

# RESTRICTIVE INTERVENTIONS IN VICTORIAN EMERGENCY DEPARTMENTS: A REVIEW OF CURRENT CLINICAL PRACTICE

Jonathan Knott Royal Melbourne Hospital University of Melbourne











# Investigators

Associate Professor Jonathan Knott <sup>1, 2</sup>

Associate Professor Marie Gerdtz<sup>1, 2</sup>

Mrs Sheriden Dobson<sup>1, 2</sup>

Dr Catherine Daniel<sup>1, 2</sup>

Professor Andis Graudins<sup>3</sup>

Professor Biswadev Mitra<sup>4</sup>

Dr Bruce Bartley<sup>5</sup>

Dr Pauline Chapman<sup>6</sup>









<sup>&</sup>lt;sup>1</sup> The Royal Melbourne Hospital Emergency Department.

<sup>&</sup>lt;sup>2</sup> The University of Melbourne, Department of Medicine and Health Science

<sup>&</sup>lt;sup>3</sup> Dandenong Hospital, Emergency Department

<sup>&</sup>lt;sup>4</sup> The Alfred Hospital, Emergency & Trauma Centre

<sup>&</sup>lt;sup>5</sup> Geelong Hospital, Emergency Department

<sup>&</sup>lt;sup>6</sup> Ballarat Hospital, Emergency Department

# Background



Restrictive interventions are used in EDs to mitigate the risk of harm. This is achieved through coercive means and restricts a person's freedom and autonomy

Within Victoria, the use of restrictive interventions for patients cared for involuntarily under the MHA is clearly governed by the MHA itself.

However, within acute care settings, including EDs, many patients are managed under a Duty of Care (DOC)

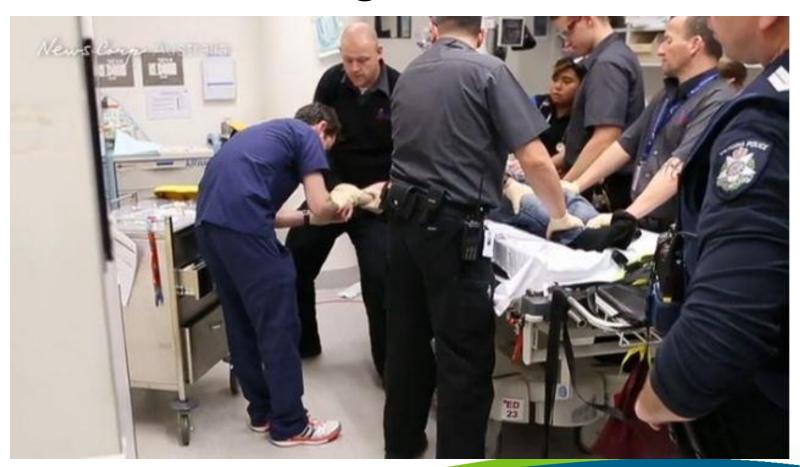








# Management of Behavioural Emergencies



Source: News Corp Australia, 22 Aug 2015









# Project brief



This project was commissioned by the Department of Health and Human Services and the Office of Chief Mental Health Nurse to ascertain:

- The known clinical practice of restrictive interventions within Victorian public hospital EDs
- An estimated proportion of patients who received a restrictive intervention in 2016 within Victorian public hospital EDs
- An estimated proportion of patients cared for under organisational responsibility where a DOC is exercised, or where legislative governance is applied under the MHA









#### Methods



Five EDs within Victoria were chosen to provide a cross-section of acute hospital settings.

All sites provide occupational violence and aggression management training to staff.

All patients who presented to the ED within the period of January 1<sup>st</sup> 2016 to December 31<sup>st</sup> 2016 were included.









#### Data



All data was obtained from the clinical information systems.

This was linked to Code Grey event logs obtained variously from hospital systems or security logs.

All patients who had a Code Grey were randomly sorted and 100 patients from each site were identified who had a least one restrictive intervention.

Manual extraction of data from the clinical records was then undertaken.









