SHORT REPORT



Rapid multi-professional training for COVID-19 in rural hospitals

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1 | INTRODUCTION

Front-line health care workers in rural settings face substantial challenges in caring for potential COVID-19 patients with the complexities of a previously unknown disease, as well as substantial risks of self-exposure to COVID-19. Such staff and facilities might have minimal resources and training available to adequately prepare for these demands. This necessitated a rapid solution to educate rural doctors and nurses about COVID-19 in a health service comprising a large regional hospital and 19 smaller rural hospitals spread across much of southern Queensland and serving a total catchment population of almost 300 000.

This report presents the planning, content and evaluation of a novel training program as a demonstration of how this can be achieved in a short time frame with high attendee satisfaction.

2 | PARTICIPANTS, METHODS AND RESULTS

An existing Emergency Medicine Education and Training (EMET) program⁴ was adapted for the new teaching. A 4-hour face-to-face training package was developed, comprising four main sections as in all EMET modules: content discussion, skill stations, case discussion and simulation. An initial slide show explained clinical information about SARS-CoV-2 and COVID-19 including transmission, treatment and the importance of personal protective equipment (PPE) in ensuring staff safety. The second section covered PPE training, with practical demonstration and participant

practice of donning and doffing (where stocks allowed). The third section included discussion around important changes in management of respiratory presentations with COVID-19, in particular aerosol-generating treatments, aimed at improving staff safety. The final section was simulated inter-professional practical scenarios with facilitated feedback in caring for a COVID-positive patient who requires airway intervention. The critical topic of health practitioner's personal safety and PPE was the most important learning objective of the session, and after this skill had been discussed and practised, it was also incorporated into the simulation scenario.

The first COVID-19 EMET session was delivered at a rural hospital 5 days after the new module was conceived. This short time frame of module creation and delivery was achieved in part by adapting the existing education program, and in part by leveraging previous networking and relationships that had been developed. The originally scheduled weekly EMET sessions were changed to deliver the new module and were advertised widely to all staff, including those in adjacent towns to increase attendance. Two additional sessions per week were also scheduled. Usual EMET sessions are delivered by two emergency specialists. Due to the increased number of training sessions, additional facilitators were sourced and trained, including an emergency department (ED) nurse practitioner, medical education registrar (ED-trained) and specialist anaesthetist. Their input not only allowed additional scheduled sessions but also offered different perspectives on training from their viewpoints. No new equipment resources were required, as the previous airway EMET module contained most of the required equipment.

Facilitators travelled a total of 2579 km to deliver 12 COVID-specific EMET sessions at 10 rural hospitals. Two

TABLE 1 Feedback from COVID-19 EMET attendees

	Strongly	Agree	Neutral	Disagree	Strongly
Evaluation question	agree (5)	(4)	(3)	(2)	Disagree (1)
The session was pitched at an appropriate level.	105	38	1	0	0
The skill stations which were used were relevant and useful.	104	39	0	1	0
This session was more valuable because it involves members of our clinical team that work together.	111	32	0	1	0
The scenarios helped me practice what I had learnt.	101	39	3	1	0
The facilitators were approachable and receptive to questions.	121	23	0	0	0

hundred and twenty-five staff attended over 5 weeks, with 83 medical attendees, 124 nurses and 18 others. Quantitative evaluation data from a simple Likert scale are shown in Table 1. Qualitative feedback received was excellent, with respondents especially praising the practical focus of the training, the incorporation of simulations, the new knowledge gained and the focus on PPE. When asked about suggestions for improvement, most simply wanted more time for more scenarios.

2.1 | Ethics approval

This project has been deemed 'not requiring ethical review' (HREC Reference LNR/2020/QTDD/63538).

3 | COMMENT

COVID-19 presents unique challenges to all health care workers in rural facilities. Training and simulated practice, especially for PPE and respiratory scenarios, is essential for a safe and effective response. This project shows that such training can be rapidly adapted and delivered to multiple rural sites, and is very well received.

AUTHOR CONTRIBUTIONS

SC was responsible for research design, data acquisition, analysis and interpretation and manuscript development. DM

was responsible for literature review, data analysis and manuscript development. All authors have read and approved the final manuscript.

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