ABSTRACTS

Session 1: Plenary

Delivering quality medical education: Metrics and more…

Prof. Lesley Roberts

Satisfaction, spend and staffing, employability data, preparedness, student outcomes, educator expertise… With an increasing array of metrics, alongside a multitude of different approaches to synthesising these to inform different stakeholder groups, this session will explore our current 'quality' framework and ask the question, "to what extent do these metrics align with our understanding of 'quality' in medical education?".

Session 2: Plenary – Student perspectives on medical education

Experiences of an interprofessional collaboration in producing educational material on professionalism dilemmas

Jenardan Sellathurai, James Bloomfield & Anne-Marie Chilton

Background: The Warwick International Health Education Academy (WIHEA) led an interprofessional collaboration to produce educational materials on professionalism conflicts. The educational resources were produced for students by students and staff working together. Participants in the project completed a post-project evaluation survey to highlight their experiences through the project.

Aims: To collect feedback responses from university staff, student teachers, and medical students on their experience of the WIHEA project to assess the value of collaborative projects in enhancing the student experience and learning. The responses will also help to better facilitate and recruit members for future collaborative projects.

Methodology: An anonymous online questionnaire was sent to members involved in the project. Questions included initial motivation for involvement in the project, what they enjoyed and did not enjoy. Further descriptive information was collected on practical aspects of organisation. Responses were analysed thematically.

Results: From the variety of responses, what was commonly enjoyed amongst the participants was the nurturing environment to work with others, but the participants felt like the time frame for the project was too limited. Despite this, they felt teaching resources were completed and beneficial to users. Suggestions about recruiting external video editors to not only increase productivity, but to also add value to the educational resources were made.

Discussion: Overall, the WIHEA initiative is an example of interprofessional collaboration between students and staff. The findings of this study show that the project was well received by participants and provided opportunities for members to develop their professionalism learning whilst developing new relationships working in novel teams. Therefore, more collaborative projects to produce educational materials will

hopefully increase engagement amongst users resulting in a more impactful learning experience whilst creating a more positive learning environment.

Student perspectives on barriers to performance for Black & Minority Ethnic graduate-entry medical students: qualitative study

Nariell Morrison, Clare Blackburn & Michelle Machado

Background: UK medical students from Black & Minority Ethnic (BME) backgrounds have been reported to underperform academically compared with their white counterparts. This persistent difference in performance between ethnic groups is known as the differential attainment gap and poses a huge problem for the medical profession. Although, the attainment gap has been widely documented, the causes are unclear.

Aim: To explore MBChB students' experiences of undergraduate training in the context of academic underperformance of medical students from BME backgrounds.

Methods: This was a qualitative study of 24 MBChB students at WMS. Eligible participants were volunteer and snowball sampled. Participants were assigned to one of four focus groups and data were gathered using a semi-structured interview schedule. Each group was recorded and transcribed. Thematic analysis was applied to the data.

Results: BME students in this study reported facing a range of difficulties throughout their undergraduate medical training that they felt impeded their learning and performance. The relationships with peers, staff and clinicians, though also identified as facilitators to learning, often hindered progress and many felt that these relationships impacted their student experience. Students also reported a lack of trust in the institution, with many not seeking support. Although rare, students faced overt racism from other students and patients. Many students reported feelings of isolation, reduced self-confidence and low self-esteem that hindered their learning and performance.

Conclusion: Although it is not clear from this small study of one institution whether these findings would be replicated in other institutions, they nevertheless highlight important issues to be considered by the institution concerned and other institutions. These findings suggest that future interventions should include improving peer relationships and student-staff relationships and implementing institutional changes to diversify student and staff populations. Guidance on tackling racism as well as adequate training in anti-racism, culture and diversity for both students and staff is likely to be key.

Perspectives of WMS Students and Staff on Resilience and Pastoral Support

Wajid Hussain, Isabel Rimmer & Nicholas Hopcroft

There has been considerable debate about resilience and its relationship to student wellbeing and academic success, yet no research has explored the concept of resilience within graduate-entry medicine. This study used semi-structured interviews to examine how WMS medical students and staff perceive resilience and how this might inform provision of student pastoral support. Interviews were carried out with 15 students from across all four years of the medical degree and with 10 members of staff (six clinical, four non-clinical) who teach and provide pastoral support. Students and staff both conceptualised resilience as the ability to develop as an individual in response to adversity. Whilst students considered this important to academic success, some had negative feelings about it due to the element of experiencing adversity. There were mixed views among staff regarding any relationship between resilience and clinical competence. Students wanted pastoral support that was both specific to medical students and responsive to them as individuals. Staff felt that students also needed a realistic view of the challenges involved in undertaking a graduate-entry medical degree. There were differing views on accessing pastoral support, with staff feeling support is under-utilised and students feeling too much onus is placed on them to proactively seek support. The implications of these findings for the provision of student pastoral support at WMS will be discussed.

Session 3: Parallel sessions

3.1. Spoken presentations

Resuscitation - A Student Led Initiative to Improve CPR Education in Schools

Michael Smith, Philippa Rutter, Hannah Morgan & Anjola Andeniran

Background: Less than one in ten people survives an out of hospital cardiac arrest in the UK. This is considerably lower than many other European countries. There is one key factor that contributes to this: low levels of bystander CPR and defibrillation. Resuscitation is a group that was set up in 2018 by students from Warwick medical school. They believe that every young person should have the ability to deliver CPR and basic first aid. In order to realise these goals, they have begun to deliver sessions in schools in the Coventry and Warwickshire area.

Achievements So Far: Resuscitation has delivered CPR and first aid education to around 600 school children across a variety of schools and ages. The sessions have been excellently received by staff and students alike. They have also trained over 20 medical students in effective session delivery, classroom control and safeguarding. These skills can be utilised by students throughout medical and educational careers. In order to ensure that sessions are being delivered to a high standard, they have begun to gather formal feedback and assess retention of knowledge at various stages after the sessions have been run.

