conference: Bridging Gaps 2024

Our Conference Program, 16th November 2024

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## Welcome!

We are privileged and proud to be welcoming you to our annual conference. This conference has been designed to celebrate students from under-represented backgrounds and identify best-practice around how to provide support to these students whilst training in clinical academia.

This conference is a respectful, safe space for all. We ask that people remain mindful of accessibility requirements, pronouns, and that for some, this may be their first conference or first time in academia. If you have any concerns at the conference, please escalate them directly to the team from The Beacon Academy and we'll do our best to support you.

This year, we're being hosted by MedAll - we are working to make this conference as accessible to those who come from any background with any requirement. With the challenges faced by the medical workforce in terms of reduced capacity and support for academic work, and reduced funding from institutions, we want this conference to remain free and supportive to give all medical students the best opportunity to develop academic skills.

We cannot wait to see you all, hear about your fantastic work, and identify best practice to support UK medical schools develop their work to support and represent academically-minded students from all backgrounds.

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Conference website – please head to the below for the poster hall, talks and all other conference information.

<https://app.medall.org/event-listings/beacon-conference-2024>

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## Our Story

In 2021, Dr Thomas Dale MacLaine and Dr Charlotte Simms designed and co-ordinated four internships, protected for those from under-represented backgrounds. The aim was to create opportunities to upskill ‘under-represented’ communities in clinical research, through mentored internships in healthcare technologies and healthcare innovation. By the summer of 2022, the first round of successful internships was completed – more about this success can be seen in [our 2022 annual report](#). With such resounding positivity and interest from students and staff alike, the founders (Dr Thomas Dale MacLaine and Dr Charlotte Simms, pictured below) and core team (Prof. Kirstie Haywood, Chloe Berg and Lauren Ketteridge) designed The Beacon Academy.

## Our Team

We are a small team of passionate individuals, sharing one vision: to improve access to clinical academia for all. We are always welcoming people to the team, whether through micro-volunteering or through more established roles. If you are interested in joining us in some way, please get in touch.

The Beacon Academy is currently delivered by Dr Thomas Dale MacLaine and Dr Chloe Berg. We work closely with Professor Kirstie Haywood in Warwick Medical School to facilitate progression and continue our incredibly strong staff-student liaison links. We’re delighted to be working with her and Emma Hall, to cohesively coordinate the senior level Beacon Academy work.

## Dr Thomas Dale MacLaine

Dr. Thomas Dale MacLaine is a dedicated educator and researcher with a passion for advancing equity and inclusion in medical academia. He is a Trauma and Orthopaedics Surgical Trainee at NHS Tayside. He holds an MBChB from Warwick Medical School, a PhD from the University of Leeds, and a BSc (Hons) from the University of Dundee.

As the founder and co-chair of The Beacon Academy, Dr. Dale MacLaine is committed to expanding opportunities for clinical



students from under-represented groups across the UK. His vision is to create pathways for these students to engage in clinical academia, thereby enhancing diversity within research projects and the broader academic community.

Prior to establishing The Beacon Academy, Dr. Dale MacLaine delivered internships through INSIPRE, an academic internship program designed for medical students. He has also hosted academic conferences and contributed to various research teams at both Leeds and Warwick, gaining invaluable experience in academic leadership and collaboration.

Dr. Dale MacLaine specialises in academic skills training, equipping students with essential tools for success in research. His expertise includes guiding students on how to work effectively with supervisors, define impactful research questions, create compelling abstracts and presentations, and write manuscripts for publication.

With a steadfast commitment to fostering an inclusive academic environment, Dr. Dale MacLaine continues to inspire the next generation of medical professionals, ensuring that diverse voices are represented in clinical research and education.

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## Dr Chloe Berg

Dr Chloe Berg (FY1) graduated from Warwick Medical School and has since demonstrated a keen interest in paediatrics and education, with a particular focus on supporting underrepresented groups. During her time at Warwick, Dr Berg worked with the Athena SWAN initiative, promoting gender equality in academic medicine.

For two years, she played a pivotal role in delivering the Beacon Internships at Warwick University, a program dedicated to creating educational and professional opportunities for students from diverse backgrounds. Through these internships, participants gained valuable skills in healthcare innovation and clinical research, while receiving mentorship and support.

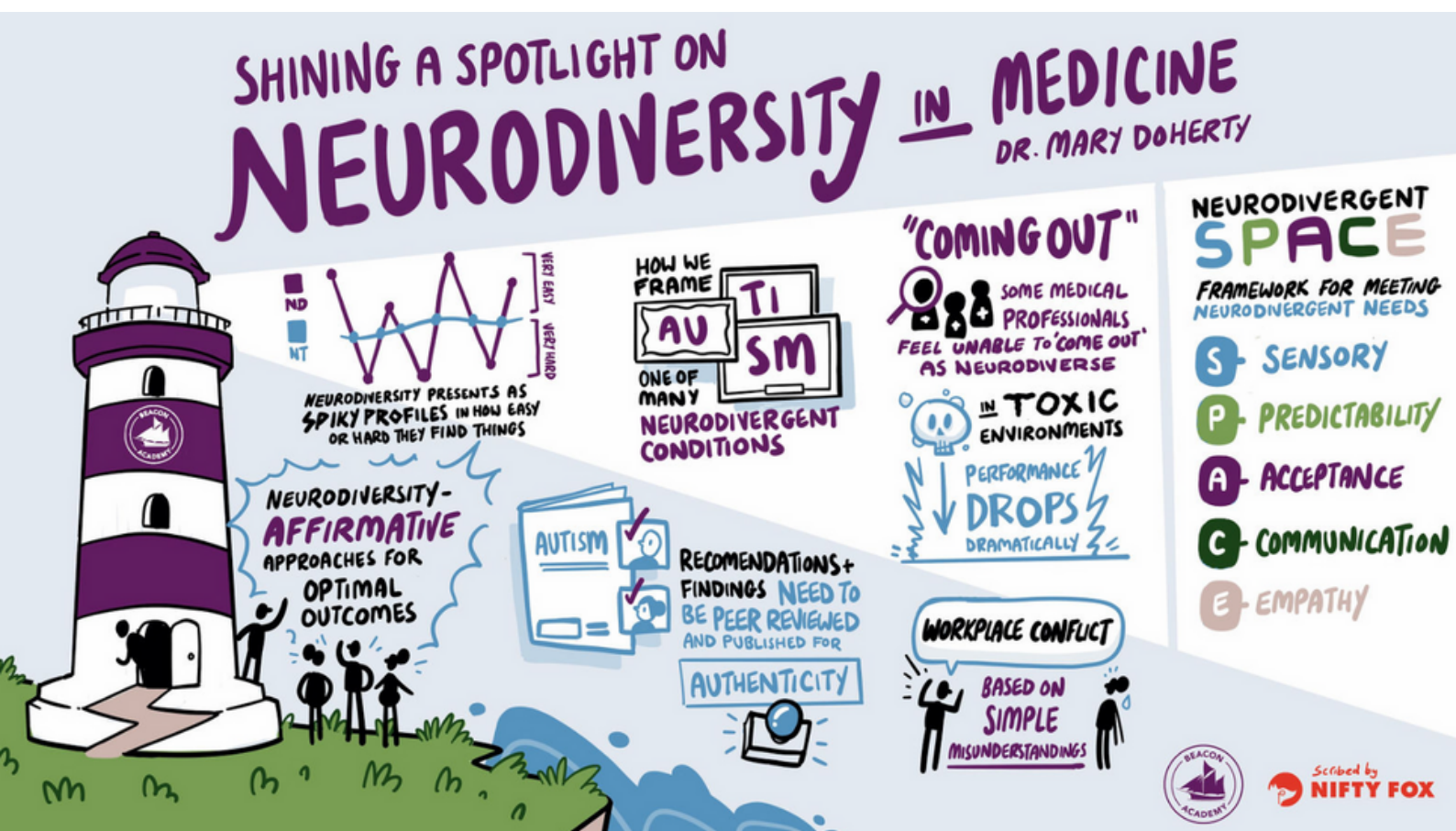


With her passion for education and her dedication to fostering inclusion, Dr Berg aspires to continue her work in paediatrics and educational development, championing equal opportunities for future generations of healthcare professionals.

## Best-practice Panel Session

Last year's conference, Breaking Ground, was our very first one. We designed this conference to reflect the nature and ethos of these internships: collaborative, innovative and intending to model best practice. That being said, all of our work is under-pinned by involvement with those we represent. That's why we held the Best-Practice Panel discussion and why we're keen to host a further one this year!

We focussed on three important topics: Neurodivergency in clinical academia, Pride in clinical academia and overall supportive representation in clinical academia. Working with Nifty Fox, we developed these three infographics highlighting barriers and best practice in these fields. These help facilitate discussions we have with Medical Schools across the UK, with our interns and supervisors, with our mentors, and with others looking to get involved in similar work. We hope you find them useful and informative.



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# THE VISIBILITY OF Queer Identities IN MEDICINE

DR VASSILI CRISPI

**NO SINGLE, COMING OUT MOMENT**  **CONSTANTLY SCANNING FOR A QUEER FRIENDLY ENVIRONMENT**

**VISIBLE ROLE-MODELS**  **IF YOU CAN SEE IT YOU CAN ASPIRE TO IT**  **NEGATIVE WORKPLACE EXP...**  **... CHANGE THE CAREER PATH OF COLLEAGUES** 

**LACK OF ACCESS (OR DESIRE) TO NETWORK**  **CLOSED-MINDED COLLEAGUES**  **LEADING TO:** **FEWER PROFESSIONAL RELATIONSHIPS** **LESS FUNDING** **LESS ACADEMIC OPPORTUNITY**

**LANGUAGE** **PRONOUNS** **FIRST IMPRESSIONS**

**INCLUSIVE WORKPLACE**  **EARNING A RAINBOW**

**CHALLENGING BEHAVIOUR**  **INFORMAL/CONVERSATION** **ACTIVE BYSTANDER**

**VISIBLE LEADERSHIP** 

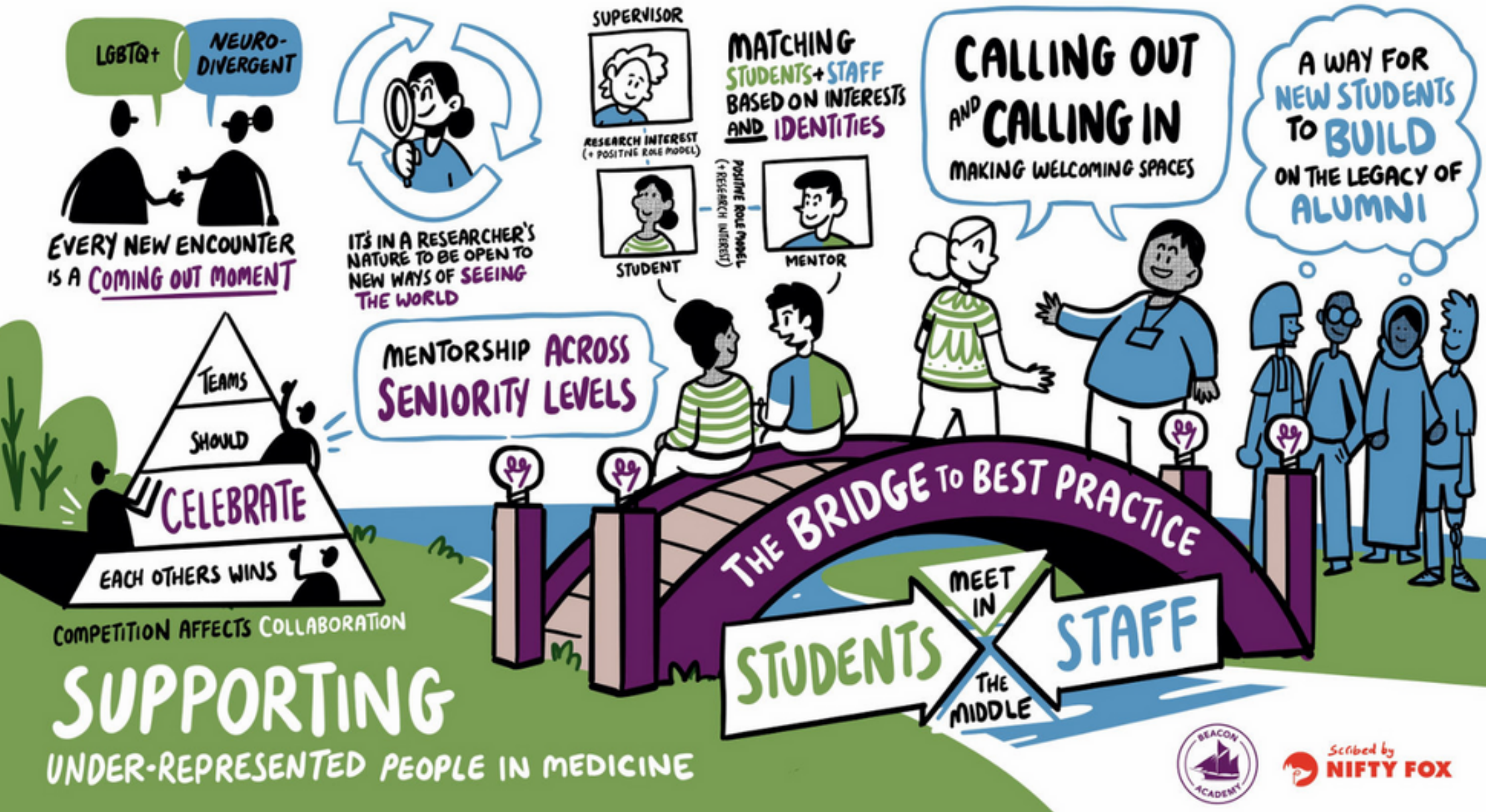
**INTERSECTIONALITY** 

**WHERE TO STEER FOCUS NOW**

**AS LEADERS**  
**WE HAVE A RESPONSIBILITY TO PULL PEOPLE UP WITH US**

**LEADING WITH PRIDE**





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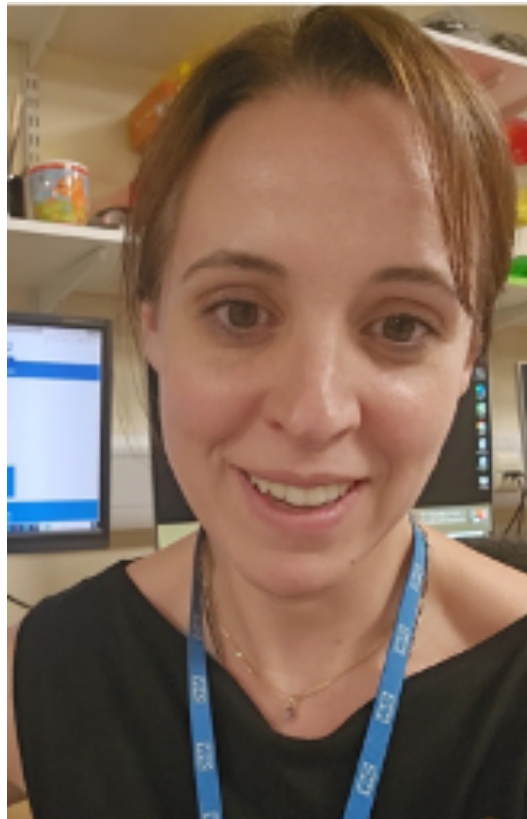


## Guest Speakers

We are so lucky to have our keynote speakers: Dr Crombie and Professor Fardon to give our two keynote talks.

