

undergraduate clinical skills assessments. It comprised a sequence of five videos of students, each presenting a clinical case (history and examination of a child). These case presentations were scored (scale 0–15 for the total score) by examiners online using an interactive mark sheet that automatically recorded the scores. Subsequently, examiners could compare their scores against an average given by a panel of senior expert examiners. In addition, recorded data were analysed for overall mean scores and standard deviation (SD). The students were ranked according to performance (1 excellent, 1 clear fail and three in between) using predetermined criteria

**Results** Total of 31 participants, 18 of them fully completed the online package.

**Abstract G04 Table 1**

Student	Number of examiners	Trainee examiners Average score (+/- SD)	Expert examiners Average score (+/- SD)
1(excellent)	31	12.7 (+/- 2.1)	13.2 (+/- 1.8)
2	22	8.4 (+/- 2.1)	9.0 (+/- 2.7)
3	18	8.2 (+/- 2.6)	9 (+/- 0.8)
4	18	12.5 (+/- 2.2)	11.1 (+/- 1.9)
5(clear fail)	18	1.4 (+/- 2.0)	2.0 (+/- 1.7)

**Conclusions** Trainee examiners considered the tool helpful, especially if they were to perform the clinical skills assessments for the first time. Results demonstrate variation of scores is higher among trainee examiners, apart from student number 2. Overall scores given by trainee examiners tend to be lower compared to experienced expert examiners.

#### **G05 A PAEDIATRIC PEER MENTORING PROGRAMME OFFERS SIGNIFICANT BENEFITS TO BOTH JUNIOR AND SENIOR TRAINEES**

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**Aim** Mentoring has been identified as an important process in personal and professional development for doctors. Peer Mentoring is a core skill specified within the RCPCP curriculum. We developed, implemented and evaluated a Programme for provision of Peer Mentoring within our School of Paediatrics.

**Methods** 18 junior trainees received individual Peer Mentoring from a specifically trained senior trainee over a one year period. 18 Peer Mentees were randomly selected from volunteers recruited at the regional ST1 Induction. 18 Peer Mentors of ST5 level upwards were recruited and selected by anonymised competitive application.

Peer Mentors undertook a tailored programme of training, with defined learning objectives, mapped against established standards. This was subsequently reinforced by experiential learning which included regular meetings with the Peer Mentee, completion of a reflective portfolio and attendance at facilitated Action Learning Sets.

**Results** 90% of ST1 trainees expressed interest in participating in the Programme. We recruited to capacity and 16/18 pairs successfully completed the Programme. Satisfaction was high: 100% of Peer Mentors and 82% of mentees enjoyed the experience of participating in the Programme. 100% of Peer Mentors and 94% of mentees felt the Programme to be useful.

**Subjects** discussed in sessions were predominantly work-related; professional development and accessing learning opportunities were discussed by 94% of pairs, followed by work-life balance and performance issues (both 82%).

Both Peer Mentors and Mentees reported acquisition of a wide range of skills useful for a range of applications. 94% of Peer Mentors wished to continue in this role and all intended to use the skills

in their workplace and, later, as an Educational Supervisor. 77% of Peer Mentees reported greater proactivity in seeking new learning opportunities and improved decision-making skills. Improved stress management was also mentioned. 75% reported enhanced ability to deal with new situations and 88% reported improved self-confidence. 76% reported a positive change in their overall outlook and approach to their professional lives.

**Conclusion** Our successful Programme represents a novel and sustainable approach to meeting both the demonstrated demand and the RCPCP curriculum requirement for Peer Mentoring. Both Peer mentors and mentees developed versatile and sustainable skills for the future.

#### **G06 IS IT POSSIBLE TO PRODUCE A RELIABLE PORTFOLIO ASSESSMENT TOOL?**

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**Background** Portfolios are a compilation of evidence that through critical reflection of their contents demonstrate personal and professional development along with achievement. Portfolios are being used increasingly for summative purposes within the medical profession and are highlighted as potential assessment tools for professional competence. The most often cited limitation of the use of reflective portfolios is the lack of reliability with which they can be assessed.

**Aims** To design a portfolio assessment tool and investigate the tool's reliability. We aim to assess both intra and inter-observer reliability.

**Methods** The study took place over 5 months. We studied nine e-portfolios belonging to Specialist Trainees in Paediatrics within a specific Deanery. Appropriate consent and ethical approval were obtained. We asked Consultant Paediatricians who are educational supervisors to mark each of these portfolios using a newly designed assessment tool. These marks were anonymously collated, and by assessing this data we were able to look for consistency in the marks awarded for each portfolio, and use statistics to determine reliability of our assessment tool.

**Results** Nine portfolios were assessed by eight assessors. The results showed low inter-rater reliability of the assessment tool. Aiming for mean differences (bias) close to zero, the inter-rater bias ranged from 3.6% to 19%, with standard deviations ranges from 6.3 to 10.2. Intra-observer reliability was better (bias of 1.1%, SD of 5). Aiming to achieve a kappa score of >0.8 for summative assessments, our kappa scores ranged from 0.2–0.72 for inter-rater reliability and was 0.59 for intra-rater reliability.

**Conclusion** Judging the quality of a reflective portfolio is becoming increasingly important with their use in summative assessment and revalidation. Our study has shown that individual assessments using our portfolio tool show poor inter-rater reliability and are untrustworthy in high-stakes assessment. Improved rater training and multiple rater assessments are likely to improve this reliability but further research would be needed to assess this.

#### **G07 THE IMPACT OF START: DRIVING THE LEARNING**

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**Aims** START is designed to assess the readiness for consultant practise of senior trainees. Consequential validity is reported by examining adjustment in trainees' behaviour and practise following feedback from START. These data will inform level 3 training needs and development of the new START assessment.