Future Goals: The group continue to develop in order to guarantee that as many young people as possible can access this vital education and ensure that other students are able to feel the benefit of being involved in this initiative. They have begun to expand to other medical schools, with a branch set up at the University of Buckingham. Additionally, they are currently developing branches at several other universities running healthcare courses across the country. They hope to share the story of their development, to encourage staff and students at WMS to develop similar initiatives of their own, furthering education and engagement throughout the medical school.

Dynamic Teaching in Medical Education: the use of group based active learning

Madhumitha Rangaraju, Ryan Laloo & Christopher White

Background: Traditional didactic teaching methods are falling out of favour with the inclusion of case based learning into several medical school curriculums. Active learning, whereby students are prompted to participate and engage with material, is proven to be more effective.

Methods: RWLectureSeries consists of foundation doctors who organised medical student courses in Warwick University and Heartlands Hospital (for University of Birmingham medical students). For final year students, the course was called 'Cases on A Surgical Patient (CSP)'. It included group-based learning on common surgical patient presentations (e.g. neck lumps, burns), followed by clinical simulations on recognising an acutely ill surgical patient and surgical skills. Teachers were instructed to avoid the use of PowerPoint as a primary teaching tool during their station. CSP in Birmingham also included a 20-student group revision session based on the American television game, Jeopardy. The Jeopardy session was also adapted for first year medical students at Warwick University.

Results: 96.3% of Warwick final year students and 93.7% of Birmingham final year students thought that station topics covered relevant material for their level; 92.6% and 93.7% thought teachers helped facilitate recall, respectively. 94.4% of first year students found the Jeopardy session relevant to their stage of training and thought it was helpful for preparation for exams. 100% felt it was interactive.

Discussion: Students were encouraged to work in teams through the day and for the CSP in Birmingham, they were awarded 'points' by teachers for good teamworking, leadership and communication skills. Encouraging students to work in teams to answer questions and display effective group learning skills furthered their association with certain topics to potentially help facilitate recall in for exams. One student exclaimed after his wrong answer, "I'll never forget that now, will I!". Confidence levels increased between pre and post course questionnaires for all station topics.

Bringing the Resuscitation for Medical Disciplines (RMD) teaching model to Warwick

Ryan Dee, Christopher Smith & Helen Watkin

Resuscitation for Medical Disciplines (RMD) is a peer-led Basic Life Support (BLS) and Automated External Defibrillator (AED) training program accredited by the European Resuscitation Council (ERC). It is delivered to more than 900 first-year students studying for clinical degrees each year and has been running for over 20 years at the University of Birmingham. Working in collaboration with RMD Birmingham, Warwick students and staff have established RMD at Warwick Medical School and are at the forefront of plans supported by the Resuscitation Council UK and the ERC for the scheme to be expanded nationally.

We discuss how the RMD model is useful for developing Warwick MBChB students teaching skills by using a well-tested and respected approach supported by the ERC. This includes structured approaches to teaching both theoretical and practical skills, how to run a learning session and to deliver effective feedback. We also discuss the challenges in bringing this model to Warwick, our ambitious plans for the future development of RMD and the opportunities that this will provide our teachers.

3.2. Workshop. Drawing & Doing in Order to Learn: A Framework to Promote Making the Unseen Seen and the Complex Simple

Erin Fillmore, Jamie Roebuck & Helen Watkin

It is difficult to imagine teaching students a challenging topic without the aid of visual representations, drawings or hands-on demonstrations. In part, this is because it is often the visual and tangible that solidify a students' learning. The 'visual' or 'tangible' might be: using a schematic diagram to teach a process, performing a clinical exam by palpating structures, using a drawing to depict a structure not visible to the naked eye, talking through a photograph of a cadaveric dissection, or using a graph to show an important trend. Whatever it might be, implementing visual representations via drawing (Draw-It) or hands-on (Do-It) activities in learning is a powerful way to make the unseen seen and the complex simple.

Indeed, research shows that drawing and/or doing something in order to learn it are powerful methods that encourage students to engage in constructing their own knowledge based on prior knowledge and experience, and aids to foster conceptual change and meaningful understanding.

So, how do we strategically develop our own Draw-It or Do-It activities on topics we know our students consistently struggle with? This workshop aims to answer just that! The focus of this workshop will be to provide delegates with an understanding of how drawing and/or doing something can facilitate the process of learning a difficult topic (and maybe even make it a bit more fun!). Participants will be given a transferable step-by-step framework that can be used as a springboard to facilitate learning through drawing or doing in their classroom. The framework will be put to use in the workshop, where delegates will have the opportunity and support to take a subject-specific concept of their choosing and create their own original Draw-It or Do-It activity. Delegates will leave with enough knowledge to implement more drawing and doing activities in their teaching, and hopefully a new appreciation for how the 'really tough' subjects can be taught.

3.3. Workshop. Lessons Learnt from the Acute Care Speciality Block: Let the Games Begin!

Dhanya Pillai, Amanda O'Keeffe, Nanditha Sathyanarayana, Thomas Baker, Alexandra Tebbett, Arwa Meki

Feedback is the driving force to achieve objectives for the learner, the educator and the curriculum. (Chowdhury &Kalu, 2004; Krackov, 2013). The Acute Care speciality block receives consistently good feedback from Phase III students. We receive comments such as: "I have really enjoyed this block – felt well supported and well taught." "It's been a highlight of my medical school experience." "This has been the best block so far by a significant margin. An organised, manageable and varied timetable. Excellent classroom teaching in tutorials and simulation. Feedback to students has been great."