### **Dr Katie Crombie**

*Co-Chair of the Paediatric Training committee West Midlands, Paediatric registrar West Midlands, Azaylia Foundation Fellow*



Dr Katherine Crombie is a paediatric registrar in the West Midlands. She graduated from the University of Southampton in 2007 with a 1st Class Honours in Nursing, then went on to complete the Graduate Entry Programme in Medicine at the University of Birmingham in 2011. She obtained full Membership of the Royal College of Paediatrics and Child Health in 2015.

She has a special interest in Paediatric Oncology and is currently taking time out of medical training to undertake a PhD funded by the Azaylia Foundation looking at Metabolic and Imaging Characteristics of Paediatric Gliomas in stable disease.

She is Co-Chair of the Paediatric Training committee in the West Midlands, and Mum of two children.

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## Professor Tom Fardon

*Clinical Lead, Respiratory Specialist Delivery Group, Centre for Sustainable Delivery.  
Consultant Respiratory Physician, NHS Tayside. Honorary Professor, University of Dundee.  
Strategic Lead, Respiratory Medicine, NHS Tayside*



Professor Tom Fardon is a consultant Physician in Respiratory and General Internal Medicine at NHS Tayside, Honorary Professor with the University of Dundee, and Associate Post Graduate Dean for the East of Scotland Region of the Scottish Deanery. He was the Clinical Lead for the Respiratory Care Action Plan for Scotland 2022-2026, and is the current clinical lead for the respiratory specialist delivery group, with the Centre for Sustainable Delivery. He is the Strategic Lead for the Respiratory Medicine Interface Care in Tayside.

Prof Fardon's clinical interests are severe asthma, and complex pulmonary infection including cystic fibrosis, bronchiectasis, mycobacterial and fungal lung infection.

### Disclosures:

- **Honoraria, assistance with travel, conference fees and other funding** from Novartis, Chiesi, GSK, AstraZeneca, Boehringer Ingelheim, Pfizer, Teva, Insamed
- **Advisory boards** in the previous three years for AstraZeneca, GSK
- Chair of the Scotland Precision Asthma Group and sat on the UK Precision Asthma Group (AstraZeneca)

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## Conference program

Title of session	Start time	Finish time
Registration & Poster time	09:00 AM	09:30 AM
Introduction and Welcome	09:30 AM	10:00 AM
Oral Presentations: Session 1: Clinical Practice Session 2: Clinical Sciences	10:00 AM	11:00 AM
Break & Poster time	11:00 AM	11:30 PM
Keynote Speaker: Dr Crombie	11:30 AM	12:30 PM
Lunch Break & Poster time	12:30 PM	01:30 PM
Keynote Speaker: Professor Fardon	01:30 PM	02:30 PM
Panel Discussion: Thinking to the Future	02:30 PM	03:30 PM
Break	03:30 PM	03:45 PM
Oral Presentations: Session 3: Widening Participation Session 4: Service Development	03:45 PM	05:00 PM
Beacon Reflections, Expansions and Conclusions	05:00 PM	05:30 PM

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## Additional Information

- **National Goal Setting Panel:** Guided by facilitators, with an open-ended discussion focused on best practices for supporting under-represented students in clinical academia. Outcomes will be documented and shared with attendees after the conference.
- **Posters:** Posters will be judged for clarity of content, appeal, and impact of work. A prize will be awarded for the best poster presentation.
- **Q&A:** There will be an informal Q&A at the end of each session, facilitated by session facilitators.
- **Feedback and Follow-up:** A feedback form will be sent to attendees via email, reviewing how engaging the conference was, its usefulness, and gathering any additional suggestions for supporting under-represented students.
- **Post-Conference Engagement:** Attendees are encouraged to sign up for the conference mailing list. There will also be recorded e-workshops, internship guides, and training plan templates accessible on the website in our new members' area.

We look forward to your participation and engagement at The Beacon Conference - Bridging Gaps 2024. For further updates, please visit our conference website regularly.



## Oral Presentation Abstracts

Please upload your presentations onto the MedAll app or, if struggling to do so, send to [conferences@thebeaconacademy.co.uk](mailto:conferences@thebeaconacademy.co.uk)

Session	Author Names	Author institution	Title of talk	Abstract
Clinical practice	Miss Aishwarya Prakash (1), Mr Hussain Selmi (2), Mr Daoud Makki (2)	(1) West Hertfordshire teaching hospital NHS trust, (2) West hertfordshire NHS trust	Effectiveness of Hydrodilation in Frozen shoulder in patients with Rotator cuff tears	<p>### <b>**Aims**</b></p> <p>Frozen shoulder is a debilitating condition characterized by progressive stiffness and pain of the shoulder joint. Hydrodilatation (HD) has emerged as a non-surgical treatment. However, its effectiveness in patients with concurrent rotator cuff pathology remains unclear, This study aims to assess and compare the clinical outcomes of HD in patients with adhesive capsulitis, with and without rotator cuff tears.</p> <p>### <b>**Method**</b></p> <p>This retrospective study analyzed data from 78 patients who underwent HD between 2021 and 2024. Patients were divided into two groups. Pain was assessed using the Visual Analog Scale (VAS), and range of motion (ROM) was measured for flexion, abduction, and external rotation. Diabetics were also analyzed. Data were collected before HD, and at follow-up intervals of 6 weeks, 3 months, and 6 months. Statistical analyses included the Kolmogorov-Smirnov test for pain scores and the Wilcoxon signed-rank test for ROM comparisons.</p> <p>### <b>**Results**</b></p> <p>Significant pain reduction was observed in both groups post-HD (<math>p &lt; 0.05</math>), with no substantial difference between patients with or without rotator cuff tears. However, ROM improvements were less pronounced in patients with rotator cuff tears, particularly at 6 months (<math>p &lt; 0.01</math>) worse in diabetics. This suggests that rotator cuff pathology may limit HD's mechanical effectiveness.</p> <p>### <b>**Conclusion**</b></p> <p>HD effectively reduces pain in patients with adhesive capsulitis, regardless of rotator cuff integrity. However, patients with rotator cuff tears may experience reduced improvement in ROM, highlighting the importance of pre-treatment imaging and tailored therapeutic strategies for this subgroup. Further research on modified HD techniques is warranted.</p>
Clinical practice	Ms Chloe Browne (1)	(1) Warwick Medical School	Do Female Surgeons Have an Increased Risk of Breast Cancer, and Should this Prompt a	<p><b>**Introduction:**</b> Orthopaedic surgery often requires X-ray imaging throughout the duration of theatre. Protective lead lined aprons are worn by staff to reduce the risk of radiation. Evidence suggests that female orthopaedic surgeons have a significantly increased risk of breast cancer, prompting the need to review if current PPE adequately protects the breasts from excess radiation exposure.</p> <p><b>**Methods:**</b> Six search strings were used to search three scientific databases. These results were overviewed and</p>

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			Change in Radiation Protection for Women?	<p>inclusion/exclusion criteria were applied. Remaining articles were quality appraised, and included articles were reviewed to gather results. The results from each article were collated, analysed and displayed in tables and charts for discussion.</p> <p><b>**Results**:</b> 16 studies were included in this review. Two studies explored the prevalence of breast cancer in female orthopaedic surgeons, finding breast cancer standard prevalence ratios of 2.9 (95% CI 1.66-4.71) and 3.97 (95% CI 2.43-6.14) compared to the general population. Orthopaedic surgery was also found to have a significantly increased breast cancer prevalence compared to other specialties. 14 Dosimetry studies were included, which concluded gowns with sleeves and axillary supplements best reduced breast radiation exposure. Unisex &amp; ill-fitting aprons significantly increased radiation exposure to both the UOQ and LIQ of the breast.</p> <p><b>**Discussion:**</b> The results of these study provide a compelling picture that female surgeons are not adequately protected from radiation exposure, and may have an increased risk of developing breast cancer. The demographics of surgery are changing with more female surgical trainees and surgeons each year, prompting the need for adequate protection.</p>
Clinical practice	Dr. Ashwitha Karnati (1), Dr. Preethi Jacob (1), Dr. Abdullah Ajaj (2), Dr. Manasi Shirke (3)	(1) LNR Foundation School, (2) NHS Trust, (3) Trent Foundation School	Managing Cardiovascular Complications in HIV/AIDS: A Clinical Perspective	<p><b>**Aim:**</b> This study aims to examine the relationship between HIV infection and cardiovascular diseases (CVD), focusing on pathophysiological mechanisms, clinical manifestations, and management strategies. The growing prevalence of CVD among people living with HIV necessitates a deeper understanding of the impact of chronic HIV infection and antiretroviral therapy (ART) on cardiovascular risk.</p> <p><b>**Methods:**</b> A comprehensive literature review was conducted, analyzing data from cross-sectional studies, cohort studies, and randomized controlled trials. The studies reviewed, covered a range of cardiovascular conditions in HIV patients, including coronary artery disease, heart failure, cardiomyopathy, and pulmonary arterial hypertension. The review also considered the impact of ART and other HIV-related factors on cardiovascular health.</p> <p><b>**Results:**</b> Findings indicate a significant association between HIV infection and increased cardiovascular risk. Chronic inflammation, immune activation, and the direct effects of HIV are key contributors to cardiovascular complications. Furthermore, ART, while effective in managing HIV infection and improving life expectancy, has been linked to metabolic disturbances, including dyslipidemia, insulin resistance, and metabolic syndrome, which increase the risk of cardiovascular disease. These HIV-specific factors, combined with traditional cardiovascular risk factors like smoking and hypertension, necessitate a comprehensive approach to management.</p> <p><b>**Conclusion:**</b> Managing cardiovascular diseases in HIV-infected patients requires a multifaceted approach that addresses both traditional and HIV-specific risk factors. Integration of cardiovascular screening and preventive strategies into routine HIV care is essential. Further research is essential to develop targeted therapies and comprehensive care models that can improve cardiovascular outcomes for people living with HIV, ultimately reducing morbidity and mortality in this population.</p>



Clinical practice	Dr. Ashwitha Karnati (1), Dr. Alex Wee (2), Dr. Manasi Shirke (3)	(1) LNR Foundation School, (2) NHS Trusts, (3) Trent Foundation School	Bridging the Gap: Addressing Racial Disparities in Cardiovascular Disease Management	<p><b>**Aims:**</b> This review explores the role of racial disparities in the treatment and management of cardiovascular diseases (CVD), such as hypertension, coronary artery disease (CAD), and heart failure. It examines socioeconomic, cultural, and healthcare-related factors contributing to these disparities and suggests potential solutions to bridge the gap in treatment outcomes among different racial groups.</p> <p><b>**Methods:**</b> A comprehensive literature review was conducted using databases including SCOPUS, Wiley, PubMed, and SAGE Journals. Relevant studies focusing on racial disparities in diagnosing, treating, and managing CVD were selected. Emphasis was placed on identifying barriers to equitable healthcare access and analyzing the physiological and pharmacological responses to CVD treatment across various racial and ethnic groups.</p> <p><b>**Results:**</b> Findings indicate significant racial disparities in the prevalence and severity of CVD, with minority populations, particularly Black, South Asian, and Hispanic groups, experiencing higher rates of morbidity and mortality compared to White populations. These disparities are influenced by factors such as limited healthcare access, lower rates of treatment adherence, and socioeconomic challenges. Additionally, the underrepresentation of minority groups in clinical trials leads to a lack of tailored treatment strategies, highlighting the limitations of the 'one-size-fits-all' approach in CVD management.</p> <p><b>**Conclusion:**</b> Addressing racial disparities in CVD requires multifaceted approaches, including improving healthcare access, enhancing cultural competence among healthcare providers, and ensuring minority representation in clinical research. Targeted interventions, such as developing culturally sensitive health promotion programs and adjusting pharmacological treatments based on racial and ethnic differences, are critical steps toward reducing these disparities and improving health outcomes for minority populations.</p>
Clinical sciences	Ms Louise Davies (1), Ms MEDHA PILLAAI (2)	(1) University of Dundee, (2) University of Dundee	Improving identification of Primary Biliary Cholangitis with intelligent liver function tests	<p><b>**Background and aims**</b> Primary biliary cholangitis is an autoimmune condition causing inflammation of the bile ducts resulting in chronic disease. It is diagnosed by the presence of cholestatic LFTs and either a consistent immunology profile or biopsy. Intelligent liver function tests were developed in Tayside and were rolled out as standard of clinical care in 2018. We aimed to assess the impact of iLFT on diagnosis of patients with PBC in Tayside.</p> <p><b>**Method**</b> New diagnoses of PBC were identified from the immunology database of patients who have undergone an iLFT. Patients under follow-up with PBC not identified from iLFT were pulled from clinic lists. Data collected were: demographics, autoimmune screen results and blood results at the time of diagnosis.</p> <p><b>**Results**</b> We identified 300 patients of which 85.1% were female and 7% have cirrhosis. The incidence of PBC since the introduction of iLFT has been rising. In the year prior to iLFT introduction incidence was 3.8/100 000 but peaked at 11.1/100 000 in 2022 and has subsequently fallen to 7.2/100 000 in 2023.</p> <p>Despite the increased case identification median ALP and age at diagnosis have not changed over time.</p>

