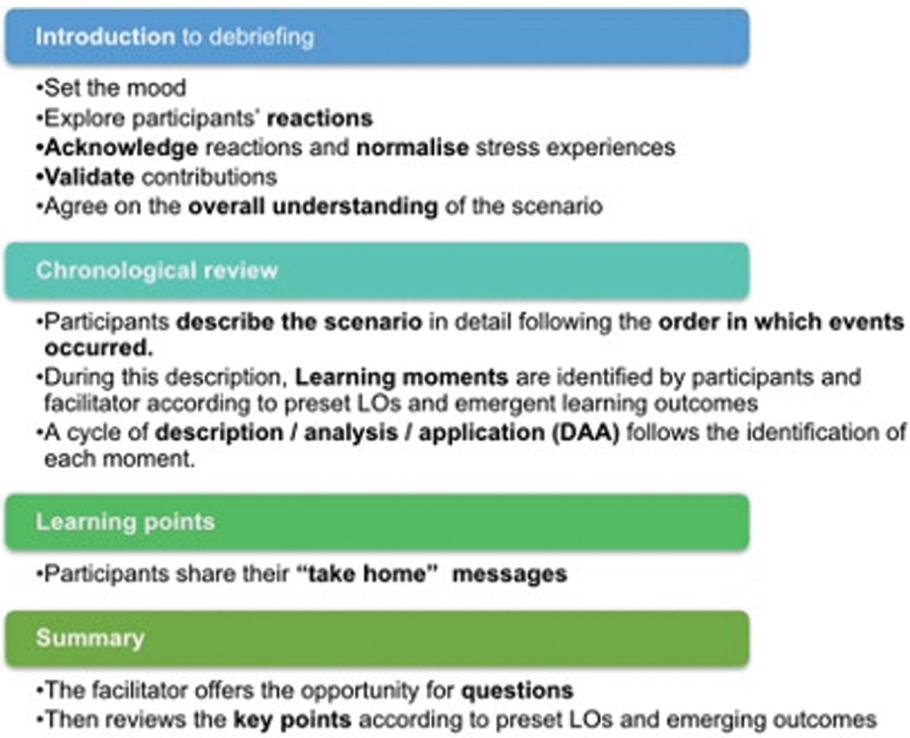

Figure 1-A66: Debriefing structure in the Triangular Approach to debriefing

the discussion. The supporting cognitive aid includes examples of phrases that might be useful in each step.
- Recommended strategies cover psychological safety (such as ground rules, time management, authenticity and validation of contributions), how to focus the discussion, facilitation techniques, closing and meta-debriefing.

Conclusion: The Triangular Approach to debriefing has been welcomed by the simulation community in Wales. It is not expected to be the only way that facilitators debrief, but a gateway into good quality debriefing for new faculty, supporting the development of national expertise and encouraging to explore other available models as well as key debriefing literature.

Ethics statement: Authors confirm that all relevant ethical standards for research conduct and dissemination have been met. The submitting author confirms that relevant ethical approval was granted, if applicable.

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DESIGN

A67

ADVANCED CARDIOTHORACIC SIMULATION -HOW TO DO IT AND WHO IS IT FOR?

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10.54531/GFPU7452

Background and aim: There is a large backlog in surgery due to covid as well as surgical training [1]. We explored the feasibility of a dry lab simulation environment to teach advanced surgical specialty skills to learners with different levels of experience.

Activity: Session description: We ran 5 cardiothoracic surgical simulation courses over 2021-2022 with a total of 61 delegates. We covered coronary anastomosis, aortic valve replacement, video-assisted-thoracoscopic-surgery (VATS) lung wedge resection and pulmonary vessel dissection. Each skill station ran for 40 minutes including a 15-minute description and real-time demo.

Target audience: Participants included 36 medical students, 14 specialty doctors and 11 foundation doctors.

Resources: We used synthetic plastinated and resin printed models with modular metal frames to help with retraction and suspension of the area of interest for the cardiac models. For the VATS models a laptop with connected angled endoscopic camera was utilized. The lung models were 3D printed.