The clinical education fellows (CEFs) at University Hospitals Coventry and Warwickshire have performed fishbone and SWOT (strengths, weaknesses, opportunities, and threats) analyses to share the lessons learnt from organizing the block. The analyses and student feedback have been crucial to self-evaluate and reflect on our practice to continually improve the block for our students. In summary we have found that strengths and opportunities include:
- The use of dedicated multi-disciplinary, registrar grade CEFs to deliver organised small-group tutorials

- Individual rota
- Consultants to deliver lectures related to the curriculum
- Auditing and reviewing our own lectures and tutorials to ensure it is relevant to the Warwick Medical School curriculum
- Electronic feedback forms
- Using Whatsapp groups to share resources and logistics
- The use of hi-fidelity simulation training
- Additional pastoral and careers support given to students via a pre-allocated named CEF
- Whole specialist block organised by one site to ensure there is consistency
- Sharing good practice with fortnightly CEF grand round within and across Trusts Weakness and Threats include:
- Maintaining CEF recruitment and handover of responsibilities
- Ensuring consultants are not pulling back from teaching
- Logistics e.g. room booking difficulties
- Increasing size of the student cohort which has multiple potential impacts

These findings will be further explored in our presentation, in order to share our lessons learnt and we will focus on the use of "serious games" to deliver our sessions in a practical element.

Session 4: Plenary

The black & minority ethnic (BME) student attainment gap at WMS: What can we do? Presentation and discussion

Lanre Sorinola, Imogen Davies and the MB ChB Attainment Gap Working Group

This plenary session will introduce the black and minority ethnic (BME) student attainment gap which has been demonstrated in higher education and across medical training, examine our medical school data, explore the contributing factors and actions that are being taken.

Session 5: Parallel sessions

5.1. Spoken presentations: Using technology to enhance learning and teaching

Student Evaluation: Improving Online Response Rate

Thomas Baker, Nanditha Sathyanarayana, Amanda O'Keeffe, Dhanya Pillai, Thomas Moore

Background: Within our education department, there was a recent transition from paper to online questionnaires; the motivation being both administrative and environmental. This resulted in a reduction in response rates. This has been demonstrated in several studies. Avery et al demonstrated a statistically significant reduction in response rate between paper (72.9 %) and online (48.5%) evaluations.

Aims: Explore the impact of different interventions on student response rates for online questionnaires during the 'Acute Block' rotation.

Methodology: â€˜Google Forms' was used to create online questionnaires. Hyperlinks for the questionnaires were disseminated via the cohort's â€˜WhatsApp' group. Control received a single hyperlink after the teaching sessions. We then trialled new interventions for each 6-week rotation. Intervention 1: Weekly reminder to students to complete the online questionnaires sent via â€˜WhatsApp' group. Intervention 2: Hyperlink provided prior to the teaching session with verbal reminder post session, in addition to weekly reminder. Overall response rates were analysed using the unpaired t-test

Results: Mean response rates were Control 24.6%, Intervention 1 43.9% and Intervention 2 46.5%. There was a significant difference in response rate between the Control and both Intervention 1 (p=0.0002) and Intervention 2 (p=<0.0001). There was no significant difference between Intervention 1 and Intervention 2 (p=0.549). Further analysis demonstrated that there was no significant difference between the Control and either Intervention 1 (p=0.362) and Intervention 2 (p=0.694) prior to the weekly reminder

Conclusions: There is evidence that online questionnaires result in reduced response rates when compared to paper questionnaires. However online questionnaires have some advantages, such as environmental benefits and reduction in administrative time and costs. This study demonstrated that simple interventions such as a weekly reminders can significantly improve response rates. This should encourage other education departments to explore the use of online questionnaires and to trial novel approaches to encourage student engagement

Padlet: Using a novel digital resource for clinical psychiatry teaching

Jessica Blickwedel & Karen Romain

Introduction: Medical education is a dynamic field and it is important to stay abreast with new technological developments in order to provide the most engaging and effective teaching. One such digital resource is Padlet, a productivity software allowing for collation of resources in an easy and intuitive way.

Methods: 57 students from Buckingham (n=12) and Warwick Medical School (n=45) on their psychiatry blocks were provided with access to a Padlet resource created by a CT2 Psychiatry trainee which included signposting to NICE, the Royal College and mental health charities, condition specific content, a quiz and information about additional on call shift learning opportunities for interested students. The resource was introduced in the introductory lecture to the block and students were asked for written feedback at the end of their placements via multiple choice and a free text questions.

Results: 26 responses were received, 70.8% from Warwick and 29.2% from Buckingham Medical School students respectively. Of these 53.9% of students had made use of the Padlet with 23.1% reporting 1-2 uses and 30.8% reporting 3-6 uses. The most frequently used resources were information about on call options (n=8, 58.3%) and completion of the psychiatry quiz (n=5, 33.3%). The free text answers both highlighted that students felt the resource would continue to be helpful for future exam revision and that those who had not accessed it, generally ascribed this to forgetting about its availability.

Significance: Gaining feedback about usage and utility for a novel way of providing learning opportunities has shown that there was uptake even though it was an additional resource provided outside of the main curriculum materials. It also offered insight into why some may have not taken advantage of this and how a simple reminder email could potentially allow even more students to benefit.

Google Sheets: Using "cloud-based architecture" for student-led clinical allocations.

Nanditha Sathyanarayana, Amanda O'Keeffe, Dhanya Pillai, Thomas Baker

Background: At a university teaching hospital, 150 medical students take part in a range of educational activities as part of a revision block. This includes placements in clinical specialties and attendance at clinical skills workshops. In previous years, they were organised through email correspondence between students and administrators, leading to increased administrative demands, frustration for students and withdrawal of learning opportunities due to miscommunication.

Aims: We aim to develop a novel student-led, admin-lite system to facilitate clinical placements and revision session sign-ups that is engaging and acceptable to all stakeholders.

Method: Using Google Sheets, we have created a student-led allocation system for two core components of a revision module, namely placements in clinical areas and attendance at clinical skills workshops. A link for each spreadsheet was distributed to all students and data was collected on student engagement from the spreadsheets.

