

# The impact of violence risk screening on code grey responses and access to clinical care

Catherine Daniel<sup>a,b</sup>, Marie Gerdtz<sup>a,b</sup>, Stephen Elsom<sup>a</sup>, Jonathan Knott<sup>b</sup>, Roshani Prematinga<sup>a</sup>.

a. The University of Melbourne, School of Nursing, Melbourne 3030

b. The Royal Melbourne Hospital, Grattan St, Parkville, 3053

catherine.daniel@mh.org.au

## Background

There is an increasing focus in the published literature on the problem of patient violence in hospital emergency departments (ED). Research and clinical practice guidelines indicate that the prevention of patient violence in hospital EDs requires a systematic process for identifying patients who are at risk; however the evidence supporting the implementation of risk screening processes in practice is limited.

## Methods

A mixed methods design incorporating both qualitative and quantitative approaches was utilised to; explore the feasibility and need for a risk screening process, implement a brief risk screening process and evaluate its influence on the use of security and clinical responses to incidents of patient violence (Code Grey events).

## Results

Structured observations of routine patient assessment at triage ( $N=167$ ) found nurses used the existing triage process to identify at risk individuals. The 12-month retrospective review of Code Grey responses ( $N= 1959$ ) identified a high risk group of patients who attended the ED on more than one occasion and required a Code Grey response for violence. Although this group represented 12% (105/857) of patients, they accounted for 32% (577/1796) of all Code Grey events audited. Factors such as arriving escorted by police and requiring a mental health assessment significantly increased the risk of an individual having a Code Grey response while in the ED (OR=18.88; 95%CI=12.9,27.97; OR=11.68, 95%CI=9.13,14.94 respectively). Patient and carer interviews found there is a community expectation that patients at risk of violence are identified to allow an opportunity for prevention and improve safety ( $N=19$ ).

Following the introduction of the violence risk screening decision support process, the median duration of Code Grey events decreased from 14 to 13 minutes  $p<.009$ . The sensitivity of the risk screening process was estimated at 56% and the specificity 97%. The total number of coercive interventions (physical restraint, medication given during the Code Grey and mechanical restraint) increased from 822 before to 1007 after  $p<.001$ .

## Conclusion

On arrival to ED, the risk for violence was determined by the triage nurse using clinical judgement. This process was found to be feasible, acceptable to clinical staff, integrated into current triage processes, and reflected the

public's expectations of care. Following the intervention there was an overall reduction in time staff were engaged in emergency responses for violence; however the increase in the use of coercive practices following implementation of the risk screening process is of concern and warrants further exploration.