				<p><b>**Conclusion**</b> Following the introduction of iLFT the incidence of PBC in Tayside has increased. We hypothesise that this is related to improved case finding due to the iLFT platform and plan on testing this by comparing the Tayside incidence with that in Greater Glasgow and Clyde. iLFT shifts the paradigm in PBC diagnosis by improving identification of patients using an automated platform.</p>
Clinical sciences	Miss Sumaia Shwea (1)	(1) University of Aberdeen	Invisible Barriers: The Mental Health Impact of Impostor Syndrome on Medical Students and its Effect on Research Participation	<p><b>**Introduction**</b> - Beyond financial aid and mentorship, a hidden barrier quietly undermines medical students' involvement in research: impostor syndrome (IS). Despite their achievements, many feel they do not belong, not only affecting mental health but also their willingness to pursue academic opportunities. Impostor syndrome, often described as the persistent feeling of inadequacy, disproportionately affects medical students, creating a hidden obstacle to participation in research.</p> <p><b>**Method**</b> - We conducted an anonymous survey to 90 medical students, including quantitative and qualitative questions about experiences with IS, its impact on research participation, and perceived support needs. Students rated statements on a Likert scale, indicating their levels and frequency of IS and its effect on their research engagement. Open questions explored strategies that students believe could help manage symptoms.</p> <p><b>**Results**</b> - Among respondents, 83 (92%) experience IS, with 50 (56%) avoiding research opportunities due to IS. Additionally, 84 (93%) expressed that access to support groups would address these feelings. Collectively, we shared experiences, explored confidence-building strategies, and discussed overcoming barriers. Based on survey data, we developed and piloted the Collaborative Resilience and Inclusion program (CRIP), aimed at reducing IS.</p> <p><b>**Conclusion**</b> - Students suggested that ongoing peer discussions with mentorship and collective goal-setting, like CRIP, would not only manage symptoms, but also tackle root causes of IS. This helps students overcome psychological barriers, contributing to a diverse research environment. A lack of participation in clinical research not only stifles the personal and professional growth of students, but also hinders medicine by reducing diverse perspectives essential for innovative healthcare solutions.</p>
Clinical sciences	Muhammad Farooq Shaikh*; Ciara Higley*; Cecelia Campanile, Becky Francis; Elyssa Panja; Silvia Santacaterina; Giacomo Pratesi; Davide Piaggio. ciara higley	(1) Beacon Academy Internship	Technology and Serious Gaming for Neurodevelopmental Disorders: A Systematic Literature Review	<p><b>Purpose:</b> Neurological development in children aged 3-11 is highly sensitive and variable. Critical skills for daily and professional life depend on the development of executive functions, and difficulties in this process can manifest as learning disorders such as ADHD, Dyslexia and Dysgraphia, affecting 5-10% of children worldwide. Early screening is crucial to ensure timely intervention and enhance the quality of life for affected individuals. However, challenges include high costs, lengthy wait times, and logistical barriers, leading to under diagnosis and delayed intervention.</p> <p><b>Study design:</b> This study systematically reviews technological solutions for early screening to improve diagnosis and intervention strategies. Using specific inclusion and exclusion criteria, relevant studies were selected to assess the effectiveness of these technologies and methodologies.</p> <p><b>Findings:</b> The review highlights the efficacy of technologies such as gamified eye-tracking tests and machine learning</p>

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				<p>algorithms in screening for learning disorders. Despite promising results documented in scientific literature, there is a significant gap in translating these technologies into clinical practice. Current practices rely heavily on paper-based tests, which are inefficient for continuous monitoring and vary widely across regions.</p> <p>Originality: This review underscores the potential of integrating advanced technologies into clinical settings to enhance early diagnosis and intervention for learning disorders. Aligning with the UK NHS Long Term Plan, the adoption of digital and personalised healthcare solutions could improve access to services, enhance patient experiences, support clinical decision-making, and optimise care delivery. Future research should focus on bridging the gap between technological advancements and clinical application to achieve these goals.</p>
Clinical sciences	Mr. Juan Felipe Espitia Jaramillo (1)	(1) Dundee University	Is cytokine production IRAK-1 dependent in bone marrow derived dendritic cells?	<p>Study aims Observe the effect of the absence of IRAK1 on the Toll-Like Receptor (TLR) inflammatory signalling cascade, the immunophenotype of the cells, and the overall production of cytokines. In this way, we can understand the importance of IRAK1 in dendritic cells.</p> <p>Method Wild type, IRAK1 KI and IRAK2 KI mice were dissected, their femur and tibia were isolated and bone marrow extracted individually. The bone marrow was then placed in 3 medias at 0.5 million cells per millilitre. After growing macrophages (BMDMs) and dendritic cells (BMDCs), the immunophenotype of the cells was analysed through flow cytometry, the progression of the TLR cascade was observed through western blotting and the cytokine production was analysed through Luminex multiplex assays.</p> <p>Results Flow cytometry showed that GM-CSF BMDCs are more phenotypically similar to BMDMs than FLT3L BMDCs (F4/80: 0 MFI). While western blotting revealed no difference in TLR cascade progression between the different genotypes. The difference between GM-CSF and FLT3L BMDCs came to light with the analysis of IL6 cytokine secretion as GM-CSF BMDCs required IRAK2 (&lt;5ng/ml in IRAK2 KI) kinase activity whilst FLT3L BMDCs required IRAK1 (&lt;0.5ng/ml in IRAK1 KI) and somewhat IRAK2 kinase activity.</p> <p>Conclusion It seems at this early stage of research that FLT3L dendritic cells may have differing requirements of IRAK1 and 2 in contrast to macrophages, and their similar counterparts, GM-CSF dendritic cells. FLT3L cells may need IRAK1 for the secretion of IL6, but more research needs to be done to observe whether this is true for the production of other cytokines.</p>
Service development	Andeep Ghataure, Sherry Zhou, Abinaya Arulalagan, Havra Adamali	(1) University of Birmingham, (2) Imperial College London, (3) University of Oxford, (4)	Pilot Public Health Initiative: Teaching Lifestyle Medicine to Students from Widening Participation Programme	<p><b>**Background**</b> Individuals in the most deprived areas of England live two decades shorter than those in the least deprived, on average (1). Evidence (2) attributes this, in part - to limited knowledge about the importance of lifestyle medicine in maintaining and improving health.</p> <p><b>**Aim**</b> We designed a comprehensive healthcare intervention to educate 16-18-year-old aspiring healthcare students from under-represented backgrounds about the lifestyle medicine pillars. By targeting younger populations, this</p>

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		University of Plymouth	to Address the Health Inequality Gap	<p>initiative encourages healthier lifestyle habits at an earlier stage.</p> <p><b>**Methodology**</b> The In2MedSchool Acceleration Programme (IAP) implemented a national lifestyle curriculum for over 80 schools and over 1200 students. Students completed an initial survey to assess baseline lifestyle medicine knowledge. We then provided a bespoke two-year curriculum following a knowledge, development and implementation supportive pathway. Education was delivered via monthly lifestyle pillar webinars, a lifestyle medicine academic essay, and a lifestyle intervention hackathon to advocate for their local community. Engagement and feedback were evaluated throughout.</p> <p><b>**Results and Conclusion**</b> As our project was a two-year pilot, we are undergoing an evaluation of our success based on student destinations. Our initial results show an increase in confidence when discussing lifestyle medicine - as well as improvement in soft transferrable skills crucial for further education - but we are evaluating further. AP is now going into its third year following positive feedback and demand, and we hope to track our initiative for a number of years.</p>
Service development	Dr. Faithman Ovat (1), Dr Chiamaka Meremikwu (2), Mrs Lotta Woolley (1)	(1) Spire Leicester Hospital, (2) The Ridgeway Hospital, Swindon	A survey of surgical site infections following elective hip and knee replacement surgeries at a private hospital in the United Kingdom	<p><b>Study aims</b> It is important to study the impact of SSIs on various surgical procedures, and to do so in categories as the impact varies considerably between different types of surgeries. The aim of this survey was to objectively ascertain the incidence of surgical site infections among patients who had elective knee and hip replacement surgeries, and identify possible perioperative factors associated with these SSIs.</p> <p><b>Methods</b> We conducted a retrospective cross-sectional study which included all patients who had elective hip and knee replacement surgeries in the third quarter of 2023 by collecting and analysing data from case notes.</p> <p><b>Results</b> Out of 212 patients who had surgeries during the study period, we found the SSI risk was 2.5% in hip replacements (2 of 79 patients) and 3% in knee replacements (4 of 133 patients). All infections we identified were superficial, diagnosed within the first two weeks after surgery on the average, and more likely to occur among patients who had more than two wound dressing changes within that two-week period (<math>p &lt; 0.001</math>). We also discovered 8 incidents of inadequate documentation for antibiotic prophylaxis, length of surgery time, and postoperative wound dressing changes.</p> <p><b>Conclusion</b> Our findings suggest that postoperative wound care may be largely responsible for the development of these superficial infections. We recommend conducting a local practice audit to assess standards of wound care, and to assess how these local SSI rates compare with the nationwide benchmark for hip and knee replacement surgeries, all in a bid to improve patient outcomes.</p>
Service development	Dr Akmal Hamsan (1), Dr Akmal	(1) Kings Mill Hospital	Laparoscopic Cholecystectomy Consent Form Audit	<p><b>Aim</b> To evaluate the quality of consent forms used for laparoscopic cholecystectomy procedures in a regional major trauma centre, focusing on completion and documentation standards.</p> <p><b>Methods</b> Retrospective analysis of 100 consent forms over 2.5 months period. Patient were identified using the lap chole telephone follow up database. Data analysed according to domains of patient demographics, clinician details,</p>

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	Danial Md Hamsan (1)			<p>procedure information, and risk disclosure.</p> <p><b>Results</b> Findings showed complete documentation of patient demographics, with clinician names present on all forms, though 1% lacked signatures and 2% omitted job titles and dates. Patient consent was confirmed in all cases, yet 36% of forms were missing patient names, and 2% lacked dates. Regarding procedural details, 100% of forms stated the procedure name, with 98% indicating the procedure's purpose or benefits. However, documentation of additional procedures was inconsistent, noted in only 75% of cases. Key risks such as bleeding and infection were universally documented, though pain was only mentioned on 68% of forms. Risks specific to laparoscopic cholecystectomy, including bile duct injury, bile leak, and retained gallstones, were variably reported.</p> <p><b>Conclusions</b> The audit reveals overall compliance but highlights areas for improvement, particularly in documenting consent confirmation and risk disclosures. A new, procedure-specific consent form is proposed to address these gaps, supported by targeted training sessions for staff and a re-audit planned to assess the interventions impact. This audit underscores the need for standardized risk documentation to enhance informed consent consistency and patient care quality.</p>
Service development	Miss Disha Yadav (1), Dr Edwin Tong (2), Ms Elizabeth Lindsay (2), Mr Christopher Donoghue (2), Mr Donald Campbell (2)	(1) University Of Dundee School Of Medicine, (2) NHS Tayside	Development of a dedicated paediatric clinic for removal of K-wires	<p><b>**Background**</b> Removal of K-wires from paediatric patients has traditionally been performed in a general Fracture Clinic, alongside adult patients, causing significant and preventable distress and anxiety to patients and their parents/carers. We therefore devised a dedicated k-wire removal clinic with an aim of improving the quality of care and service we provide our younger patients.</p> <p><b>**Method**</b> The orthopaedic team liaised with the plaster room, the paediatric, and anaesthetic teams to develop a dedicated K-wire removal clinic in the Children's Ward. A patient information leaflet was developed for patients and parents/carers and provided at the time of the appointment. A Patient Satisfaction Survey was developed and used to monitor patient/parent/carers feedback of the service. Regular meetings were held within the orthopaedic department on how to improve the service.</p> <p><b>**Results**</b> Our results have been presented internationally and other departments have been keen to develop similar pathways. The clinic was established in 2021 and to date, 144 patients have attended the clinic. The average age of our patients was 8.4 years. 5 patients had to return the following day for a general anaesthetic (3%). Our clinic therefore has a 97% success rate alongside incredibly positive feedback from patients and their carers.</p> <p><b>**Discussion**</b> The development of a dedicated K-wire removal clinic has proven to be a welcome improvement in paediatric patient care with multiple benefits including a reduction in risk to patients, an improved patient experience and realistic/informed expectations of their parents and carers.</p>

Service development	Mr. Zubair Younis (1)	(1) Government Medical College, Srinagar	Labelling of fluids in sterile field during orthopaedic surgery: a quality improvement initiative	<p>Background: Intraoperative safety protocols, including proper labeling of syringes, are critical to patient safety in surgical settings. This quality improvement project aimed to assess current labeling practices in a district general hospital, identify barriers to compliance, and develop a cost-effective solution.</p> <p>Methods: The project was conducted in three orthopedic theatres over two audit cycles. During the first audit cycle, 30 procedures were observed to assess compliance with labeling guidelines. Following this, an intervention was introduced, using surgical marker pens and sterile stickers for fluid labelling, along with a mandatory 'tactical pause and check' and an awareness campaign. Two months later, a second audit of 34 procedures was conducted to evaluate the effectiveness of the intervention.</p> <p>Results: In the first audit cycle, only 3 out of 30 procedures (10%) were compliant with labelling guidelines. Following the intervention, compliance increased dramatically to 32 out of 34 procedures (94%). The use of sterile stickers and marker pens proved to be a simple and cost-effective solution that did not interfere with the sterile environment or increase costs.</p> <p>Conclusion: This study demonstrates that a low-cost intervention using sterile stickers and surgical marker pens can significantly improve compliance with fluid labeling guidelines in orthopedic surgery, thereby enhancing patient safety. While the intervention was successful, future research should explore more sustainable solutions, such as pre-printed sterile labels, and evaluate the long-term impact of such interventions across various surgical settings. Continuous education and regular audits will be essential in maintaining high compliance rates.</p>
Widening participation	Miss Salma Salem (1), Miss Natasha Wollen (1)	(1) St George's University, London	The impact of providing accessible resources in increasing widening participation students' confidence towards a Medical school application	<p>Aim: Promoting equality, diversity and inclusion in medicine begins at ensuring accessible initiatives are executed at a grassroots level for prospective students. Our project aims to explore the impact of providing free educational events for applicants from widening participation (WP) backgrounds and to assess whether these interventions can enhance confidence and performance in their medical programme applications by addressing disparities in access to preparatory support.</p> <p>Method: We conducted sessions aimed at different aspects of the medical application process to increase WP students' confidence, such as an 'Introduction to medicine' conference covering personal statements, UCAT exams and how to approach them as well as multiple mini-interview (MMI) preparation support through an online webinar and in-person mock. Feedback forms were implemented before and after sessions using 5-Point Likert scales to measure changes in confidence.</p> <p>Results: The results showed that participants who attended the mock MMI event increased in their 'confidence in applying to medical school', with a 21% rise in students rating themselves as 'very/somewhat confident'. The conference event demonstrated a 56.8% increase in students rating themselves as 'very/somewhat confident' after attending. Our webinar event showed a 47.6% increase in participants rating themselves as 4/5 or 5/5 confident. The overall results show a total increase in confidence of 37.6% between the pre-session and post-session questionnaires.</p>

