

### Using software to manage error in trauma resuscitation—Does it work?

Nathan Farrow<sup>1,\*</sup>, Angela Murray<sup>1</sup>, Mark Fitzgerald<sup>1</sup>, Geraldine Lee<sup>2</sup>

<sup>1</sup>Emergency and Trauma Centre, The Alfred, Bayside Health, National Trauma Research Institute, Prahran, VIC, Australia

<sup>2</sup>Latrobe University, Alfred Clinical School of Nursing, Bayside Health, Prahran, VIC, Australia

**Background:** Despite significant improvements in the last 30 years, human error remains a problem in trauma management. Error management strategies are being explored as a means of improving patient outcomes. The reception and resuscitation of trauma patients requires a multitude of assessment tasks, medical interventions, clinical decisions and team interactions. Not surprisingly, studies have reported that the initial emergency department/trauma centre phase of trauma care is responsible for the greatest number of errors. It is time for a new approach.

**Aim:** The Trauma Reception and Resuscitation Project has developed real time, evidence-based, computer prompted algorithms embedded in a software program designed to guide trauma management and prevent, reduce or mitigate human error.

**Methods:** Using a randomised, controlled trial design within a standardised trauma care environment, this Project tested the hypothesis that the introduction of real time, computer prompted algorithms will result in a measurable reduction in management errors associated with reception and resuscitation of major trauma patients. Video audit of trauma and real-time data generated by the software program were used to monitor algorithm compliance and observe the rate of error. Any measured reduction in management errors were then tested for effect on trauma morbidity and mortality.

**Results:** This paper will present the results of the Trauma Reception and Resuscitation Project.

**Conclusions:** Using software to manage error in trauma resuscitation is a novel approach to managing the problem of error in trauma management. The outcomes of the Trauma Reception and Resuscitation Project will provide important directions in both research and practice of managing error in trauma.

**Keywords:** Trauma resuscitation; Human error; Error management; Algorithms; Trauma research; Video audit of trauma

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### Promoting tissue donation in emergency departments—A future challenge

Joanna Forteach

Donor Tissue Bank of Victoria, Southbank, VIC, Australia

The aim of this presentation is to promote tissue donation from the recently deceased in emergency departments. It will highlight the possibility of tissue donation, demonstrate potential donors and explain the extensive legislation covering tissue donation in Victoria. The workings of the Donor

Tissue Bank of Victoria will be explained and the coronial process explored. It will identify the similarities and differences between organ and tissue donation. The presentation will use case studies of past donors who died in emergency departments in order to create an awareness of where tissue donation is possible. The extensive exclusion criteria will be discussed as well as highlighting ways to increase donor numbers by early referral to the tissue bank.

Tissue donation is a gift of life and an important challenge for the future. The direction of donation is changing for the better as Australia realises the importance of donation and attempts to promote this. Donation numbers have been on a national decline and education of emergency nurses of the possibility of tissue donation will be beneficial.

Emergency nurses are involved in many situations where tissue donation is possible. At times where organ donation is not possible, tissue donation is. Emergency nurses work in a dynamic environment and are the first to form a rapport with the deceased's families. They are present at the time when people ask questions and require answers. By facilitating the education of emergency nurses to better understand the possibility of tissue donation families can be well informed, when appropriate, about the possibility of tissue donation.

**Keywords:** Tissue donation awareness; Organ donation; Coronial process; Education

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### Moving from fast-track—Expanding the role of the emergency nurse practitioner

Belinda Free<sup>1,\*</sup>, Natasha Jennings<sup>1</sup>, Kylie Wilson<sup>1</sup>, Geraldine Lee<sup>2</sup>

<sup>1</sup>Emergency and Trauma Centre, Alfred Hospital, Prahran, VIC, Australia

<sup>2</sup>LaTrobe University/Alfred Clinical School of Nursing, Alfred Hospital, Prahran, VIC, Australia

The nurse practitioner (NP) role was introduced to the Alfred Emergency and Trauma Centre in July 2004. Initially three candidates established the role in the fast track area of the department, focusing on the treatment of patients with minor injuries and Australasian Triage Scale (ATS) 4 and 5.

The NP role is now seeking to expand the scope of practice, and to build upon the foundation of advanced emergency nursing skills that candidates practiced prior to implementation of the NP role. On this basis, the department is seeking to move candidates into higher acuity areas, in order to develop the capability to care for patients with more complex presentations.

The move out of fast-track is an ongoing process requiring careful application of NP clinical practice guidelines to address the needs of a more complex environment. The increase in acuity of patients being managed by NPs, increases the inherent risk of incorrect decision making. Thus, initial close supervision by senior medical staff is required. Completely independent practice in this arena may well be a challenge to achieve, warranting the development of a more collaborative approach to patient management. This would allow NPs in the emer-