Results: For clinical placement allocations, there were 505 edits made by students, with 177 edits within the first hour of the spreadsheet going live. Overall, 48% of students utilised this system to access the learning opportunity. For clinical skills workshops, there were 90 edits and 87% of students have allocated themselves to sessions using the sheets. We plan to collect further data using questionnaires on user satisfaction of Google Sheets, from both students and administrators.

Conclusion: Google Sheets has proved to be a simple, efficient and acceptable platform to organise educational activities. It is evident that students have engaged with this system, likely due its accessibility. We now have a proven way to enable students to plan their learning opportunities, monitor student-led allocations and generate data for resource planning next year. Thus, we postulate that Google may be the

answer for other institutions, when organising educational activities for their learners while not committing excessive administration time to complex timetables.

5.2. Workshop. Benefits of a new feedback model: 'The 4 Ps'

Lucy Elliott & Prisca Chimkupete

Introduction: Traditionally, feedback has been thought of as a process focusing on negative aspects highlighted for improvement. Coupled with a lack of sensitivity, this often results in a disheartening process. Existing models such as Pendleton's Rules and the Agenda Led Outcome-Based Analysis (ALOBA) model aim to minimise this[1]. However these models can be formulaic and lack specificity.[2]

Objective: We propose a new feedback model: 'The 4 Ps' incorporating features of models above, with a focus on specificity and practicality. 'Purpose' indicates the setting of an agenda specific to the students' learning needs. 'Perception' allows for collaborative and constructive comments on the students' performance. 'Proof' ensures specific examples are given to clarify the points made, essentially justifying 'Perception.' 'Plan' warrants a specific action to be agreed for further active learning to take place.

Methods: We undertook a student survey, giving Warwick Medical School students a structured questionnaire to evaluate the feedback model after a supervised learning event at George Eliot Hospital. Thirty four students returned feedback and the results were analysed using a Likert scale of 'usefulness' and identifying common themes.

Conclusion: Overall, students perceived the model as very useful (average score: 8.9/10). Feedback analysis identified positives areas; the model was 'outcome-focused', 'collaborative,' 'specific,' 'structured' and focussed on a 'future plan.' The student survey also highlighted the importance of written feedback prompting use of a template for them to keep. The '4 Ps' has been shown to be an effective and practical model by which to give clinical feedback.

References

(1) Brown J, Kidd J, Noble L, Papageorgiou A. Clinical Communication in Medicine. John Wiley & Sons. 2015.

(2) Ende J. Feedback in clinical medical education. JAMA 1983 Aug 12;250(6):777-81.

5.3. Workshop. The BAME Student Experience and Attainment Gap

Anil Awesti, Meleisa Ono-George & Imogen Davies

Various reports (Broecke and Nicholls, 2007; Richardson, 2008; HEFCE, 2010; NUS, 2011; Singh, 2011; Stevenson, 2012; HEA, 2012; ECU, 2018; OfS, 2018; Universities UK, 2019) on student attainment and experience in Higher Education have shown a clear and substantial difference in the attainment, progression and overall experience of students who identify as Black, Asian and Minority Ethnic (BAME) compared to those who identify as White. In each of the past ten years, a smaller proportion of BAME students were awarded first and upper-second class degrees than White students. UK HE is witness to an overall BAME attainment gap of 13.6% and a 24% attainment gap between White and Black students. At the same time, the National Student Survey (NSS) consistently records lower satisfaction for students from ethnic minority groups compared to White students. Warwick's latest NSS results show that overall satisfaction of Black students was 11.6% lower than the University average, 9.1% lower than the sector average for Black students and 17% down on 2017. It is now widely accepted that the disparity in outcome and experience is the direct result of practices and processes within the University itself that disadvantage specific communities of BAME students. One specific area of concern has been the way teaching practice, content and environment contributes negatively to BAME student experience and attainment. As part of informing Warwick's progress on this issue, an 'Anti-Racist Pedagogy and Process in Higher Education Learning Circle' was established as part of Warwick International Higher Education Academy (WIHEA) in 2018. This workshop will present the work of the Learning Circle and facilitate conversation about relevant areas of teaching and learning that negatively contributes to BAME experiences. In doing so, the workshop will inform institutional deliberations on issues of BAME student experience and attainment, and the creation of inclusive teaching and learning through the engagement and practice of anti-racist pedagogy.

Session 6: Plenary

Key themes from the day

Professor Lesley Roberts, Pro Dean Education and Deputy Dean, WMS

WMS at 20 - A look back, a look around and a look ahead

Professor Colin Macdougall, Head of Medical Education, WMS

WMS is now almost 20. We are an established medical school amongst a pool of schools that will soon be joined by the next phase of newcomers. Traditionally, I have closed the MBChB conference with a look around, taking in the big picture and talking about the (often) challenging environment we work in. Whilst there are still national issues to update you on, I will also take the opportunity to look forward. As WMS turns 20, what do we think it will be like at 40? How will life have changed, what will doctors do and how do we prepare them? Over the next year, we will have much to celebrate, and Coventry City of Culture to prepare for, but we should also re-focus on what sort of school we need to be come for now and the future.

Posters

P1. Student experiences of viva examinations as a tool to assess learning at the end of a placement rotation and as a potential format for final year exam

Jenardan Sellathurai & Mohamed F Mohamud

Background: The 'Care of the Surgical Patient' rotation at UHCW for third year Warwick medical students concludes with a viva examination based on the tutorials and cases students would have seen. Participants then completed a feedback form regarding their experiences of the assessment.

Aims: To collect feedback from students regarding their experience of the assessment and to consider whether viva examinations can be a useful form of assessment for final medical school exams.