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				<p>Conclusions: Our overall results demonstrated significant improvement in confidence in applying to medical school (<math>p &lt; 0.001</math>). These findings suggest that investing in these initiatives can support WP applicants' access to medical school and help reduce inequity in admissions.</p>
Widening participation	miss Carolyn Thomas (1)	(1) University of Dundee	International Medical Students, Experiences of Psychological Safety in Feedback Episodes: A Focused Ethnographic Study	<p><b>Study aims</b> This study examines international students' experiences of psychological safety in feedback interactions in a Scottish undergraduate medical programme. This area deserves attention given the unique challenges faced by the overseas medical students due to cultural differences.</p> <p><b>Method</b> A focused ethnographic approach was adopted to explore international students' experiences and perceptions of psychological safety in their feedback experiences. Data were collected in the form of field observations and semi-structured interviews, involving both student and faculty participants. Approximately 13 hours of fieldwork and a total of 11 interviews were conducted. These were analysed using a combination of inductive and deductive thematic analysis.</p> <p><b>Results</b> Data analysis identified four key themes: feedback delivery, educator attributes, cultural factors and longitudinal educational relationships. Both staff and student participants highlighted how environmental factors such as room design and group size functioned as enablers or barriers to psychological safety in feedback episodes. Students appreciated tutors who expressed vulnerability and demonstrated awareness of their cultural backgrounds. Students described significant differences between the feedback approaches in the host (UK) institute and that in their home country. Longitudinal associations fostered trust and familiarity with peers and tutors, enhancing students' receptivity to learning and feedback.</p> <p><b>Conclusion</b> This study highlights the importance of integrating overseas students into a new culture through careful considerations of group size and environment, to create safe learning spaces for feedback. These insights are crucial given the increasing mobility of students across the borders, and the need for bespoke integration to appropriately enhance their experience and attainment.</p>
Widening participation	Dr Aalap Asurlekar (1), Mr Jason Ha (1)	(1) In2MedSchool	Addressing Barriers to Healthcare Work Experience for Widening Participation Students: A Three-Year Review of Collaborative Efforts	<p><b>Aims</b> This study explores challenges students from widening participation (WP) backgrounds face in securing hospital work experience and identifies potential interventions to improve inclusivity in medical school applications.</p> <p><b>Method</b> Over three years, 84 NHS trusts were contacted via email and phone. Introductory emails outlined our charity's mission and highlighted WP students' needs in medical school applications. Outreach outcomes were collected and analysed to pinpoint barriers and areas for improvement.</p> <p><b>Results</b> In 2022-2023, outreach to 19 Trusts resulted in 2 collaborations, 4 ongoing discussions, while 3 did not respond, and 10 were not open to work experience or collaboration. In 2023-2024, efforts expanded to 20 Trusts, with 2 collaborations secured and 1 ongoing discussion, though 11 Trusts were unresponsive and 6 declined. By 2024-2025, outreach grew to 45 Trusts, yet 33 remained unresponsive, yielding only 2 collaborations and 1 further</p>

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				<p>discussion. Despite these efforts, only 13 out of over a thousand In2MedSchool mentees secured hospital work experience.</p> <p>Conclusion This study underscores the structural barriers WP students face in accessing work experience. Addressing these requires a flexible approach that accommodates WP students' unique needs. We propose appointing a widening access lead in every major NHS Trust to directly support WP students in obtaining vital experience for medical school applications without relying on societal connections. Additionally, Trusts should proactively engage Consultants from WP backgrounds, who may be more inclined to mentor such students. Finally, we urge organisations like the GMC to consider appraisal requirements for Consultants to foster widening participation.</p>
Widening participation	Ms Eleanor Duckett (1), Miss Louisa Rees (1)	(1) Cardiff University	A 7-Year Evaluation of Widening Participation in Wales - Reflections from Cardiff WAMMS on the Past, Present, and Future	<p>Introduction Cardiff Widening Access to Medicine Mentoring Scheme (WAMMS), founded in 2017 as a student-run Widening Participation (WP) Scheme, supports state-educated students across Wales. Originally visiting schools to support through lectures, we have since diversified to facilitate webinars, mock interviews, workshops and conferences. By analysing our annual feedback, we identified areas where pupils most benefit from support, adapted our resources to maximise benefits, and helped WP students embrace diversity as a strength (1).</p> <p>Method Retrospective mixed-methods analysis of feedback data from inception to present day was completed. Quantitative engagement data was charted to showcase growth, and thematic analysis was utilised to examine qualitative feedback and identify improvements.</p> <p>Results 2018-2019 saw 541 pupil engagements (254 at events/webinar, 287 in schools), compared with 1008 pupil engagements (645 events/webinars, 363 in schools) in 2023-2024. Our Instagram engaged 331 followers in 2021, growing to 674 by the end of 2023-24 (+50.6%). Throughout 2018-2019, 34 schools engaged with WAMMS, compared to 33 in 2023-2024 (Fig.1). Qualitative analysis demonstrated online mentoring was initially unpopular, but has since been positively received. Workshop content was positively reviewed, and students found interactivity more engaging.</p> <p>Conclusion Since inception, WAMMS has become increasingly popular, particularly online and through events, while pupil engagements from schools have remained relatively stagnant. While supporting pupils in their school environment remains important (2), WAMMS has found diversifying into larger events and direct student communication to be a better approach for WP organisations. Hereafter, WAMMS plans to expand WP mentoring from Year 7 to final-year medical students.</p>
Widening participation	Mr Andeep Ghataure (1), Miss Alicia De Vidal (1)	(1) University of Birmingham	Sustained Support in Widening Access: A Dr.eam Senior Conference Serial Analysis	<p><b>**Background**:</b> Birmingham Widening Access to Medical Sciences, BWAMS, is a student-run society at the University of Birmingham, aiming to increase state-school engagement with healthcare careers. Dr.eam Senior is our virtual conference for Year 12-13 students, about the Medicine application process. This evaluation assesses the impact of Dr.eam Senior in 2023 and 2024.</p> <p><b>**Methods**:</b> Our primary impact parameters for the conference were application process understanding, interview</p>

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				<p>preparedness, and widening access insight. Pre- and post-conference questionnaires collected quantitative and qualitative data on a 5-point Likert Scale. SPSS Statistics supported analysis.</p> <p><b>**Results**:</b> From the 200 and 250 students who attended Dr.eam Senior in 2023 and 2024, respectively, our primary parameters showed improvement in average scale score. Understanding the application process demonstrated a 30.6% growth, (3.04 out of 5.00 to 3.97 out of 5.00), interview preparedness had a 47.6% increase (2.27 out of 5.00 to 3.35 out of 5.00), and widening access insight had a 19.6% improvement (3.31 out of 5.00 to 3.96 out of 5.00). These were all noted to be statistically significant (<math>p &lt; 0.05</math>). Our previous conference in 2023 shows similar results, and overall, our average impact across our primary impact parameters was greater in 2024 than 2023 (+32.6% vs +29.8%, respectively).</p> <p><b>**Conclusions**:</b> Both Dr.eam Senior in 2023 and 2024 experienced positive impact when assessed using primary parameters, showcasing the importance of events to college students. However, a greater impact was achieved in 2024, and therefore we will continue to act on feedback from attendees. Further research is needed to explore this.</p>
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## Poster Presentation Abstracts

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Author Names	Institution	Title of poster	Abstract
Dr Ahmad Harb (1), Dr Dina Younis (1)	(1) Queens Hospital Burton	Ensuring Smooth Transitions: How SBAR Improves Patient Safety for Community Hospital Transfers	<p><b>Objective:</b> Inadequate patient selection for transfer to community hospitals disrupts care continuity and compromises patient safety and outcomes. The SBAR (Situation, Background Assessment, Recommendation) communication tool presents a promising solution. This study investigated the impact of SBAR on quality of care and patient outcomes.</p> <p><b>Design:</b> Retrospective study involving patients admitted to Samuel Johnson Community Hospital from October to November 2023.</p> <p><b>Methods:</b> Data regarding the completion of the SBAR forms, accepted-rejected patients and reasons for rejection, and repatriation numbers were gathered. Comparisons were made against our previous study in 2021.</p> <p><b>Results:</b> Out of 403 referrals, 266 were accepted, 137 (34%) were rejected. 52 were due to medical reasons, while 85 were non-medical reasons. Compared to data from 2021, 137 out of 403 referrals (34%) were rejected in 2023, 3 out of 155 (2%) were rejected in 2021. There were 76 repatriations in 2023 (average of 26/month), whereas there were 139 repatriations in 2021 (average of 46.33/month).</p> <p><b>Conclusion:</b> By facilitating a standardized and comprehensive handover between acute and community providers, SBAR ensures patients receive the appropriate level of care at the community setting. Moreover, SBAR empowers healthcare staff to confidently make decisions regarding transfer acceptance or rejection, prioritizing patient well-being throughout the process. The decrease in repatriations indicate a notable improvement in patient outcomes and healthcare management strategies. The findings revealed significant improvements in both the quality of care and patient safety following the adoption of SBAR. Additionally, SBAR utilization demonstrated a notable reduction in the financial burden on the NHS.</p>
Mr Matheus Pereira (1)	(1) Uscs	Comparison of the Impact of Heart Failure in Riverside vs. Urban Populations	<p><b>**Study Aims:**</b> This study aims to compare the impact of heart failure (HF) in riverside and urban populations in Brazil, focusing on prevalence, morbidity, mortality, and access to healthcare. The research also seeks to identify socioeconomic and environmental factors influencing these outcomes, providing insights for the development of effective and targeted public health policies.</p>

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		in Brazil: A Meta-Analysis of Regional Studies	<p><b>**Method:**</b> A comprehensive meta-analysis of regional studies published between 2000 and 2023 was conducted, focusing on heart failure in riverside and urban populations in Brazil. Data were collected from databases such as PubMed and LILACS. Random effects models were used to calculate the difference in HF impact between populations. Statistical analyses included the calculation of relative risk (RR) and p-value to verify the significance of the results, with a 95% confidence interval (CI).</p> <p><b>**Results:**</b> The results indicate that the prevalence of heart failure in riverside populations is 15% higher than in urban populations (RR = 1.15; 95% CI: 1.02-1.30; p = 0.02). Mortality associated with HF is significantly higher in riverside areas, with a 25% higher mortality rate compared to urban areas (RR = 1.25; 95% CI: 1.10-1.42; p &lt; 0.001). These disparities are attributed to reduced access to healthcare and unfavorable socioeconomic factors such as low income and education.</p> <p><b>**Conclusion:**</b> This study reveals a disparity in the impact of heart failure between riverside and urban populations in Brazil, with riverside communities facing greater challenges in mortality and healthcare access. It is crucial to implement public policies to improve healthcare access and mitigate the effects of HF in riverside regions.</p>
Dr Believe Nomayo (1), Dr Oduware Osagioduwa	(1) University of Benin Teaching Hospital, Benin City.	Challenging the Status Quo: Insights from Managing Diabetic Foot Gangrene in Resource-Limited Settings in Benin City, Nigeria	<p><b>**Background/Introduction**:</b> Diabetic foot gangrene significantly contributes to morbidity and mortality, particularly in resource-limited settings. Despite global advancements in diabetic foot care, outcomes in such environments remain poor. This case series from a tertiary hospital in Benin City, Nigeria, highlights unique challenges in managing diabetic foot gangrene and explores potential strategies to improve care.</p> <p><b>**Aims/Objectives**:</b> The study aims to identify the clinical challenges, therapeutic interventions, and outcomes in managing diabetic foot gangrene in a low-resource setting, with the goal of improving patient outcomes.</p> <p><b>**Patients and Methods**:</b> A retrospective review was conducted on three patients with diabetic foot gangrene. The study examined diagnostic challenges, therapeutic interventions, and the impact of socio-economic factors on treatment decisions, using data from clinical records.</p> <p><b>**Results**:</b> Patients presented late with diabetic foot ulcers that had progressed to gangrene, complicated by chronic anemia, poor glycemic control, and refusal of surgery. Management strategies included aggressive wound care, innovative patient education to address cultural barriers, and tailored interventions based on comorbidities. Outcomes varied: one patient left against medical advice, one died post-operatively, and one recovered following an above-knee amputation. These results highlight higher rates of amputation and mortality in Nigeria compared to developed countries.</p> <p><b>**Discussion/Conclusion**:</b> Managing diabetic foot gangrene in resource-limited settings like Nigeria requires innovative approaches. This case series underscores the importance of early detection, patient education, and customized management</p>



			strategies, providing valuable insights for adapting global best practices to local contexts to reduce the burden of diabetic foot complications.
Miss Rachel Osborne (1), Dr Grieg Taylor (1)	(1) Newcastle University	Qualitative study exploring general dental practitioners' views of MIH and its management in UK and Australia	<p>Background: MIH is a prevalent condition, and how it is managed varies greatly between professional groups.</p> <p>Aim: To explore, and compare, UK and Australian general dental practitioners' management of MIH in children.</p> <p>Design: Face-to-face (remote) semi-structured interviews were undertaken, using country-specific topic-guides. Participants were purposively sampled and recruited through national conferences and research networks (Evident Foundation and Northern Dental Practice Based Research Network). Interviews (from each country) were audio-recorded, transcribed verbatim and independently analysed using thematic analysis.</p> <p>Results: Two major themes arose from the UK interviews: i) decision-making complexities and understanding of treatment options and ii) need for specialist input. The main Australian themes were i) multidisciplinary approach to management supporting decision-making complexities and ii) economic implications for care. Several difficulties, such as financial implications, multidisciplinary care and clinical decision making, were identified as barriers to effectively managing MIH by GDPs in primary care.</p> <p>Discussion: There are similarities and differences in the knowledge and management of MIH amongst UK and Australian non-specialists. The different healthcare systems played a significant role in shaping how GDPs manage MIH with barriers relating to affordability, multidisciplinary care and clinical decision making.</p>
Anusree Chalamalasetty	(1) SSMC	USG to the Rescue: Solving a Case of Atypical Appendicitis	<p>Appendicitis usually presents with a classic Murphy's triad: McBurney's sign, vomiting and fever. (2) While this presentation is most common, atypical cases can occur, making it difficult to diagnose and treat.</p> <p>Learning objectives:</p> <ul style="list-style-type: none"> <li>* Use of USG in pediatric cases</li> <li>* Diagnostic accuracy in unusual presentations of a disease.</li> </ul> <p>A 12 year old female presented with periumbilical pain, vomiting food particles, constipation, and abdominal distension for 3 days, but without fever, leukocytosis, or McBurney's point tenderness. She was afebrile and on abdomen examination, tender over periumbilical region, abdomen was distended, flanks felt full. There were no bowel sounds, no peristaltic movement visible.</p> <p>WBC count was normal, Lymphocytes were decreased, CRP was increased.</p> <p>X-ray of abdomen in erect posture did not reveal any perforation or inflammation. Ultrasound (USG) of the abdomen revealed appendicitis with small bowel obstruction due to fecal impaction. Plain computed tomography (CT) confirmed the diagnosis.</p>

