

'Fewer elective cases so less opportunity' and 'Affected in the Peak of COVID but it is improving. Following the session, 100% of participants found the sessions to be effective in improving confidence in performing the surgical skill and 87% found the sessions to be extremely effective. Participants found the teaching sessions to be useful due to the opportunities of 'Close supervision and direct feedback', 'Set of tasks', 'Practise with animal models', 'Having the tutor there to assist and help us' and '[Discussing] theory prior to learning the procedure'. **Implications for future practice:** Surgical simulation provides opportunities for early-year trainees to learn and perform surgical skills during the COVID-19 pandemic. Small-group surgical simulation allows CSTs and ISTs to develop and practise skills under supervision of tutors, with trainees finding real-time feedback useful. In a post-COVID era, a surgical simulation teaching programme could provide an effective training opportunity to shorten the steep learning curve of core surgical training.

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USING THE TEAM TOOL IN HIGH-FIDELITY IMMERSIVE SIMULATION FOR INTERNAL MEDICINE TRAINEES: ASSESSING LEADERSHIP OF CARDIAC ARREST SCENARIOS

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Background: Non-technical skills (NTS) play a crucial role in cardiac arrest resuscitation performance, both in simulated and clinical environments^[1]. Poor performance in these skills, particularly leadership, has been highlighted in acute medical emergency and cardiac arrest teams^[2]. Simulation training aims to develop internal medical trainees (IMT) NTS in leading cardiac arrest teams, a role that is expected of them as they progress in their training.

Aim: This observational pilot study aimed to explore the leadership and team-working behaviours of IMT1 doctors in a simulated cardiac arrest scenario, to identify strengths and areas for improvement to focus future training.

Simulation activity outline: The Scottish national IMT1 boot camp involves a variety of high-fidelity immersive simulation scenarios

across the 3-day course. Trainees are in groups of six with one IMT taking a lead role in each scenario. This study assessed a scenario of shockable rhythm cardiac arrest. All group participants are involved as the cardiac arrest team, with the original 'hot seat' participant expected to take the role of team leader, unless otherwise agreed by the team. The scenario is followed by a facilitated debrief around leadership in cardiac arrest.

Method: Following ethical approval from NHS Education for Scotland and written participant consent, videos of the cardiac arrest scenario were observed by the research team. Leadership and team behaviours were scored using the validated Team Emergency Assessment Measure (TEAM)^[1]. Field notes including general observations of the three main TEAM categories (leadership, teamwork and task management) were also recorded. Participants completed a pre- and post-course questionnaire, including rating their confidence in leading cardiac arrests.

Results: Seventeen videos involving 102 trainees were reviewed and scored using the TEAM tool. The average overall TEAM score was 6.19/10. Scores for each of the 11 NTS domains ranged from 2.13/4 to 3.25/4. IMTIs scored highly on adapting to changing situations and monitoring and reassessing, but poorly on team leader displaying direction and command and leader maintaining a global perspective. When leadership scores were high, overall team performance was also high. General observations from field notes found the team often did not allocate a leader until cardiac arrest occurred. The leader often struggled to remain hands-off with a lack of assertiveness and poor communication between the leader and team. One hundred and fourteen IMTIs completed a pre- and post-course questionnaire. Average pre-course confidence in cardiac arrest team leadership was 3.8/7, and among the lowest of all situations rated. This improved to 5.35/7 post-course, but compared with other situations, remained low.

Implication for practice: This pilot study found leadership to be a key component in managing cardiac arrest for IMTIs, influencing overall team performance. Particular areas for improvement include hands-off leadership, leader assertiveness and whole team communication, which could be the focus of future educational interventions. Scenario participation and facilitated debrief improved overall confidence, but further focussed leadership and team training is required as IMTIs transition into the leadership role.

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