Methodology: An anonymous questionnaire was distributed amongst the students immediately after the completion of the exam. Questions explored what students liked and disliked about the experience, whether it suitably tested their knowledge and if it was representative of the cases they had seen on the rotation, and their thoughts on viva assessments as a potential exam for their final medical school exams. The responses were thematically analysed.

Results: Responses showed that students enjoyed the diverse range of cases as it helped them identify their weaknesses which was facilitated by a friendly atmosphere. However, there was a common issue regarding the ambiguity of some of the exam questions and the need for further clarification. Despite this, the viva examination was an overall positive experience and all students recommended it as a potential format for final year examinations if some modifications are first made.

Discussion: Finding the most appropriate format of assessments for final year examinations is something that medical schools research and prepare extensively. Most common formats of current examinations involve written papers and objective clinical structured examinations (OSCEs). The findings of this study show that viva exams may also be a potential format as students found that it tested their knowledge fairly. However, more mock viva examinations need to be conducted with the different specialties, to assess its suitability across the board.

P2. Why do patients volunteer to take part in medical student final examinations, how is their experience and can it be improved?

Louise Harmer & Prisca Chimkupete

Learning outcomes this research is linked to:
1. Enhancing medical student learning, teaching and assessment.
2. Partnerships in undergraduate medical education: Examples of collaborations to enhance the student experience; medical students, educators, patients, university and trusts working together to create â€˜One Medical School'.

Background: Medical education relies on voluntary patient engagement for medical students to demonstrate competency in final year examinations. Literature regarding patient experiences when participating in such examinations and their motivation to volunteer is lacking and the most recent paper found through our literature search is from 9 years ago. We explored the motivations of patient volunteers recruited for the

same purpose in our trust in order to investigate changes to patient reasoning over the years.

Aims: We aim to answer the following research questions
1.   Why do patient volunteers take part in medical student final examinations?
2.   Have motivations changed since previous studies?
3.   What is their experience like?
4.   Which factors are important in providing a good experience?
5.   Would a video demonstrating the process given before participation improve their experience?

Methods: Our participants consisted of patient volunteers from GEH medical school finals. The methods used include questionnaires and semi-structured focus groups. The data from focus groups was collected via audio recordings which were transcribed by the authors; analysed as a proxy for experience. The qualitative data will be analysed using thematic content analysis and an inductive approach.

Results and Conclusion: We achieved a response rate of 66.67% for the questionnaires and 20% of patients attended the focus groups we ran. Feedback was generally positive. Improvements suggested were surrounding patients' preferring more information regarding the itinerary for the day and it was felt a video would help.

Our results showed some inconsistency regarding the examiners behaviour towards patients and this is something we could standardise in future. A video will be recorded and made available for patients and suggested improvements will be implemented before the following year's exams. During the following years exams questionnaires will be used again to determine if the changes have been effective.

Reference
Gandhi, A. et al. (2010) Clinical undergraduate examination--voluntary patients' perspective. Medical Teacher, 32:1 e1-e4

P3. Are you paying attention?

Eloise Powell & Helen Jones

50 minute lectures are common practice in University Education. However, evidence shows that student concentration declines rapidly after 15 minutes and improves with the introduction of short lecture breaks. HEA advises using one or more short breaks which may or may not involve a structured activity.

We trialled the use of 5 minute lecture breaks consisting of an interactive quiz on content unrelated to the lecture material using Kahoot! game based learning platform. We then collected student feedback to assess the effectiveness of this intervention. We believe that by improving the lecture experience we can enhance student concentration and learning.

P4. Hesitation to Escalation: Reviewing factors that influence escalation of critically unwell patients by medical students

Dhanya Pillai, Thomas Baker, Amanda O'Keeffe, Arwa Meki & Nanditha Sathyanarayana

AIM: To explore enablers and barriers perceived by final-year medical students in the escalation of a clinically deteriorating patient

METHODS: The questionnaire compromised of a mixture of free-text responses and Likert-scale responses. The 5-point Likert-scale responses were to the question 'How do the following factors influence when you escalate?' It also asked how confident the student felt to escalate and the reasoning for their response . These free-text responses were thematically analysed.

RESULTS and CONCLUSIONS: The questionnaire highlighted that 88% of final-year students did not feel confident or very confident to escalate to seniors (n=68,).

Several perceived barriers and themes were identified in the escalation of a deteriorating patient. The major barrier to escalation was a perceived 'lack of experience' and 'confidence' in the recognition of acutely unwell patient which is reflected in similar studies . Another barrier was the lack of practicing a structured tool for their escalation such as SBAR (Situation, Background, Assessment, Response) and not knowing which clinician or team the student should escalate to.   It also highlighted that students would be unlikely to

escalate if they felt they would be criticised on their management which was echoed in the free-text comments.

The results provide targets for our department to help medical students overcome these barriers to escalation and reassess their training needs. We have since incorporated approaches such as empowering students to escalate during simulation training and reinforcing the process of escalation and providing SBAR training in small-groups workshops.
We have further plans to provide more practice of escalation in the students' assistantship phase, which immediately precedes them commencing their foundation jobs and we hope to perform further longitudinal studies to review the impact of these interventions.

P5. Student perspectives on barriers to performance for Black & Minority Ethnic graduate-entry medical students: qualitative study

Nariell Morrison, Clare Blackburn & Michelle Machado

Background: UK medical students from Black & Minority Ethnic (BME) backgrounds have been reported to underperform academically compared with their white counterparts. This persistent difference in performance between ethnic groups is known as the differential attainment gap and poses a huge problem for the medical profession. Although, the attainment gap has been widely documented, the causes are unclear.

Aim: To explore MBChB students' experiences of undergraduate training in the context of academic underperformance of medical students from BME backgrounds.

Methods: This was a qualitative study of 24 MBChB students at WMS. Eligible participants were volunteer and snowball sampled. Participants were assigned to one of four focus groups and data were gathered using a semi-structured interview schedule. Each group was recorded and transcribed. Thematic analysis was applied to the data.