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			<p>The patient underwent open appendectomy which revealed a sub hepatic appendicular perforation which was gangrenous and abscessed. Child had an uneventful recovery and resumed her daily routine after 14 days.</p> <p>To summarize, USG can diagnose Appendicitis and bowel perforation in children even when they have atypical presentation, such as no fever, no McBurney's point tenderness, and no WBC elevation, as long as enough time is allowed.(1) USG can also reduce the need for CT, especially in the pediatric population, where radiation exposure should be minimized.(4) Clinicians should be aware of the variability of appendicitis presentation and the value of USG as a diagnostic tool.</p>
Anusree Chalamalasetty	(1) SSMC	Planetary Health report card for Sri Siddhartha Medical College	<p>Our institution has successfully integrated a comprehensive curriculum on climate change and health impacts, which has garnered positive feedback from both students and faculty. There are regular discussions about the impact of extreme temperatures on cardiovascular, respiratory and neuro physical health. Our medical college has actively participated in reducing its carbon footprint by using renewable energy such as Solar panels which provide electricity and hot water to the neighboring villages.</p> <p>Our institution recognizes the need for practical application in sustainable healthcare, especially in a laboratory setting. Enhancing our program with hands-on experiences through partnerships with multiple local sustainable healthcare facilities is a targeted area for improvement. Providing sustainable and environment friendly travel methods which are also accessible for students is the next goal.</p> <p>* The completion of the PHRC has been instrumental in advocating for sustainable healthcare practices within our institution. It has catalyzed discussions with the administration, leading to significant strides in campus sustainability, such as the implementation of energy-efficient systems and waste reduction initiatives, especially in the hospital laboratory. Waste segregation has been taken seriously and implemented centrally along with promotion of bicycles use instead of cars and two-wheelers.</p>
Anusree Chalamalasetty	(1) SSMC	USG to the Rescue: Solving a Case of Atypical Appendicitis	<p>Appendicitis usually presents with a classic Murphy's triad: McBurney's sign, vomiting and fever. (2) While this presentation is most common, atypical cases can occur, making it difficult to diagnose and treat.</p> <p>Learning objectives:</p> <ul style="list-style-type: none"> <li>* Use of USG in pediatric cases</li> <li>* Diagnostic accuracy in unusual presentations of a disease.</li> </ul> <p>A 12 year old female presented with periumbilical pain, vomiting food particles, constipation, and abdominal distension for 3 days, but without fever, leukocytosis, or McBurney's point tenderness. She was afebrile and on abdomen examination, tender over periumbilical region, abdomen was distended, flanks felt full. There were no bowel sounds, no peristaltic movement visible.</p> <p>WBC count was normal, Lymphocytes were decreased, CRP was increased.</p>

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			<p>X-ray of abdomen in erect posture did not reveal any perforation or inflammation. Ultrasound (USG) of the abdomen revealed appendicitis with small bowel obstruction due to fecal impaction. Plain computed tomography (CT) confirmed the diagnosis.</p> <p>The patient underwent open appendectomy which revealed a sub hepatic appendicular perforation which was gangrenous and abscessed. Child had an uneventful recovery and resumed her daily routine after 14 days.</p> <p>To summarize, USG can diagnose Appendicitis and bowel perforation in children even when they have atypical presentation, such as no fever, no McBurney's point tenderness, and no WBC elevation, as long as enough time is allowed.(1) USG can also reduce the need for CT, especially in the pediatric population, where radiation exposure should be minimized.(4) Clinicians should be aware of the variability of appendicitis presentation and the value of USG as a diagnostic tool.</p>
Anusree Chalamalasetty	(1) SSMC	Study of distribution pattern of ABO and Rh-D blood groups among blood donors in SSMC blood center- An institutional study	<p>Blood group is based on the presence or absence of antigens on the surface of RBC and corresponding antibodies in the serum, which is determined by an individual's genetic makeup.1 This study aimed to analyze the distribution of blood types in and around Sri Siddhartha Medical College, Tumkur, Karnataka in India to enhance blood bank management and transfusion safety. This institutional study spanned from January 2023 to March 2024, including 697 blood donors registered at Sri Siddhartha Medical College and Hospital. Blood grouping was performed using slide and test-tube methods, with data recorded and analyzed to determine the frequency and prevalence of each blood group. Results showed that prevalence of O+ predominated (O+&amp;gt;B+&amp;gt;A+&amp;gt;AB+) which is consistent with national trends2. Among the Rh negative groups, O- was the highest (O- &amp;gt;B- &amp;gt;A- &amp;gt;AB-). Rh positive groups were significantly higher than Rh negative groups. The gender distribution indicated a higher number of male donors. The study's implications suggest that B and O blood groups, being more readily available, are advantageous for transfusion needs, assuming the sample represents the population adequately. The association between certain blood groups and disease susceptibility, such as pancreatic cancer in group A and cardiac issues in group B, proves the importance of understanding blood group distribution for public health planning and risk assessment.</p>
Dr Vrinda Prabhu (1)	(1) Kims hospital and research centre, Bangalore	A Rare Case of Seckel Syndrome Associated with Moyamoya Disease and Multiple Intracranial Aneurysms in a 19-Year-Old Boy	<p><b>Aims/Objectives:</b> To report a unique case of SS with Moyamoya disease and multiple intracranial aneurysms, emphasizing the need for early diagnosis and management of cerebrovascular complications in SS patients.</p> <p><b>Patients and Methods:</b> A 19-year-old male with SS presented to the emergency department with vomiting, drowsiness, and seizures. Initial imaging revealed subarachnoid hemorrhage (SAH), obstructive hydrocephalus, and multiple intracranial aneurysms. CT-angiogram demonstrated severe bilateral internal carotid artery stenosis, suggestive of Moyamoya disease, with abnormal vascular formations and multiple aneurysms.</p> <p><b>Results:</b> The patient underwent an external ventricular drain placement to manage hydrocephalus. Despite surgical intervention, his condition worsened with bilateral cerebral infarction and brain herniation, leading to brainstem death. After discussions with the family, the patient was palliatively extubated and passed away.</p>

			<p>Discussion/Conclusion:</p> <p>This case highlights the rare association between Seckel Syndrome and CNS vasculopathies such as Moyamoya disease and intracranial aneurysms. CNS vasculopathy in SS patients can lead to severe complications and poor prognosis. Routine cerebrovascular screening should be considered for SS patients to detect abnormalities early and prevent life-threatening events. Multidisciplinary care and further research are necessary to guide management and improve outcomes in this high-risk population.</p>
<p>Dr Noon Altijani (1), Dr Temitope Ajagbe (2), Dr Rawan Hassan (3), Dr Kehinde Oloriade (4), Dr Fatima Abbass (5), Prof Abhishek Mahajan (6)</p>	<p>(1) Liverpool University Hospitals NHS Foundation Trust, (2) University Hospitals of North Midlands, (3) Derriford Hospital, Plymouth, (4) North West Imaging Academy, (5) North Bristol NHS Trust, (6) The Clatterbridge Cancer Centre NHS Liverpool</p>	<p>Improving the Knowledge and Confidence of International Medical Graduates (IMG) in Conducting Clinical Audits in the NHS</p>	<p><b>**Introduction**:</b> Clinical audit, a pillar of clinical governance, is essential for patient safety and clinical excellence. As such it is part of UK medical training. However, IMG doctors new to the NHS may have received limited training on conducting clinical audits. Our quality improvement project evaluated the impact one workshop had on IMG doctors' knowledge and confidence in conducting audits, and explored its potential scalability by piloting an online format.</p> <p><b>**Methods**:</b> An interactive workshop including two practical audit exercises was delivered, in-person then online. Pre- and post-workshop questionnaires assessed doctors' knowledge and confidence using a 5-point Likert scale with answers. A Wilcoxon rank-sum test evaluated the changes in responses.</p> <p><b>**Results**:</b> 33 doctors completed the questionnaires, 27 attended in-person and 6 online. Pre- and post-workshop questionnaires were completed by 26 doctors, 23 in-person and 3 online. For the in-person workshop, a significantly greater proportion of doctors scored 'above average' in the post-workshop questionnaires: their understanding of clinical governance increased from 5% to 78% (<math>p&lt;0.0001</math>), their knowledge of clinical audits increased from 30% to 78% (<math>p&lt;0.0001</math>), and their confidence in conducting audits increased from 30% to 74% (<math>p&lt;0.0001</math>). Similar trends were observed in the online workshop. Overall, 74% of doctors found the audit exercises 'very useful'.</p> <p><b>**Conclusion**:</b> Our workshops improved IMG doctors' knowledge and confidence in conducting clinical audits, and improvements persisted with the online format. This suggests that our workshop could be effectively incorporated into the NHS induction packages, in either format, for new IMG doctors.</p>
<p>Dr Adrienn Gyori (1), Mr Marvin Duenger (2), Dr Harish Narayanan (3)</p>	<p>(1) In2MedSchool, Hull University Teaching Hospitals, (2) University College London, (3) In2MedSchool, Watford General Hospital</p>	<p>Medical School Application: Creating Opportunity Through Writing Skills Course and Essay Competition</p>	<p><b>**Introduction**:</b> With competition ratios as high as 38:1 (1,2), medical school applicants must demonstrate not only academic excellence and a satisfactory UCAT score but also a genuine interest in medicine beyond the school curriculum. To support applicants with less writing experience or English as a second language, In2MedSchool (3) created a Moodle-based Writing Skills Course followed by an in-house essay competition. This study evaluated the impact of these initiatives on participants' self-reported confidence in writing skills and preparedness for medical applications.</p> <p><b>**Method**:</b> The free Moodle-based course included asynchronous sessions and interactive quizzes for self-directed learning. Participants chose one of four essay topics and submitted a 1,500-word essay with bibliography. A survey measured self-reported pre- and post-intervention preparedness for medical school applications, improvements in writing skills and writing confidence, the latter using a 7-point Likert scale. Statistical significance was determined using the Wilcoxon signed rank test.</p>

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			<p><b>**Results:**</b> Among the essay competition submissions (N=18):</p> <ul style="list-style-type: none"> <li>* 100% (18/18) reported that the competition improved their writing skills.</li> <li>* 83% (15/18) felt better prepared for medical school applications.</li> <li>* Average self-reported confidence increased from 3.8 to 5.8 for the 50% (9/18) of participants who completed the writing course, a statistically significant increase (<math>P &lt; 0.05</math>).</li> </ul> <p><b>**Conclusion:**</b> This is the only known essay competition for medical school applicants that integrates targeted educational resources to enhance writing skills. The course and essay competition significantly improved participants' confidence and preparedness, suggesting that such structured initiatives can support underrepresented applicants and help level the playing field in medical school admissions.</p>
Dr Venkat Marimuthu (1)	(1) Ponmalligai Hospitals, Tamil Nadu, India.	Capillary hemangioma of the external oblique muscle: A case report	<p><b>**Aim**</b></p> <p>To present a rare case of intramuscular hemangioma (IMH) in the abdominal wall of a 14-year-old girl, detailing the clinical presentation, diagnostic process, surgical treatment, and follow-up outcomes, and to emphasize the importance of considering IMH in the differential diagnosis of symptomatic intramuscular swelling.</p> <p><b>### Introduction</b></p> <p>Intramuscular hemangiomas (IMH) are rare benign vascular tumors. They can occur anywhere in the body but are more common in the head and neck. Their location in the muscles of the abdominal wall is uncommon.</p> <p><b>### Case presentation</b></p> <p>A 14-year-old girl presented with 5 months of progressive swelling on the right side of her abdomen followed by intermittent pain. On examination, a solitary mass with ill-defined borders was noted fixed to the subcutaneous tissue in the right lumbar quadrant. After elevating the right leg, the swelling became more prominent. Doppler ultrasonography revealed a mixed echogenic mass in the subcutaneous plane of the anterior abdominal wall of the right lumbar region. Magnetic resonance imaging of abdomen was suggestive of hemangioma, and the patient underwent surgical excision. Histopathological examination confirmed the diagnosis of capillary hemangioma. During follow-up at 3 and 6 months, the patient did not present with recurrence and was healthy.</p> <p><b>### Conclusion</b></p> <p>Although IMH is a rare soft-tissue tumor, it should be considered when diagnosing symptomatic intramuscular swelling.</p>
Dr Venkata Shanmukha Rao Nutalapati (1), Dr James Zhang (1),	(1) Basildon University Hospital, (2) Dr.NTR University of health sciences	Opioid Requirements and Predictive Factors for Total Hip and Knee Arthroplasties. A 7-	<p><b>Introduction</b></p> <p>Total knee and hip arthroplasties have prolonged and uncertain pain and rehabilitation timelines and can be debilitating for patients. In our study, we compare opioid requirements and analyse predictive factors between the two procedures.</p> <p><b>Method</b></p> <p>All patients undergoing primary total hip (THA) and knee (TKA) arthroplasties from 2015-2021 at a major trauma centre were</p>

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Dr Yaseswi Peddu (2)		year major trauma centre study	<p>reviewed. Opioid prescriptions in the first postoperative year were calculated every month up to 6 months and then from 7th-12th month. Overall strength in morphine milligram equivalents (MME) and days with at least one opioid prescription (days-covered) were calculated. Demographic and comorbidity factors were also included in the multivariate model analysis.</p> <p>Results</p> <p>2908 THAs and 2235 TKAs were included. Patients undergoing THAs were younger and more commonly female (68.5 vs 70.2 years old, <math>p&lt;0.001</math> / 61%:58%, <math>p=0.022</math>). TKAs had significantly higher postoperative opioid strength requirement, with a mean 843 MME vs 614 MME (<math>p&lt;0.001</math>). On comorbidity analysis, TKAs had the stronger comorbidity predictive value, with strength in the post-operative year being positively associated with heart failure (<math>p=0.04</math>), kidney disease (<math>p&lt;0.001</math>), connective-tissue disorders (<math>p=0.009</math>), respiratory disease (<math>p&lt;0.001</math>) and diabetes (<math>p=0.014</math>), with THA associated with rheumatological conditions and diabetes (all <math>p&lt;0.01</math>). Both had limited underlying continuous/consecutive sub-interval trends for strength or days-covered, however, both had many strong associations in 1st month days-covered.</p> <p>Conclusion: Our study enables a high-resolution breakdown of the rehabilitation and pain journey of patients undergoing THA and TKA, and provides insight to patients and clinicians about factors predisposing to higher pain relief requirements</p>
Dr Venkata Shanmukha Rao Nutalapati (1), Dr James Zhang (1), Dr Yaseswi Peddu (2)	(1) Basildon University Hospital, (2) Dr.NTR university of health sciences.	Epidemiology and incidence of pelvic fractures	<p>Introduction</p> <p>There is a lack of recent UK based literature reporting on the incidence of pelvic fractures, and the demographic associations with fracture locations. Our study reports on the incidence and factors associated with pelvic fractures at a major trauma centre over a 7 year period.</p> <p>Methods</p> <p>Data from pelvic fractures treated at a level 1 trauma centre was collected from January 2015 to January 2021. Fracture location, patient demographics, and operative status were collected and analysed.</p> <p>Results</p> <p>A total of 3137 patients with pelvic fractures were included, with incidence of 78.6/100,000 patients per year. The mean age was 63.0, 53% of patients were female and a mean BMI of 25.3. The mean length of hospital admission was 20.5 days. Patients with Pubis fractures had the highest mean age (65.55), whilst those with ilium fractures had the lowest (51.14), significantly different from the mean at <math>p&lt;0.001</math>. Female patients were more likely to have pubis (60.1%) fractures but less likely to have acetabulum (30.0%) fractures, <math>p&lt;0.01</math>. Patients with acetabular fractures had a higher BMI (<math>p&lt;0.01</math>) and the highest rate of operative fixation (48.5%)</p> <p>Conclusion</p> <p>Our study provides insight into the incidence of pelvic fractures in a UK major trauma centre setting, the first study in over 15 years in this context.</p>