**Methods** Questionnaires were distributed via SurveyMonkey to the 59 trainees being assessed and the 37 assessors, with a respective response rate of 74.6% and 73%. A semi-structured approach collected data using Likert scales, combined with open ended questions.

Analysis addressed both quality and organisational issues. Summarised responses to the Likert scales are reported. Open ended questions were explored using thematic content analysis and main areas for development visualised with word clouds. Follow up data will be analysed and reported using a longitudinal approach to examine the impact of reflective changes to practise following the feedback from the assessment.

**Results** 74.4% of trainees and 100% of assessors recognised START as a good assessment of skills that are not assessed elsewhere such as safe prescribing, critical appraisal and management of complexity. 64.3% of trainees and 100% of assessors noted that START was a good assessment of 'readiness' for consultant practise. START assesses a range of skills requiring appropriate leadership and understanding team dynamics.

Assessors identified leadership, prioritisation, multidisciplinary working and decision making as being the most predominant areas for development when considering all the trainees. This differed slightly from areas identified for development within the sub-specialties which included knowledge.

Assessors believe START will impact on trainees' learning and practise behaviour, emphasising importance of reflection and identified action on the feedback. They consider it fit for purpose in helping with the transition of becoming a consultant and focussing the trainees on areas needed for further development. This information prompts trainees to actively seek opportunities in identified domains to improve and gain further experience. Future longitudinal follow-up evaluation and analysis of the impact of START will be undertaken.

**Conclusion** START provides new and useful feedback on trainee's behaviour and practise and a focused learning plan in readiness for consultant practise. Initial findings indicate the importance of attitude and 'buy in' amongst trainees.

G08

## PERFORMANCE DEBRIEFING IN PAEDIATRICS: DEVELOPMENT AND PSYCHOMETRIC VALIDATION OF A NOVEL EVIDENCE-BASED DEBRIEFING INSTRUMENT

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**Aims** Simulation offers paediatric trainees the opportunity of practised experience in a safe learning environment. Performance debriefing (facilitated or guided reflection in the cycle of experiential learning) is essential to maximise the learning experience, but there is currently little evidence-based guidance on effective paediatric debriefings. This study aimed to develop a debriefing assessment tool in order to assess the quality of feedback in paediatric simulation debriefings, and to evaluate its validity, inter-rater reliability, and feasibility.

**Methods** A literature review (phase 1) and semi-structured interviews with 16 paediatricians (phase 2) were used to identify key elements of a paediatric debriefing. Emergent theme analysis of these key elements was used to identify dimensions for inclusion in a novel "Objective Structured Assessment of Debriefing" for Paediatrics tool (OSAD). Expert input on the tool was sought from ten experienced paediatric simulation debriefing facilitators to provide further input to OSAD (content validation; feasibility). Evidence for inter-rater reliability was sought from video ratings of 35 debriefings after simulation scenarios of a seriously ill child. Concurrent validity was assessed via correlations of OSAD scores with trainees' self-ratings of the quality of debriefings they received.

**Results** The literature review identified 34 relevant studies on debriefing. 307 key elements were identified from the literature review and 16 interviews. Key elements were thematically grouped into eight dimensions representing the desired features of a paediatric debriefing, which make up OSAD (Figure 1). The simulation

	1	2	3	4	5
1. Approach	Confrontational, judgmental approach	Attempts to establish rapport with the learner(s) but is either over- critical or too informal in manner	Establishes and maintains rapport throughout; uses a non- threatening but honest approach to create a psychologically safe environment		
2. Establishes learning environment	Unclear expectations of the learner(s); inadequate learning environment	Explains purpose of the debriefing or learning session but does not clarify learner(s) expectations	Explains purpose of debrief; clarifies objectives and learner expectations from the beginning		
3. Engagement of Learners	Purely didactic; facilitator doing all of the talking with no learner engagement; does not involve passive learner(s)	Learner(s) participates in the discussion but through closed questions; facilitator does not actively invite input from more passive learner(s)	Encourages participation of learner(s) through open-ended questions; invites learner(s) to actively contribute to discussion		
4. Reaction	No acknowledgment of learner(s)' reactions, or emotional impact of the experience	Asks the learner(s) about their feelings but does not fully explore their reaction to the experience	Fully explores learner(s)' reaction to the experience, appropriately managing any learner(s) who is confused or unhappy		
5. Descriptive Reflection	No opportunity for self- reflection; learner(s) not asked to describe what actually happened in the scenario	Some description of events by facilitator, but with little self-reflection by learner(s)	Encourages learner(s) to self-reflect upon experience using a step by step approach		
6. Analysis	Reasons and consequences of actions are not explored with the learner(s)	Some exploration of reasons and consequences of actions by facilitator but not learner(s)	Helps learner(s) to explore reasons and consequences of actions, identifying specific examples; relates it back to previous experience to offer explanations		
7. Diagnosis	No feedback on clinical or teamwork skills; does not identify performance gaps or provide positive reinforcement	Feedback provided only on clinical (technical) skills; focuses on errors only; does not target behaviours that can be changed.	Provides feedback on clinical (technical) and teamwork skills; identifies positive behaviours in addition to performance gaps, targets changeable behaviours		
8. Application	No opportunity for learner(s) to identify strategies for future improvement or to consolidate key learning points	Some discussion of learning points and strategies for improvement but lack of application of this knowledge to future practice	Reinforces key learning points identified by learner(s) and highlights how strategies for improvement could be applied to future clinical practice		

**Abstract G08 Figure 1** Objective Structured Assessment of Debriefing (OSAD) in Paediatrics