Results: BME students in this study reported facing a range of difficulties throughout their undergraduate medical training that they felt impeded their learning and performance. The relationships with peers, staff and clinicians, though also identified as facilitators to learning, often hindered progress and many felt that these relationships impacted their student experience. Students also reported a lack of trust in the institution, with many not seeking support. Although rare, students faced overt racism from other students and patients. Many students reported feelings of isolation, reduced self-confidence and low self-esteem that hindered their learning and performance.

Conclusion: Although it is not clear from this small study of one institution whether these findings would be replicated in other institutions, they nevertheless highlight important issues to be considered by the institution concerned and other institutions. These findings suggest that future interventions should include improving peer relationships and student-staff relationships and implementing institutional changes to diversify student and staff populations. Guidance on tackling racism as well as adequate training in anti-racism, culture and diversity for both students and staff is likely to be key.

P6. WHOA! A new reflective model for thinking through professionalism dilemmas

Jordan Moss, Dean Skutela & Anne-Marie Chilton

Background: 90% of medical students encounter a professional dilemma during their clinical placements. Despite this, medical students are less likely to report issues compared with nursing students and may experience considerable distress if they witness something troubling but feel unable to act.

The 'WHOA!' model was created by medical students and staff to develop the professional reasoning skills of students and increase their confidence to act professionally.

The model provides a simple, easy to remember and structured approach to thinking through professional dilemmas: each time a student encounters a professionalism issue that concerns them, they can apply the 'WHOA!' model to structure their thinking in real time and work out the best way to take appropriate action.

Aims: To evaluate whether the 'WHOA!' model helps students think through professional dilemmas effectively and builds confidence to take action.

Methodology: The model will be evaluated as part of a dedicated teaching session on professionalism. Current medical students will be asked to apply the model to authentic scenarios which past students have faced. A questionnaire will be used to rate how likely they are to use the model in future, and whether applying the model increases their confidence to address professionalism scenarios in real life.

Results: Overall, 77% of students said they would use the model in clinical training, and average rating of usefulness was high. Building confidence and competence in this way may have positive effects on students' satisfaction with training and wellbeing.

P7. Implementation of a new MSK-themed simulated tutorial (COMET) for undergraduate medical students at George Eliot Hospital

Lucy Elliott, Yvonne Chang & Laura Doan

Background: A COMET (Clinically Observed Medical Education Tutorial) is a formative learning event in the style of an OSCE (Objective Structured Clinical Examination). It consists of three simulated stations each lasting 20 minutes at a time, and covers topics including A-E initial assessment, prescribing skills, investigation and interpretation of results and communication skills. It culminates in a de-brief session with further feedback and a pre- and post-session multiple-choice question (MCQ) quiz.

Aim: We aimed to implement an MSK COMET for final phase students during their MSK placement, in preparation for their OSCE examinations. The overall aim is to improve their confidence and skills when managing musculoskeletal emergencies.

Methods: We conducted the COMET with twenty-four undergraduate medical students over five sessions from July 2018 to December 2018. The simulated case used in the COMET was a patient with a suspected neck of femur (NOF) fracture. This was used consistently throughout every session. We conducted a student survey of subjective confidence before and after the COMET session using a feedback questionnaire with a Likert Scale. The students also completed an MCQ quiz before the session and then repeated the same MCQ quiz after completing the COMET.

Results: We analysed the results of the feedback questionnaire and the MCQ quizzes completed by the students (n=24). There was a statistically significant improvement in MCQ results ($p=<0.001$), and a statistically significant improvement in overall confidence as rated by students in three domains: performing an A-E assessment, prescribing and completing a TTO ($p=<0.001$). General feedback comments were also very positive.

Conclusion: Overall, the MSK COMET has been shown to be an effective method of teaching clinical skills and initial A-E assessment in a simulated musculoskeletal emergency. There is further scope for different simulated cases to be implemented in the future.

REFERENCES
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P8. Dedicated teaching clinics (DTC) - are they a new way forward in undergraduate medical education?

Mohamed Mohamud, S. Hanmer, M. Pennington & LS Wong

Background: There is limited evidence in the literature on the benefits of dedicated teaching clinics (DTC) at the undergraduate level and how they compare to traditional clinics. The aim of this study was to determine whether a DTC improved the overall confidence of medical students in taking histories and performing examinations. Additionally, the overall satisfaction of medical students in the DTC vs traditional clinics was investigated.

Methods: A pilot DTC was trialled in ten final year medical students during their surgical placements in a single-centre, student-satisfaction-survey study. Feedback was collected via a Likert-type questionnaire with a free-text section on overall student satisfaction, satisfaction compared with traditional clinics and confidence pre- and post-DTC in history and examination skills. The raw data was transcribed and coded

into patterns (positive, negative and mixed feedback). The data was also coded into themes (time and teaching). A paired-samples t-test was used to determine if there was a statistically significant difference in pre- vs. post-DTC confidence in history and examination skills.

Results: The surgical clinics were effective (p<0.05) at improving students' confidence in history and examination skills pre- (3.2/7) and post-DTC (4.5/7) on a 7-point Likert scale. The DTC received 100% positive feedback when compared with traditional clinics. 70% of students felt positive about support from doctors whilst 50% of students felt â€˜very-much' supported during the DTC. The most common negative feedback was a lack of time per patient and physician feedback.

Conclusion: The DTC were received well by final year medical students and were effective at improving student's confidence in histories and examinations skills. Improvements in the DTC structure includes more time per patient to allow the student to elicit a full history and after each patient to allow adequate feedback.

Take-home Message: DTC were found to be effective in developing students' clinical skills and therefore, considerations should be made for it to be rolled out more widely in order to benefit future students.