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Dr Venkata Shanmukha Rao Nutalapati (1), DR Jaes Zhang (1), Dr Yaseswi Peddu (2)	(1) Basildon University Hospital, (2) Dr.NTR university of health sciences	Opioid requirements during rehabilitation after pelvic fracture	<p><b>Introduction:</b> Pelvic fractures are often highly traumatic and debilitating injuries for patients, with an arduous rehabilitation process. Our study aims to analyse the predictors for opioid requirements in pelvic fractures.</p> <p><b>Methods</b> Data was collected of all pelvic fractures treated at a major trauma centre from 2015-2017, with fracture location, demographics and comorbidities collected. All opioids prescribed in the first postinjury year were collected and categorized into 1st/2nd/3rd/4th/5th/6th month, and 7th-12th post injury months. We then calculated total strength in Morphine Milligrams Equivalents, (MME), and days with at least 1 opioid prescribed (,“coverage,“). Multivariate regression was performed on the outcomes.</p> <p><b>Results</b> A total of 3137 patients with pelvic fractures were included, with mean 954 MME (95% CI=899-999) in the first year. Acetabulum fractures showed lower strength in the 1stt, and 7,“12-month periods, with lower coverage 1st-3rd month (<math>p&lt;0.05</math>). Pubis fractures needed higher strength opioids for more days across all time intervals (<math>p&lt;0.01</math>). On multivariate comorbidity analysis, higher BMI and age, pulmonary disease, and drug abuse were all associated with higher overall strength, and every sub-interval after 1st month (<math>p&lt;0.01</math>). Liver disease was associated with higher strength overall, and every interval after the 4th month (<math>p&lt;0.05</math>). Higher age and BMI were associated with increased coverage overall, and every individual interval (<math>p&lt;0.01</math>), with chronic kidney disease and rheumatological conditions associated with increased coverage after the 2nd month (<math>p&lt;0.05</math>)</p> <p><b>Conclusion</b> Our study highlights the various injury, demographic and comorbidity factors that predispose patients to requiring higher strength and coverage of opioids during their rehabilitation.</p>
Mr James Redman (1), Mrs Mahathi Varma (1), Mr Andeep Ghataure (1), Mrs Sherry Zhou (1)	(1) In2MedSchool	Evaluating the Impact of Focused Teaching Sessions on Medical School Applications for Widening Participation Students: A Cross-Sectional Survey Analysis	<p><b>Background:</b> Widening participation in Medicine remains a concern, with 80% of medical applicants coming from 20% of UK schools, mainly selective ones (Garrud). Students from disadvantaged backgrounds often face barriers including lack of support in the application process (Sartania et al. #).</p> <p><b>Aims:</b> We aimed to assess teacher perspectives on the impact of the In2MedSchool Acceleration Programme (IAP) curriculum, delivered monthly at 78 UK schools in 2023-2024 to support year 12 and 13 students on their medical school application journey.</p> <p><b>Method:</b> Designated staff from participating schools completed a survey which included questions on IAP’s perceived role in supporting students’ medical school applications and resource availability before and after the intervention. Before joining IAP, 77.1% of the schools thought students had some knowledge of the overall UCAS medicine application process, which improved to 97.2% post-</p>

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			<p>intervention. We also increased thorough understanding of a career in medicine from 14.3% to 71.4%.</p> <p><b>Results:</b></p> <p>We have just finished our first full two-year cycle of IAP, so we are currently evaluating our work. Provisionally, from 54 applicants, 40 received at least one medicine offer. However, this will not fully represent IAP's impact. All schools involved noted the sessions to be useful in their student's education and appreciated the broad resources we provided.</p> <p><b>Conclusion:</b></p> <p>Teachers agreed that IAP helped students from widening participation backgrounds. While our evaluation is ongoing, the intervention was seen as beneficial and supportive, suggesting focused teaching sessions can improve medical school entry chances for underrepresented students.</p>
Miss Naabil Khan (1)	(1) Skin For All and University of Exeter	Bridging the Gap: Skin For All and Its Impact on Addressing Racial Inequalities in Medical Education	<p><b>**Introduction**</b></p> <p>The study presents _Skin For All_, a website designed to address healthcare inequalities arising from limited knowledge of skin conditions on skin of colour. A key issue within the NHS is the lack of inclusivity in clinical descriptions, which can lead to misdiagnosis, especially in patients with darker skin tones \[1\]. _Skin For All_ aims to offer diverse language, inclusive diagrams, and accessible resources for both medical professionals and patients. This initiative seeks to enhance medical education and patient awareness, aligning with the NHS's goals of equitable healthcare delivery and carbon emission reduction.</p> <p><b>**Method**</b></p> <p>The website draws from six diverse platforms to identify over 30 common skin conditions, offering resources for both patients and clinicians. It prepares medical students for clinical practice while supporting patients from varied backgrounds. The content covers both dermatological and systemic conditions like gonorrhoea and liver cirrhosis, addressing public health needs in both developed and developing countries.</p> <p><b>**Results**</b></p> <p>Since its launch in June 2023, _Skin For All_ has attracted over 10,000 page visits and 4000 unique visitors. It has gained recognition from organisations such as the BBC, the British Medical Association, Exeter University, and AMSA, underscoring the demand for equitable healthcare education \[2\].</p> <p><b>**Discussion and Conclusion**</b></p> <p>The website's success highlights the need for inclusive medical education and accessible resources for both healthcare professionals and the public \[3\]. Its focus on diversity and equity aligns with NHS goals for equal healthcare.</p>

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<p>Nikhat Fatima, Ammara Zafar Taj, Ramsha Abdul Qadir, Syeda Sarah Jafri, Bushra Anwar, Javeria Mansoor Ramsha Abdul Qadir</p>	<p>(1) BMY HEALTHCARE, CANADA</p>	<p>ASSOCIATION BETWEEN UNHEALTHY LIFESTYLE AND HORMONAL IMBALANCE SYMPTOMS IN WOMEN WITH LEAN POLYCYSTIC OVARIAN SYNDROME VS HEALTHY FEMALES: A CASE CONTROL STUDY IN PAKISTAN</p>	<p>Study aims: Polycystic Ovarian Syndrome (PCOS) is a prevalent endocrine disorder, affecting both lean and obese women. While most research has focused on obese women with PCOS, lean PCOS, despite being a significant subset, remains understudied, particularly in Pakistan. Given the role of lifestyle factors in hormonal imbalances, there is a need to explore their impact on lean women with PCOS, especially within the socio-economic context of Pakistan. Identifying these factors can lead to better interventions and healthcare strategies for this population. In this study, we analyzed the association between unhealthy lifestyle and hormonal imbalance symptoms in women with Lean PCOS.</p> <p>Method: This study examined the link between unhealthy lifestyles, hormonal imbalance, and lean PCOS. Conducted at a Karachi hospital from December 2023 to February 2024, it involved 200 women (100 with PCOS, 100 controls) aged 14-45 with BMI ,â§ 24.9. Data on PCOS, diet, exercise, stress, and medical history were collected via interviews. The sample size was calculated for 95% confidence and 80% power.</p> <p>Results: This study examined the link between unhealthy lifestyles, hormonal imbalance, and lean PCOS. Conducted at a Karachi hospital from December 2023 to February 2024, it involved 200 women (100 with PCOS, 100 controls) aged 14-45 with BMI ,â§ 24.9. Data on PCOS, diet, exercise, stress, and medical history were collected via interviews. The sample size was calculated for 95% confidence and 80% power.</p> <p>Conclusion: This study demonstrates a significant association between unhealthy lifestyle factors and hormonal imbalances in lean women with PCOS, highlighting the need for targeted lifestyle interventions in this population.</p>
<p>Mr. Zubair Younis (1)</p>	<p>(1) Government Medical College, Srinagar</p>	<p>Virtual Examination for Final Year Orthopaedics Postgraduate Residents during COVID-19: Is it a Viable Alternative?</p>	<p>Aim: To evaluate the effectiveness by a preformed questionnaire (developed by the faculty of Department of Orthopaedics, GMC Srinagar), Jammu and Kashmir, India of virtual pattern for exit examinations of final year postgraduate residents of medical colleges in India.</p> <p>Materials and Methods: A total number of 10 candidates appeared in the final year (MS Orthopaedics) examination. The conventional format which consisted of assigning patients to the candidates was replaced by a digital presentation format. A questionnaire was designed to assess the acceptability of the virtual examination. It comprised of 10 questions and each answer was graded on a three point Likert point scale, producing a maximum score of 2 and a minimum score of 0 for each question.</p> <p>Results: Mean total scores for both the groups (examiners and candidates) were 18.25 and 16.9, respectively. The overall outcome regarding the responses was satisfactory in both the groups. The scoring was highest for the safety of the examination in examiner as well as the candidate group. In addition, overall satisfaction also scored the highest among the examiner group.</p> <p>Conclusion: This virtual pattern of examination presents a viable interim alternative to the traditional face to face examination, though it may not replace the latter. The time frame of the pandemic and its trend is difficult to imagine at this point of time, so, the virtual pattern might have to be used for future examinations as well. In addition, this pattern may even be utilised by other departments to frame their examinations.</p>

Mr. Zubair Younis (1)	(1) Government Medical College, Srinagar	Correlation between the Findings of Magnetic Resonance Imaging Shoulder and Shoulder Arthroscopy	<p><b>Aim:</b> To correlate the findings of Magnetic Resonance Imaging (MRI) shoulder with the findings of shoulder arthroscopy and subsequently determine sensitivity, specificity and accuracy of MRI in diagnosing shoulder pathologies.</p> <p><b>Materials and Methods:</b> Forty two patients suffering from chronic shoulder pain for a period of more than six weeks, having symptoms of instability, clinical signs of tear or impingement, or functional limitation of the affected shoulder were included in this study. The patients included were in the age group of 18 to 80 years. Subsequently, MRI followed by arthroscopy of the shoulder was done and the findings of MRI were compared to that of arthroscopy using kappa statistics.</p> <p><b>Results:</b> In this study along with rotator cuff tear (26 patients), subacromial bursitis (26 patients), was the other most common shoulder pathology. The sensitivity of MRI in detecting shoulder pathologies varied from poor (0.28) for Superior Labrum Anterior Posterior (SLAP) lesion to very good (0.88) for Bankart's tear and (0.8) for synovial chondromatosis to excellent for rotator cuff tears (0.92). Although sensitivity of MRI was variable for different shoulder pathologies, specificity was comparatively high in detecting all of the above shoulder pathologies. The accuracy of MRI was highest (0.95) in diagnosing synovial chondromatosis, followed by bankart's lesion (0.92), and rotator cuff tear (0.88).</p> <p><b>Conclusion:</b> MRI is a very useful and effective tool in diagnosing various shoulder pathologies with exception of SLAP tears where its sensitivity diminishes significantly.</p>
Rhys David	(1) University of Exeter	The Role of Longitudinal Teaching within Student-led Widening Access to Medical School Societies	<p><b>**Background:**</b> Student-led organisations, like Truro Widening Access to Medicine, are societies that look to support prospective medical students from underrepresented backgrounds. Supported by universities, they create links to local communities and gain insight into the regional and societal barriers affecting applicants. The biggest obstacles to overcome are pupils lacking confidence; schools without ties to work experience; and a poor understanding of the application process. (1) Student-led organisations provide tailored events and lectures within the community to help overcome these barriers. Longitudinal teaching, which uses repeated contact with the same providers, creates student-teacher relationships that research has shown to improve academic achievements and quality of teaching. (2) This poster and presentation aims to highlight the benefits and drawbacks of utilising a longitudinal teaching model for widening access to medicine sessions. The principles of this research will also be used to create a free-to-access resource too.</p> <p><b>**Methods:**</b> Research is collated from various scientific databases and teaching experts were consulted to ensure research agrees with current academic consensus.</p> <p><b>**Results:**</b> Preliminary analysis of research shows the benefits of longitudinal teaching, but demonstrates challenges when utilising this model also.</p> <p><b>**Conclusion:**</b> Longitudinal teaching can be difficult to institute due to the complex personal lives and academic demands of providers and</p>

