



Article scientifique

Lettre

2013

Published version

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### How to cite

DI RENNA, Tania, BOET, Sylvain, CROOKS, Simone. The Cognitive Aids with Roles Defined – CARD : A new concept for crisis management. In: Resuscitation, 2013, vol. 84, n° 2, p. e47–e48. doi: 10.1016/j.resuscitation.2012.11.025

This publication URL: <https://archive-ouverte.unige.ch/unige:184844>

Publication DOI: [10.1016/j.resuscitation.2012.11.025](https://doi.org/10.1016/j.resuscitation.2012.11.025)



## Letter to the Editor

**The Cognitive Aids with Roles Defined – CARD: A new concept for crisis management**

Sir,

Life-threatening events are common in healthcare.<sup>1</sup> The potential for a good outcome after a critical event is likely enhanced by a rapid and coordinated delivery of life-saving treatments by an interprofessional team. Barriers to effective teamwork in crisis situations include overcrowding, lack of role definition and task overload.<sup>2,3</sup>

Cognitive aids have been suggested as a potential solution to decrease the dependence of healthcare providers on memory in critical situations.<sup>4</sup> Cognitive aids have been defined as “techniques and principles that help people detect, interpret, store, and retrieve information efficiently.”<sup>5</sup> To date, cognitive aids have been typically based on algorithms identifying either a list of actions to be taken or the dose of a medication. There is no cognitive aid documented in the literature addressing the issue of teamwork in crisis management.

We developed a new tool to specifically address the well-recognized issue of suboptimal teamwork in crisis management.<sup>2,3</sup> This tool represents a new type of cognitive aid focusing on clarification of individual roles and distribution of tasks rather than usual treatment algorithm: the Cognitive Aids with Roles Defined – CARD. The proposed cognitive aid relies on cards attributed to every team member. Each member wears a large identification card specially designed for his/her profession and role (Fig. 1). The card identifies specific tasks associated with the role, reminding the team member exactly of his/her tasks. As such, CARD enables the code leader to quickly recognize the individual's role at the code and for the team members to commence their assigned tasks without delay. Individuals responding to the critical event who do not have a card are to remain silently in the room, away from the vicinity of the code and wait to be called upon by the code leader. CARD aims to decrease mental workload of team members and team leader during the crisis, allowing them to focus more on their pre-determined tasks. The CARD concept intends to clarify role definition, eliminate redundancy, and task overload, therefore having the potential to improve team performance during the response to critical events.

The CARD concept could be adapted to various situations with a specific set of cards designed for each domain of application such as obstetrical crisis, trauma or cardiac arrest in the operating theatre. In a pilot study introducing CARD in simulated intraoperative cardiac arrest, multidisciplinary professionals were overwhelmingly in favour of instituting the CARD system. Further on-going research will precise the potential benefits of CARD during crisis management for various crisis situations.

The CARD concept offers an innovative yet simple solution to many of the barriers identified in team response to crises.<sup>2,3</sup> CARD

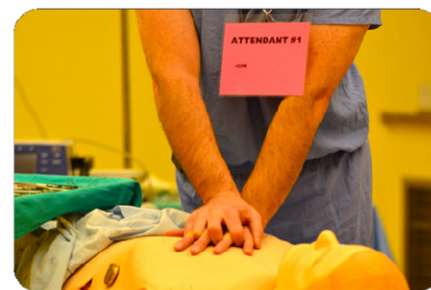


Fig. 1. Example of CARD designed for perioperative crisis.

is relevant to a broad number of critical situations. The concept of a self-organizing team with explicitly defined roles may enhance patient safety.

**Conflict of interest statement**

We have no conflicts of interest to declare.

**Sources of financial support**

Anaesthesia Department of The Ottawa Hospital.

**Acknowledgments**

The authors thank Pr. Edward T. Crosby MD FRCPC for his critical review of the manuscript and the Anaesthesia Department of

The Ottawa Hospital for its on-going support of innovation and research.

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21 November 2012