P9. Is there a difference in the perception of outpatient clinic teaching, between medical students and teachers'? A mixed method study

Bander Dallol & Birgit Fruhstorfer

Background: Undergraduate education can take various forms. Outpatient clinics are a resource that could be greatly beneficial, for combining scientific knowledge with clinical experience for medical students. There are several factors affecting learning in this environment. Some are organisational and others are personal, amongst which is the students' and teachers' attitude towards this method of learning. Outpatient clinic teaching has an important role in undergraduate education. There is also evidence that this practical aspect of participation is a more effective way of learning. The General Medical Council (GMC) suggested that greater use is made of outpatient clinics for students' teaching in order to combine scientific knowledge with practical experience as recommended in tomorrow's doctor document for undergraduate medical education. Despite this clear role there are restrictions which could impede the learning process including time and space restrictions. It is also dependent on the teacher's personality and attitudes towards teaching in outpatient settings.

Aim of project: The aim of this project is to explore students and teachers perception of outpatient teaching. This is in order to identify the preferred learning style for this setting and minimise limitations. It also aims at proving feedback to teachers in order to develop their teaching skills.

Results: Common themes emerged between students and teachers regarding outpatient teaching. Reducing patient numbers seems the ideal solution but difficult in the current climate due to the increasing demands on services. In this study, it was perceived that improving communication before and after clinics between students and teachers could be easily achieved and positively influence learning in this setting. Most teachers would consider undertaking training in outpatient teaching (23 versus 14).

Recommendation: Trusts are encouraged to invest in teaching clinics idea where feasible. Teachers are encouraged to engage with medical students during clinic time in order to improve the learning experience. Students are encouraged to give prior notice for teachers before attending clinics and to read about subject matter beforehand.

Anticipated impact: The results of this project will be disseminated to educators at Warwick University and clinicians at UHCW in order to understand students perception and identify steps as well as explore recommendations made, in order to maximise the learning opportunity. We hope to improve the learning opportunity and develop consultant's teaching skills during outpatient clinics. We aim to raise profile of this underused resource of teaching for teachers as well students and junior doctors.

P10. What influences medical students in choosing a surgical career?

Madhumitha Rangaraju, Ryan Laloo, Sallu Dawo & Sophie Haughton

Background: In 2016, Health Education England reported 24% decline from 74% of FY2 doctors entering higher training over five years with an increasing proportion taking a career break from practicing medicine in

2016 (13.1%) compared to 2011 (4.6%). [1]

General and Vascular Surgery ST3 posts experienced the lowest fill rate at 86.5% compared to 100% in previous years. [2] Two systematic reviews on factors dissuading a surgical career highlighted poor work-life balance, limited theatre exposure and gender discrimination. [3,4]

Aim: This cross-sectional study aimed to explore factors affecting a surgical career choice and career aspirations at UK-based medical schools.

Method: Candidates consented to complete pre- and post-course questionnaires on career aspirations, deterring and promoting factors to pursue a surgical career. Candidates included are first year and final year medical students from Warwick University and final year students from University of Birmingham.

Results: Warwick finalists found theatre experiences to be the most memorable with 65.1% observing and 32.6% assisting. Poor work-life balance was the major deterrent (58.8% Warwick, 92.9% Birmingham) followed by high competition rates (27% Warwick, 78.6 Birmingham). The ratio of pre- and post-course career preference was not statistically different (0.41, p=0.991) for Warwick finalists. Included are general career aspirations including proportions of students interested in a medical or surgical speciality versus general practice.

Discussion: Approximately quarter of the Warwick finalist cohort were interested in pursuing a career in surgery, a majority of which were women. Poor work-life balance was the major deterrent followed by high competition rates. Facilitating hands-on theatre exposure for medical students and junior doctors may tackle declining recruitment rates.

P11. CEF Grand Round - Meeting the needs of Clinical Education Fellows

Amanda O'Keeffe, D. Pillai, T. Baker & N. Sathyanarayana

Background & Purpose: As a trainee in a hospital department there will be an education agenda involving grand rounds, journal clubs and tutorials. There are also often regional events that bring together a deanery's trainees that facilitate large group learning and development of peer support networks.

The same is not the same for Education Fellows who have the same educational and support needs as trainees but limited regular networking opportunities and educational events. Medical Education managers have also been asking us to collaborate with other trusts to better what is offered to students and improve feedback we receive.

The aim is to achieve a local and regional network of Clinical Teaching Fellows that meet regularly for continuing professional development, networking and support.

Methodology: A local CEF grand round has been established within our trust, a mix of Journal Club, Teaching and 'Project Café' events. External speakers have been invited to talk on careers, research and medical education management. After our first external speaker we noted that it was likely the Teaching Fellows from other trusts that hosted students from the same medical school would benefit from the same sessions, as we shared learning and networking needs. We had not yet met the fellows from other trusts and felt that meeting them alone would be beneficial.

The other hospital Teaching Fellows were contacted and invited to collaborate on regular regional CEF Teaching Events.

Results: For our first meeting we invited CEFS to meet, discuss their roles, what was going well in their trust and what they wanted to improve. We spoke about medical education research projects we were doing or wanted to do and decided on what we wanted to achieve from joint meetings over the year, including a structure for the meetings. Together we decided to call it a â€˜Regional CEF Grand Round'. We also had a talk from the Head of MBChB on careers in medical education. Our second meeting included teaching on current affairs education medical education.

Our next meeting plans to cover our ongoing projects and what we can collaborate on, sharing best practice and areas for improvement, opportunities and challenges within our roles and further planning for the year ahead. We will also hold a half an hour discussion on the educational, professional and support needs of

teaching fellows in our area, to direct future activities of the Grand Round. We will then collect feedback on the sessions and map its outcomes to the needs discussed.

Discussion & Conclusions: We aim to connect fellows from three trusts to promote collaboration, continued professional development (CPD) and education career planning, establishing a larger 'community of practice'(1). The trusts are different sizes and opportunity for education CPD was not balanced. There have been barriers, such as diary conflicts, poor buy-in and differing ideas on needs, but we hope with collaboration these will be overcome.