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			students. However, this model of teaching has been shown to improve academic achievement and engagement while enhancing teaching quality. Furthermore, by recruiting providers from widening access backgrounds similar to the prospective applicants ,Äi we are able to provide powerful examples of real-life role models to students also.
Miss Shaima Chbib (1)	(1) University of Exeter Medical School	The Association Between Community Gardens on Mental Wellbeing in Elderly Populations	<p><b>**Introduction:**</b></p> <p>Community Gardens (CGs) are plots of land where neighbourhoods can socialise and grow plants. Greater loneliness is a cause of all-cause mortality in people over 60. (1) With more visits to CGs, elderly populations report improvement in independence, dignity, and quality of life. (2) The social interactions and physical activity improves mental wellbeing. (3,4) The aim of this study is to evaluate the association between CGs on the mental wellbeing of people over 60 years old using the WHO-5 score. (5)</p> <p><b>**Methods:**</b></p> <p>The BlueHealth International Survey data set is across 18 countries with 18,838 adult participants and 312 variables over a year. The variables observed are participants over 60, average visits to CGs and WHO5 score. This was a sample of 4957 people. RStudio was used for analysis.</p> <p><b>**Results:**</b></p> <p>There is a positive association between frequency of visits to CGs and an improvement in mental wellbeing. This is shown by an increase of 7 points in the mean total WHO5 score. The standard deviation decreases from 21.3 to 20.3 as visits to CGs increases. This supports the hypothesis that spending more time in CGs can improve mental wellbeing amongst older populations.</p> <p><b>**Discussion:**</b></p> <p>With more CGs visits, there can be international improvement in the mental wellbeing of the elderly population. Increasing activity and nutritional knowledge has potential to improve mental and physical wellbeing, decreasing mortality rates. Randomised control trials need to be used to explore this hypothesis. A linear regression model was used to explore this hypothesis in depth.</p>
Rimsha Ansar Rimsha Ansar (1)	(1) Continental medical college, Lahore	ANALYSIS OF ROUTINE STRESS TESTING AFTER PCI IN PATIENTS WITH AND WITHOUT ACUTE CORONARY SYNDROME	<p><b>Abstract:</b> Routine stress testing post-percutaneous coronary intervention (PCI) is critical in managing coronary artery disease (CAD) patients. This study evaluates its efficacy in patients with and without acute coronary syndrome (ACS). <b>Objective:</b> To assess the clinical outcomes and cost-effectiveness of routine stress testing following PCI in patients with and without ACS. <b>Methods:</b> A retrospective cohort study was conducted with 300 patients who underwent PCI. The cohort was divided into ACS (n=150) and non-ACS (n=150) groups. Data on demographics, clinical characteristics, stress test results, interventions, and outcomes were collected from electronic health records. The primary outcome was the incidence of major adverse cardiac events (MACE). Secondary outcomes included all-cause mortality, recurrent angina, and subsequent interventions. Statistical analyses included chi-square tests, t-tests, Kaplan-Meier survival analysis, and Cox proportional hazards regression. <b>Results:</b> The average age was 63.5 <math>\pm</math> 10.2 years for ACS and 65.2 <math>\pm</math> 11.3 years for non-ACS patients (p=0.045). MACE was significantly higher in ACS patients with a cardiac death rate of 5% compared to 3% in non-ACS (p=0.034). ACS patients had a higher prevalence of abnormal stress</p>

			tests (40% vs. 35%, $p=0.389$ ) and required more interventions, including repeat PCI and CABG. Kaplan-Meier analysis showed a steeper decline in survival for ACS patients. Conclusion: Routine stress testing post-PCI is more beneficial for ACS patients due to higher risks and the need for subsequent interventions. However, its routine use in non-ACS patients is less clear, suggesting tailored approaches based on individual risk profiles are needed.
Dr Yasir Ashfaq (1)	(1) The Royal Oldham Hospital	Are follow-up chest x-rays being performed according to British Thoracic Society Guidelines on adults diagnosed radiologically with Community Acquired Pneumonia?	<p><b>Introduction</b> The aim of this audit was to evaluate whether follow up chest x rays were performed on adults diagnosed with Community Acquired Pneumonia ( CAP ) radiologically, according to British Thoracic Society national guidelines.</p> <p><b>Background.</b> Lung cancer is the second most prevalent cancer in the UK. Late presentation is common and therefore, mortality associated with the disease is significant. Unfortunately, many of the symptoms of pneumonia are also found in patients diagnosed with lung cancer. Patients who have lung cancer are also more susceptible to superadded infection. As infective radiological changes may mask an underlying undetected malignancy, follow up x ray should be performed within 6 weeks to ensure resolution of radiographic opacities.</p> <p><b>Methodology</b> The study retrospectively identified 100 cases of radiologically diagnosed CAP in adults of a busy city hospital over 6 months and to quantify the number of these who went on to have a 6 week follow up chest X ray as per national guidelines.</p> <p><b>Results.</b> Only 45 % of patients fulfilled the national Guidelines for undergoing follow-up chest imaging with in 6-week timeframe. Of the patients who underwent subsequent imaging, 4 probable Lung Malignancies were diagnosed.</p> <p><b>Conclusions</b> We concluded several of the typical reporting phrases used may be ambiguous and not interpreted as infection. It has resulted in difficulty for junior clinicians to know how to follow these patients up. Lack of understanding by patient regarding importance of follow up imaging and hence failure to attend.</p>
Dr Yasir Ashfaq (1)	(1) The Royal Oldham Hospital	Comparative efficacy and safety of different pharmacological treatments for acute exacerbations of chronic obstructive pulmonary disease.	<p><b>Introduction.</b> This study aims to compare the efficacy and safety of various pharmacological treatments for acute exacerbations of chronic obstructive pulmonary disease (COPD).</p> <p><b>Methods</b> This study was conducted at SIMS, Lahore during January 2022 to May 2022. A total of 245 patients diagnosed with acute exacerbations of COPD were included in a randomized controlled trial. Patients were assigned to different treatment groups, each receiving a specific pharmacological intervention.</p> <p><b>Results.</b> The study revealed that patients treated with Drug A showed a significant improvement in lung function, with a mean increase in FEV1 of 20% compared to baseline, while patients receiving Drug B and Drug C exhibited increases of 15% and 10%, respectively. Symptom scores improved by 30% in the Drug A group, 25% in the Drug B group, and 20% in the Drug C group. The rate of exacerbations was lowest in the Drug A group, with an average of 1.5 exacerbations per patient over 12 weeks, compared to 2.0 in the Drug B group and 2.5 in the Drug C group. Regarding safety, Drug A had the lowest incidence of adverse events at 10%, whereas Drug B and Drug C had adverse event rates of 15% and 20%, respectively.</p>

			<p>Conclusion. The study identified significant differences in the efficacy and safety profiles of the pharmacological treatments for acute exacerbations of COPD. The results provide insights into optimal treatment strategies, highlighting the need for personalized therapeutic approaches based on individual patient profiles and specific drug safety and efficacy parameters.</p>
Miss Nabilah Ali (1)	(1) University of Nottingham Lincoln medical school	A retrospective survey evaluating how medical student leadership activities enhance confidence in pursuing careers in paediatrics and paediatrics surgery	<p>Background: Leadership training in medical education is essential for addressing healthcare needs and improving outcomes. Emphasizing teamwork and early exposure through projects helps develop leadership skills. Medical school societies, through activities like conferences and teaching series, play a crucial role in preparing students for future clinical practice by fostering these skills. During my time in leadership position as president of paediatrics society, I have worked with the team to deliver change through various projects.</p> <p>Aim: To demonstrate change over one year, data should be collected from projects undertaken during leadership positions in a medical society</p> <p>Methods: A retrospective anonymized survey used a Likert scale and descriptive statistics to assess students' understanding of paediatrics surgery and paediatrics after a conference and teaching series organized by the Lincoln Paediatrics Society. Ethical approval was not required because the data was anonymised.</p> <p>Results: Before the Paediatrics Surgery Day Conference, students had 50% confidence in paediatrics surgery, which rose to 80% after the conference. The 13-episode teaching series increased their confidence in the topics by an average of 30%. Overall, students rated 80% of the content in conference and teaching series helpful.</p> <p>Conclusion: The leadership of Paediatrics Society's activities increased students' confidence and interest in pursuing careers in paediatrics surgery and paediatrics. This highlights the positive impact of effective leadership on students' confidence and positive effect on organisational change. The leadership position of presidency has allowed me to demonstrate the change and skills needed apply in my own future clinical practice to improve patient outcomes.</p>
Mr Marcin Wojnowski (1), Dr Patrick Strangward (2), Dr Dirk Sieger (2)	(1) The University of Edinburgh/ University of Dundee, (2) The University of Edinburgh	Development of a Novel Image Processing Pipeline for 3D Cortical Organoids Co-Cultured with Glioblastoma	<p>Glioblastoma (GBM) is the leading incurable brain cancer of all ages. Modelling this neurodegenerative disease is challenging, as conventional models like mice and zebrafish fail to fully recapitulate GBM's complexity due to differences in brain biology and immunology. Since 2013, cerebral organoids derived from human pluripotent stem cells (hPSCs) have been developed, though these organoids lack homogeneity, affecting research reproducibility.</p> <p>To address these limitations, we created novel cortical organoids from induced pluripotent stem cells (iPSCs), aiming for greater homogeneity. We imaged six cortical organoids using light sheet microscopy, co-cultured with GBM derived from varying glioblastoma stem cell (GSC) densities (two each at 100k, 50k, and 5k) to develop a novel imaging pipeline using three-dimensional cortical organoids (3D-COs). After a seven-day co-culture, we quantified total tumour bulk volumes, the shortest distance travelled by dislodged GBM cells, and the total volume of invading cells.</p>

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			<p>Using a one-way ANOVA test, we found significant differences in the shortest distance travelled by dislodged GBM cells between 100k and 50k GSC densities and between 100k and 5k GSC densities. However, no significant difference was observed between the 50k and 5k densities and in the other metrics analysed using the Kruskal-Wallis test and ANOVA. Nevertheless, our findings suggest that GSC density does not significantly impact GBM invasiveness within the tested range. Future studies should explore additional GSC densities and the role of tumour-associated microglia and macrophages in influencing GBM aggressiveness. This research contributes to developing more accurate GBM models and imaging, potentially leading to improved therapeutic strategies.</p>
<p>Miss Rameen Wahaj (1), Dr Kevin McConville (1), Dr Shona Ogilvie (1)</p>	<p>(1) University of Dundee Medical School</p>	<p>Medical Students' Perceptions of a Career in Dermatology</p>	<p><b>Background:</b> Dermatological conditions are increasing in prevalence across the globe, however interest in dermatology amongst medical students is low. This is largely due to the negative perceptions students have of dermatology prior to gaining clinical experience. Inadequate teaching and placements are often blamed, as students believe they have not been exposed to clinical dermatology and lack necessary knowledge.</p> <p><b>Aim:</b> This study aimed to explore medical students' perspectives of a career in dermatology at the University of Dundee.</p> <p><b>Methodology:</b> A case study approach was adopted applying semi-structured interviews to explore medical students' views. Fifteen recorded interviews were transcribed verbatim and reflexively, thematically analysed.</p> <p><b>Findings:</b> Students believe dermatology is a dull and repetitive specialty that lacks status and respect. Teaching experiences and the media created unrealistic views of the specialty, including a significantly reduced workload and extravagant lifestyle, these expectations were the main factors attracting students to dermatology. Students suggested increasing the opportunities to engage with dermatologists and explore what a career in dermatology involves would be beneficial to correct any misconceptions.</p> <p><b>Conclusion:</b> Medical students receive insufficient information regarding a career in dermatology. Thus, increasing clinical opportunities in dermatology could stimulate interest and understanding of the specialty amongst medical students. In addition, clinical experiences allow any misconceptions to be addressed and increase student career education.</p>
<p>Dr Surbhi Dumra (1)</p>	<p>(1) Employees' state insurance corporation, faridabad</p>	<p>Case presentation - Berardinelli-Seip congenital generalized lipodystrophy</p>	<p>Berardinelli-Seip Congenital Lipodystrophy (BSCL), also known as Congenital Generalized Lipodystrophy is an exceedingly rare autosomal recessive disorder, marked by a significant scarcity of adipose tissue in the body. Adipose tissue, commonly known as body fat, is primarily found under the skin and between internal organs. In BSCL, the development of adipocytes and the ability to store fat in them is greatly affected. As a result, lipids are deposited in other tissues, including muscle and liver. The magnitude of adipose tissue loss determines the severity of symptoms. The clinical presentation of this syndrome varies between thin muscular appearance, increased appetite, bone cysts, marrow fat loss, ,Ãã,Ããacromegaly, severe insulin resistance, skeletal muscle hypertrophy, hypertrophic cardiomyopathy, hepatic steatosis/hepatomegaly, cirrhosis and Intellectual disability. We present an</p>

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			interesting case of a 9-year-old child with a known history of BSCL, who presents with fever and a left ankle mass, potentially an exostosis. This was complicated by high blood sugars (currently not on insulin), moderate pulmonary arterial hypertension (PAH) with tricuspid regurgitation (TR) and fever resistant to acetaminophen. Detailed history, thorough examination, and appropriate investigations revealed anaemia, thrombocytopenia, high total leukocyte count and CRP. The child was treated with high-potency antibiotics for 5,10 days which showed marked improvement in his overall condition. Referrals to endocrinology and orthopaedic departments were made for the management of diabetes mellitus and ankle mass, respectively. We herein discuss the clinical presentation and complications in BSCL and the requirement of a multispeciality approach for holistic patient care and timely management, particularly in children
Dr. Varshini Vishwanatham (1), Dr. Maryam Zahid, Dr. Shreya Magadum (3)	(1) Ninewells Hospital, NHS tayside. , (2) General Practice, Coldsie Medical Practice, Dundee, (3) Christian Medical College, Vellore, India	Genetic Thrombophilia and Subacute Budd-Chiari Syndrome: A Case Report of a Young Male with Factor V Leiden Mutation	<p><b>**Background:**</b></p> <p>Budd-Chiari Syndrome (BCS) is an uncommon vascular illness presenting as obstruction of hepatic venous outflow from the hepatic venules to IVC and right atrium due to thrombosis. This condition is mainly of two types: Primary (when obstruction occurs in vein ,1 thrombosis) and secondary (external compression of the vein from an abscess or tumor).</p> <p><b>**Case Presentation:**</b></p> <p>We came across a case of a 19-year-old male, who presented to our outpatient service with non-specific symptoms such as fatigue and dizziness without typical signs like abdominal pain or ascites. He had a significant family history with his mother known to have deficiency in Factor V Leiden. Additional imaging studies were ordered when initial laboratory tests showed an isolated elevation in gamma-glutamyl transferase (GGT). Transabdominal color Doppler ultrasound followed by CT and later MRI merely confirmed the diagnosis of subacute BCS, showing hepatic venous hypertension as well as collateral circulation \[Fig. 1\]</p> <p><b>**Genetic Investigation:**</b></p> <p>Genetic testing showed that the patient was heterozygous for both Factor V Leiden and Prothrombin mutations, predisposing him to a general hypercoagulable state. The results suggest to look for a genetic predisposition in young patients with idiopathic hepatic venous obstruction.</p> <p><b>**Management and Final Thoughts:**</b></p> <p>The patient was started on apixaban, with further discussions of potential interventions. This Case emphasis crucial link between Bud Chiari and thrombophilia, as early recognition and prompt intervention is necessary in this rare but serious condition. Increased awareness and genetic screening can prevent severe sequelae of this rare but potentially lethal condition by prompt interventions.</p>
Miss Disha Yadav (1), Dr Edwin Tong (2), Ms Elizabeth Lindsay (2), Mr David Nicoll (2)	(1) University of Dundee School of Medicine, (2) NHS Tayside	AUDIT OF CONSULTANT-LED WARD ROUNDS IN NINEWELLS HOSPITAL, TRAUMA AND	<p><b>**Background**</b></p> <p>Our department faces several pressures, and the upcoming winter is likely to intensify these challenges. Optimal patient care relies on regular consultant-led ward rounds, early decision-making, clear escalation plans, and discharge planning. Our previous audit showed that the average number of ward rounds per week was 1.91 (range 0-5), with an average patient stay of 23 days. Consultants who had fewer that average weekly ward rounds (1.84 vs. 1.91) saw patients staying longer in the hospital (32 days).</p> <p><b>**Aims &amp; Standard**</b></p>