#### Results



Overall the five sites had 327 454 patients in 2016

Age: median 40 (24-63)

Male: 52%

Presentation

Self 69%

Ambulance 30%

Police 1%











#### Results



#### Disposition

Discharged 49%

Observation med 18%

Admitted 26%

Mental health 1%

DNW 6%

Median LOS 190 minutes (116 – 281)









# Code Grey results



One site excluded; for the remaining four 3871 patients had a Code Grey (1.5%) 1-14 Codes per person

Patients who had a Code Grey were more likely to be: male (59% versus 52%) younger (median age 36, IQR: 27-44)

Those with a toxicological issue made up a significant minority (20%).

A higher proportion of patients with a Code Grey were admitted: to an observation unit 32% to a mental health ward 17%











# Restrictive Interventions

For those patients who had a Code Grey

942 (22.7%) had at least one restrictive intervention









# Restrictive Interventions



	n=494	
Age (years) - median (IQR)*	36	(27-45)
Sex - n (%)~		
Male	256	(64)
Female	144	(36)
Other <sup>^</sup>	0	(0)

	n=494	
Physical restraint - n (%)	165	(33)
Mechanical restraint - n (%)	296	(60)
Duration - median (IQR)#	180	(75-360)
Chemical restraint - n (%)	388	(79)
Seclusion - n (%)	5	(1)
Duration - median (IQR)#	406	(375-2460)

**VIDRL** 









# Mental Health status



	N=494	
MHA status on arrival - n (%)		
No Status	147	(30)
Section 351	254	(51)
Assessment order	11	(2)
Involuntary treatment order	20	(4)
Unknown	62	(13)
MHA status at 1 <sup>st</sup> intervention - n (%)		
Duty of Care	311	(63)
Assessment order	108	(22)
Involuntary treatment order	10	(2)
Unknown	65	(13)









# Reason for Restraint

	n=494	
Reason for restraint - n (%)		
Aggression / Agitation	371	(75)
Risk of harm to self or others	218	(44)
Risk of absconding	140	(28)
Attempting to self-harm	110	(22)
Refusal of medication	101	(20)
Damaging property	36	(7)
Trauma care	8	(2)
Unknown	19	(4)











# Disposition

	n=494	
Discharge Diagnosis Category - n (%)		
Mental Health	265	(53)
Toxicology	125	(25)
Trauma	42	(9)
Other	60	(12)
Unknown	4	(1)
Disposition - n (%)		
Home	139	(28)
Observation medicine	112	(23)
General ward	103	(21)
Mental Health ward	81	(16)
Critical Care	13	(3)
Correctional facility	10	(2)
Inter-hospital transfer	5	(1)
Left at own risk	31	(6)







AIDLE



## Discussion



For the majority of patients who required a restrictive intervention in the ED, this was carried out under a DOC. Unlike the legislative requirements pertaining to the MHA, there is no standardised state-wide process or documentation of restraint use.

More than half the patients who received a restrictive intervention were subsequently admitted to an observation ward or sent home from the ED.

Less than one in six were admitted to a mental health ward.









# Limitations



Accurate reporting of Code Grey rates depends on adequate, standardised data collection.

All five sites had differing systems for recording Code Grey data and the use of restrictive interventions. No organisation had a dedicated system for recording restrictive interventions or the MHA status at the time of the intervention.

Documentation at the sites varied with four of five using paper—based forms for recording restrictive interventions that occurred under a DOC.

The more detailed data required manual extraction and the records are not standardised.









### Recommendations



A framework for the governance of restrictive interventions in acute settings needs to be developed.

The use of restrictive interventions in the ED should be clearly documented using a standardised tool.

The rate of Code Greys and restrictive interventions should be reported to organisational occupational violence and aggression committees.









#### Recommendations



All healthcare organisations are moving towards electronic systems that should make consolidation of data and comparisons, relatively straightforward. A standard set of data needs to be developed

However, in the devolved governance that exists in Victoria, there is a substantial risk that individual sites will develop their own, mutually incompatible, data collection tools.









### Recommendations



Programs for appropriate diversion should be developed and evaluated.

Models of care should be developed that emphasise low stimulus, high resource environments that combine acute and mental health care.

Interventions should be a component of a program of recovery-orientated, trauma-informed care. Difficult and challenging behaviour should be managed in ways that shows decency, humanity and respect for individual rights, while effectively managing risk.











# Thank-you