Findings: 88% of all participants were able to complete all procedures successfully under supervision. 96% of all participants increased in confidence with the procedure following simulation compared to before. Interestingly only 44% of specialty trainees described themselves as confident in some procedures prior to simulation. Of the medical student cohort 95% had not had any previous simulation or surgical experience prior.

Conclusion: We have demonstrated the feasibility of a dry lab simulation programme for candidates of all experiences in cardiothoracic surgery. Confidence in surgical technique is low during the COVID era. Simulation improved confidence in surgical technique and must be offered more widely to enhance training experiences. No experience is necessary for successful simulation.

Ethics statement: Authors confirm that all relevant ethical standards for research conduct and dissemination have been met. The submitting author confirms that relevant ethical approval was granted, if applicable.

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TECHNOLOGY

A68 REMOTE SIMULATION IN CARDIOTHORACIC SURGERY

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10.54531/DMMO7757

Background and aim: Simulation is integral to the recovery of surgical training in the UK after the COVID pandemic. Physical constraints on traditional simulation training can affect access. We sought to understand if cardiac and thoracic simulation training remotely is feasible and effective. It has been demonstrated in other settings and has potential in the surgical setting [1].
Methods: We completed simulation training sessions using the Teams and Zoom online platforms with single one on one and group simulation training sessions covering Video-assisted-thoracoscopic-surgery wedge resections and lobectomy as well as coronary anastomosis.
Results: We had 15 participants in the thoracic arm and 5 participants over 4 sessions in the cardiac arm. All participants found the remote simulation training useful and improved their confidence in surgical skill. We did not have any technical connection difficulties during sessions but challenges for simulation in this format included standardizing the equipment and setup pre-sessions. Participants found in 89% of cases that feedback on performance was superior to face to face simulation and/or surgical theatre experience.
Conclusion: Remote simulation is feasible and effective in cardiothoracic surgery in our pilot study. Further studies are needed to better clarify who this resource should be targeted at included experience of trainees and level of competence.
Ethics statement: Authors confirm that all relevant ethical standards for research conduct and dissemination have been met. The submitting author confirms that relevant ethical approval was granted, if applicable.

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DESIGN

A69 SUSTAIN AND SPREAD: A STANDARDIZED SOLUTION FOR HIGH QUALITY SIMULATION

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10.54531/NVJR8888

Background and aim: The past three years during Covid19 have brought significant changes to our simulation service, including a change of specialist extended faculty. As we began to resume our standard service, and new faculty members joined the team, it became apparent that we had been heavily reliant on individual faculty memory and had lost some organizational memory. This impacted the efficiency and quality of the service, as well as the experience for the new staff members. Therefore, we decided to evaluate all our courses to identify opportunities that would improve the overall service and help integrate new faculty.
Activity: We initially used a scoping exercise based on the System Engineering Initiative in Patient Safety (SEIPS) framework [1] to evaluate all our courses looking at course design, scenario design, evaluation tools and course delivery to highlight themes for service improvement. Potential service improvement ideas were prioritized taking into consideration the Hierarchy of Intervention Effectiveness to ensure improvements were mixed across the person and system-focused levels [2].
Findings: The SEIPS scoping exercise highlighted inconsistency in course design, delivery and evaluation. As a team we set about designing a standardized approach that could be applied to both established and new courses, aiming to enable course resilience and retain valuable knowledge and documentation.
We have designed and embedded standardization in all aspects of course design, delivery and evaluation:

- SEIPS based scenario design proforma
- Course introduction with a human factors workshop
- Incivility workshop
- Technical teaching aid for debriefing
- Human factors teaching tools
- Pre- and post-course evaluation

Anonymized feedback from faculty was used to assess the impact of the standardized course design. This standardized approach has supported existing and new faculty to develop and run high quality courses; created a shared understanding of teaching content and delivery, and has had a positive impact on the consistency of course quality.
Conclusion: By scoping and exploring our service we illuminated gaps within our organizational memory and were able to strengthen these by designing a series of innovative documents, proformas, teaching aides and evaluation. This standardized approach helps to enable consistent high quality, support new faculty, whilst still allowing for flexibility and adaptations when delivering courses.
Ethics statement: Authors confirm that all relevant ethical standards for research conduct and dissemination have been met. The submitting author confirms that relevant ethical approval was granted, if applicable.

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