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		ORTHOPAEDICS ,Äi ONE YEAR ON	<p>The aim of the second arm of this audit was to further evaluate documentation of Consultant-Led Ward Rounds within our department. The standard set was 100% of inpatients should have a Consultant-Led Ward Round documented at least twice a week.</p> <p><b>**Method**</b></p> <p>We retrospectively reviewed all trauma admissions between 1st September 2024- 27th September 2024. Documented Consultant-Led Ward Rounds were identified from the Electronic notes. We included all emergency trauma and excluded elective or day case surgery.</p> <p><b>**Results**</b></p> <p>A total of 196 patients under the care of 15 consultants were identified during the study period. 106 patients required operative intervention and 90 were admitted for non-operative management. The average admission was 7 days (range 1 day-28 days). The average number of ward rounds per week during the total study period was 1.5 (Range 0-5), which was lower than our previous audit.</p> <p><b>**Discussion**</b></p> <p>There remains significant variation between the number of Consultant-Led Ward Rounds within our department. Whilst all patients are reviewed on admission and post-operatively, overall documented reviews remain suboptimal.</p>
Talha bin Fazal (1)	(1) cmh lahore medical college, Pakistan	Comparison of Prevalence of Premenstrual Syndrome Symptoms among Medical and Non-medical Professional Females and its Association with Depression, Anxiety, and Stress: A Cross-sectional Study	<p>This study examines the prevalence of premenstrual syndrome (PMS) among women in Pakistan, with a focus on medical and non-medical professions, as well as housewives. The research, conducted from January to April 2021, aimed to assess PMS symptoms and their association with stress, anxiety, and depression. A total of 431 women aged 12,Äi55 participated, excluding those pregnant or post-menopausal. Data was gathered using the Shortened Premenstrual Assessment Form (SPAF) for PMS symptoms and the Depression, Anxiety, and Stress Scale (DASS-21).</p> <p>Results indicated that 58.2% of participants experienced mild PMS, 39.9% had moderate PMS, and 1.9% had severe PMS. Medical professionals showed the highest PMS prevalence, followed by housewives, with non-medical professionals the lowest. Depression, anxiety, and stress were found to correlate strongly with PMS, with stress showing the highest correlation. Contraceptive use appeared to slightly reduce PMS symptoms, whereas pre-existing psychiatric conditions correlated with higher PMS levels.</p> <p>The study highlights that PMS significantly affects women's mental and physical health, impacting work productivity and quality of life. Despite its prevalence, PMS remains under-researched and often unaddressed in Pakistan due to cultural stigma. The authors recommend integrating reproductive health education early and establishing specialized clinics to support women in managing PMS. They advocate for further research on PMS risk factors to inform better detection, counseling, and treatment approaches for affected women.</p>

Talha bin fazal Talha bin Fazal (1), Yumnah Razzaq	(1) Cmh lahore medical college, (2) Shaukhat khanum memorial hospital lahore	Fear and Anxiety levels during COVID- 19 pandemic in Pakistan: A cross- sectional comparative study	<p>The COVID-19 pandemic, originating in Wuhan, China in December 2019, was declared a public health emergency by the WHO as it spread globally [1][2]. Initially presenting as pneumonia cases of unknown cause, it quickly raised international concerns, leading WHO to launch online awareness programs to educate the public and healthcare workers (HCWs) [2]. The pandemic severely impacted the global economy, disrupting supply chains, halting transport, and closing educational institutions [3]. Developing nations faced heightened hardship, with daily wage workers struggling to access basic provisions, leading to hunger-related deaths.</p> <p>Social and media-driven fear of COVID-19 intensified anxiety and confusion, especially due to uncertainty and misinformation [4]. Studies have shown that HCWs, due to their education and awareness, reported lower levels of fear and anxiety than the general public, who had limited access to reliable information [5][6]. Among 447 Pakistani participants surveyed, the general public had significantly higher anxiety levels than HCWs (<math>p &lt; 0.05</math>) [7]. The Fear of COVID-19 Scale (FCV-19S) and Hamilton Anxiety Rating Scale (HAM-A) revealed mild fear levels for most, with anxiety peaking among younger people influenced by social media [8].</p> <p>Our findings highlight the need for mental health support, especially in countries where stigma limits access. HCWs require adequate protection and resources to avoid burnout, while public education on COVID-19 through reliable sources is essential to alleviate widespread anxiety and misinformation [9].</p>
Dr Prashanth Ravishankar Doddakadanur (1), Mr Randeep Aujla (1)	(1) University Hospitals of Leicester	Bridging the gap in knowledge and skills for foundation level doctors in Orthopaedics	<p><b>**Objective:**</b> This study aims to bridge the knowledge gap in trauma and orthopedics among foundation-level doctors, particularly international medical graduates (IMGs), through structured teaching initiatives, led by Specialist Orthopedic registrars.</p> <p><b>**Background:**</b> IMG doctors entering trust-grade foundation roles often come from diverse backgrounds and lack specific skills or expertise in Orthopedics. This deficiency in targeted training can hinder their job performance and effectiveness in managing trauma and orthopedic care, ultimately compromising patient outcomes.</p> <p><b>**Methods:**</b> We developed a 10-week teaching program focusing on key topics in trauma and orthopedics, including essential procedural skills. This collaborative project involved orthopedic registrars incorporating near-peer teaching. Protected time was allocated for sessions, and refreshments were provided to encourage attendance. Participants received certificates with Continuing Professional Development (CPD) value to acknowledge their participation.</p> <p><b>**Results:**</b> Initial evaluations revealed that doctors' knowledge was poor in 10%, average in 30%, and good in 60% before the program. After completing the 10 sessions, this improved to 40% good, 50% very good, and 10% excellent knowledge. All participants reported feeling more competent in their job roles, more comfortable to communicate to specialist registrars and a majority expressed a desire for the teaching to continue in the future.</p>

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			<p><b>**Conclusion:**</b> Organized teaching programs, including near-peer teaching and procedural skills training, effectively enhance the preparedness of foundation-level doctors. By addressing specific training needs, these initiatives lead to improved job performance, enhanced co-operation among the senior and junior doctors in patient care, better patient outcomes, and greater professional satisfaction among IMG doctors.</p>
<p>Role of ALP1 and ALP2, Novel Polycomb Proteins, in Gene Regulation and Seed Development Jasmine Jia Pin Lo</p>	<p>(1) University of Edinburgh (Development, Regeneration and Stem Cells Honours Project Report), supervised by Professor Justin Goodrich</p>	<p>Role of ALP1 and ALP2, Novel Polycomb Proteins, in Gene Regulation and Seed Development</p>	<p>ANTAGONIST OF LIKE HETEROCHROMATIN PROTEINs (ALPs) have been identified as modifiers of the plant Polycomb (PcG) mutant phenotype and as a component of the Polycomb Repressive Complex 2 (PRC2) with a role in trimethylating histones. ALP1 and ALP2 are novel proteins originating from the domestication of the <i>_Harbinger_</i> transposon. <i>_ALP1_</i> and <i>_ALP2_</i> mutations partially suppress the early flowering time phenotype in PcG mutants and decrease the expression of several PRC2 target genes. This contradicts the aforementioned role of ALPs as components of PRC2. Therefore, it is currently unclear if ALP1 and ALP2 function as gene repressors or activators. To resolve this dilemma, we examined the effect of ALP proteins on transcription by monitoring transgenic plants expressing fusions of ALP to Zinc Finger proteins that tether ALPs to the <i>_FWA_</i> gene promoter. We found ALP1, but not ALP2, functions as a gene repressor to methylate the hypomethylated <i>_fwa-D_</i> promoter. Both ALP1 and ALP2 lack gene activation function and cannot demethylate the methylated <i>_FWA+_</i> promoter. Another point of interest were the homologs of <i>_ALP1_</i>, <i>_POW1_</i> and <i>_PANDA_</i> in rice, which demonstrated increased grain size. By analysing seed harvested from mutant <i>_ALP_</i> allele lines, we found an overall increase in <i>_ALP_</i> seed size which indicates wild type <i>_ALP+_</i> negatively regulates seed size. Thus, this study presents new and exciting functions of <i>_ALP_</i> in regulating flowering time and seed size in <i>_Arabidopsis_</i>.</p>
<p>Mr Jake Keast (1), Miss Charlotte Smith (1)</p>	<p>(1) University of Exeter</p>	<p>The Expectations and Experiences of Postgraduate and Mature Students Undertaking Remote or Online Delivery Postgraduate Courses.</p>	<p><b>**Aims:**</b> To understand student and staff expectations when applying to courses with online teaching delivery, and evaluate satisfaction and proposed methods for improvement of online courses at the University of Exeter (UoE).</p> <p><b>**Method:**</b> A questionnaire comprising 27 questions to understand positive and negative experiences was distributed to staff and students of postgraduate courses. We then stratified these <math>[n=33]</math> for mode of teaching delivery <math>[n=28]</math>. Each survey responder <math>[n=13]</math> was offered a semi-structured interview to further discussion <math>[n=5]</math>. Data was collected via Microsoft forms, with interviews transcribed and analysed via thematic analysis.</p> <p><b>**Results:**</b> Of our 13 respondents, 86% of students <math>[n=6]</math> were balancing studies with significant other commitments. Interviews elaborated on the many benefits and challenges of remote learning. 57% of students <math>[n=4]</math> expected intense in-person weeks to facilitate networking between both peers and staff and consolidate knowledge in short blocks. In thematic analysis discrepancies were seen in staff and student barriers to gauging understanding online, the role of small group learning, and meeting of expectations for further review.</p> <p><b>**Conclusion:**</b> Clear awareness is seen from both staff and students as to the expectations and challenges of a change to online content delivery. Using focus groups of relevant graduate professionals allows us to develop relationships between the two parties and develop</p>

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			curricula favourably for the future. The importance of learner-content and learner-instructor interactions do not differ in online and in-person delivery however must be accommodated in different manners, as eluded in the take-home messages and quotes of our report (linked in the appendix).
Dr Kisshan Raj Balakrishnan (1), Dr Dharshanan Raj Selva Raj, Mr Sabyasachi Ghosh, Mr Gregory AJ Robertson	(1) Department of Trauma and Orthopaedics, Wrexham Maelor Hospital, Croesnewydd Rd, Wrexham LL137TD, United Kingdom, (2) Department of Trauma and Orthopaedics, Wrexham Maelor Hospital, Wrexham LL13 7TD, United Kingdom, Department of Trauma and Orthopaedics, The Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry SY10 7AG, United Kingdom	Bridging Gaps in Diabetic Foot Attack (DFA) Management: Addressing Clinical and Research Disparities in Care Protocols	<p>Study aims- This study aimed to address critical gaps in the management of diabetic foot attack (DFA), including clinical protocol standardisation, emerging therapies, and disparities impacting under-represented populations, with a focus on advancing both typical and atypical DFA management.</p> <p>Method- This review synthesised research from 2015-2024, including clinical trials, cohort studies, and guidelines (IWGDF/IDSA, BOFAS), analysing diagnostic and therapeutic disparities in typical versus atypical DFA. The study examined diverse management needs, highlighting limitations in access to emerging therapies such as hyperbaric oxygen and bioengineered tissue substitutes, especially in resource-limited settings.</p> <p>Results- Findings reveal significant disparities in DFA management, particularly in socioeconomically disadvantaged groups. Standardised care practices were inconsistent, and advanced therapies, while promising, were often inaccessible. Moreover, atypical DFA, linked to ischemia or Charcot neuropathy, presented additional challenges, with poorer outcomes due to diagnostic delays and limited vascular intervention options. Additionally, the study introduced a novel treatment framework that categorises DFA management into acute, intermediate, and long-term phases, tailored to both typical and atypical presentations. This insight allows for more targeted and continuous patient care, promoting better limb salvage and functional outcomes by addressing gaps in early recognition, vascular intervention, and long-term monitoring.</p> <p>Conclusion-Bridging gaps in DFA management requires the development of comprehensive, accessible care protocols that integrate emerging therapies and address inequities in treatment accessibility. This review underscores the need for dedicated research to inform holistic care and improve outcomes, particularly for vulnerable patient populations, promoting an inclusive approach to DFA treatment worldwide.</p>
Miss Berivan Macit (1)	(1) University of Warwick	The role of Social Capital in Medical Education and its effect on academic performance.	<p><b>**Introduction:**</b></p> <p>Medical school places immense academic demands on students, underscoring the importance of supportive peer networks. This literature review explores the role of social capital within these peer networks, examining how connections among students impact academic performance and personal well-being. The review identifies three central themes: resource sharing, mentorship from senior students, and peer-to-peer teaching, all of which contribute to the academic performance of medical students.</p> <p><b>**Main Findings:**</b></p> <p>In medical education, social capital manifests through both formal and informal networks that provide students with access to valuable resources, guidance, and collaborative learning opportunities. Formal networks are often organized by the curriculum, while</p>

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			<p>informal networks typically form organically based on shared characteristics. These networks enable resource sharing, such as study materials and exam notes, while senior students often guide juniors on effective strategies. Peer teaching further reinforces knowledge and builds essential skills, though students who fall outside these networks may lack access to key resources and support.</p> <p><b>**Conclusion:**</b></p> <p>Social capital within peer networks proves essential for student success in medical school, enabling students to draw from a variety of resources and support systems. While the diversity of resources means not every option will suit every student, the breadth of support allows individuals to find what aligns with their learning style. By fostering strong peer connections, medical students are better equipped to handle the rigorous demands of their education, gaining the resources and mentorship needed to excel in a high-pressure academic environment.</p>
Miss Shruti Anand Virgincar	(1) University of Warwick	The Social Bank of Mum and Dad: A scoping review exploring the perceived advantage of having medical parents.	Various forms of capital, including social capital, may play a key part in the gaining of resources and development of networks prior to, during and after medical school. This literature review explores the advantages and disadvantages of family members who are doctors for medical students. The review examines what exactly medical family members may give to their medical student children in terms of resources, networks and support prior to, during and following graduation from medical school. A better understanding of these influences can enable medical schools to start to level the playing field and compensate for these differences in resources amongst medical students.