By coming together and setting shared agendas we plan to collaborate on research projects, curriculum development and invite speakers that can meet our learning needs. The meetings also have a support function, the need for which is reinforced by Browne et al's (2016) (2) exploration of the '4S model' when reflecting on successful medical education careers. Support was key; in particular the support network colleagues in medical education can provide each other, which will be facilitated by these meetings.

Through this education and networking programme, and development as education professionals, we hope to have a positive impact on the education of the students we teach.

P12. Teaching medical students non-technical skills through simulation

Dr Nicola McMullan, Dr Ushani Siriwardena, Sandra Navas & Christine Walker

Background: The transition from medical student to junior doctor is challenging. The GMC 'Outcomes for Graduates' document states graduates should be able to provide immediate care in medical emergencies. Despite this, previous studies have shown newly qualified doctors feel unprepared for this role. Particular difficulties highlighted include clinical reasoning/ diagnosis, emergency management, multidisciplinary team working and handover. Simulation offers an opportunity to practice these skills in a safe environment.

Method: Phase three medical students have a six week 'acute block' at UHCW (University Hospital Coventry). During this block, students rotate through 'on call' shifts in acute medicine, emergency medicine, and intensive care. They attend tutorials on common acute presentations, and important skills such as SBAR handover, and A-E assessment. In addition, students attend two hi-fidelity simulation sessions at UHCW.

The simulation sessions are designed to allow students to put theory into practice. The scenarios are mapped to the student curriculum, with a focus on non-technical skills. There are nine scenarios in total across the two sessions. The complexity of the scenarios increases to challenge the students further. There is a comprehensive debrief following each scenario.

Qualitative feedback was collected using a structured questionnaire designed to evaluate the different levels of Kirkpatrick's hierarchy of evaluation.

Results: 96 students have attended the acute block in the last six months. 86% of students were extremely satisfied with the teaching session. 75% of overall learning points were related to non-technical skills. Of the non-technical skills improvement in communication was the most common theme.

Discussion: Simulation is a highly effective method of teaching undergraduate medical students. Integrating the scenarios within the 'acute block' allows students to apply theory into simulated practice. Interestingly, from our observation, the initial learner agenda is focussed on technical aspects. However, the evaluation demonstrates the main learning points are non-technical.

P13. Do graduate entry medical students with non-science backgrounds have a greater tolerance of ambiguity during the transition to clinical placements compared to those with a science degree?

Jack Mowatt & Louise Davis

Background: There is evidence that the arts may help to improve tolerance of ambiguity. Tolerance of ambiguity is important for any healthcare professional and this extends to medical students. There is a lack of research comparing tolerance of ambiguity in the clinical phase between science and non-science graduates studying graduate entry medicine (GEM); this study aims to determine whether those with a non-science background have a greater tolerance of ambiguity in the clinical phase than science graduates

Summary of Work: Using a mixed methods approach, a questionnaire combining the TAMSAD (Tolerance of Ambiguity in Medical Students and Doctors) scale and background questions was emailed to 328 phase 3 medical students at The University of Warwick. Statistical analysis explored differences between non-science and science respondents and descriptive analysis was conducted on background information provided by participants. The students were also invited to participate in a semi-structured focus group which was analysed using thematic analysis.

Summary of Results: Although TAMSAD scores were equal, background analysis showed non-science students were more likely to have had paid healthcare experiences and a gap between their first degree and starting GEM; this was theorised to have contributed to a higher percentage of non-science students feeling more confident before and a month after starting the clinical phase. Six students participated in the focus group (non-science:science ratio 4:2) and six themes were identified. Data from the themes suggested that non-science students had a greater skill set to mitigate uncertainty due to previous experiences.

Discussion and Conclusions: Descriptive and qualitative data suggests that non-science students had more experiences to draw upon to increase their tolerance of ambiguity. This was due to non-science students having a greater period of time between their first degree and starting GEM. Non-science students were older and more mature in their approach to uncertainty.

P14. Turning safeguarding training on its head – a flipped classroom experience

Cornelia Juengst

Background: Safeguarding is a training requirement for undergraduate medical students (GMC 'Outcomes for graduates ' 2018). With 90% of patient contacts in the NHS occurring in primary care (RCGP, 2015), community healthcare professionals have significant experience with safeguarding scenarios and can take a valuable role in undergraduate safeguarding training. Literature indicates that a flipped classroom approach promotes deeper understanding and application of complex knowledge.

Objective: In order to promote active learning rather than passive absorption of lecture content, we replaced the traditional safeguarding lecture for 210 first year medical students with a custom made interactive e-learning module. In this way teaching time was made available for small group work which was facilitated by community healthcare professionals, strengthening links between the medical school and primary care.

Method: The project was evaluated using a mixed method approach with quantitative and qualitative online feedback questionnaire, peer review, written feedback from tutors and informal feedback from students.

Results: Students preferred the flipped classroom approach to the traditional lecture. Feedback on the content and presentation of the e-learning module was positive, but problems with access were reported. Students appreciated the opportunity to apply their knowledge from the e-learning module to scenarios. Tutors reported that they needed more guidance from the university on their role as group work facilitators in a flipped classroom. In consequence we are now developing written guidance for tutors and have added a tutor briefing to the group work sessions.

Discussion: Consistent with literature, students preferred the flipped classroom to traditional lecture. Feedback indicates that the flipped classroom has promoted deep learning and application of knowledge. As feedback was voluntary, a selection bias cannot be excluded. Cooperation between healthcare organisations and education providers in the delivery of mandatory training is encouraged by the UK Core Skills Training Framework. In order to improve tutor experience and successfully continue the cooperation with these experienced community healthcare professionals, more detailed guidance is being produced and a tutor briefing is offered before the small group session.