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**Introduction:** Multi-casualty major incidents require effective coordination of many agencies, including prehospital and hospital teams. Simulation as a tool for interprofessional learning is well-established within healthcare [1]. However, it is unusual for healthcare and emergency services to collaborate within multi-agency simulation. Given the resources and planning required to deliver this [2], there are logistical challenges to deliver a joint, immersive simulation experience for healthcare and non-healthcare professionals in a major incident context [3]. Furthermore, there are challenges inherent to involving different professional groups, each with their own educational backgrounds and cultures.

The authors explore:

- How can varying simulation approaches be aligned for a common purpose in the context of multi-agency major incidents?
- How best can a variety of participants be engaged in simulation when each have their own learning needs?

**Methods:** A major incident simulation occurred in an urban city centre re-creating a road traffic collision and concurrent river-based rescue. This was facilitated by fire and health services, however involved a larger multi-agency response, with more than 100 participants, including individuals from the police and coastguard. Undergraduate nursing, paramedic, medical and journalism students were involved with support from embedded faculty. Registered nurses and emergency medicine trainees also attended.

Healthcare professionals adopted the role of casualties, triaged and transported rescues, observed multi-agency communication strategies, and undertook initial patient assessments within a simulated emergency department. Various simulation approaches were implemented throughout the exercise including fully immersive components, 'pause and play' effects, and real time observational discussion. Faculty reflections were collated from hot and cold team debriefs to evaluate the impact on learning and the challenges of facilitating an immersive multi-agency simulation.

**Results:** Based on these reflections, we analysed the challenges and conflicts involved with running a multi-agency simulation. A key theme from this was the use of simulation across, and through, several boundaries. This included the challenges of balancing postgraduate and undergraduate learning needs within the same educational environment; utilising multidisciplinary teams to enhance interprofessional learning; awareness of the different approaches to systems hierarchy; simulation strategies within different agencies; coordinating facilitation between agencies; and the impact of hospital-based healthcare professionals working in an unfamiliar pre-hospital setting.

**Discussion:** This work can inform future multi-agency simulations and prompt consideration of new approaches to interdisciplinary and interprofessional learning. This experience challenged the usual norms of simulation by traversing several

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### 'SIMULATION ACROSS BOUNDARIES': EXPERIENCES OF FACILITATING A MULTI-AGENCY MAJOR INCIDENT SIMULATION FOR INTERPROFESSIONAL LEARNING

boundaries including across agencies, professions, simulation approaches and techniques, hierarchical structures, and undergraduate and postgraduate learning spaces.

**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.

## REFERENCES

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