



## Community Opioid Use in Queensland Trauma Patients: Novel Data Linkage

Aim is to describe the prevalence, patterns and distribution of prescribed opioid dispensing for adults during the 24 months following injury-related hospitalisations in Queensland

### Background



Every day, 3 people die and nearly 150 are hospitalised because of harm from opioids



Around 80% of people taking opioids for ≥ 3 mths experience harms



Emerging "opioid crisis" mimicking US trends

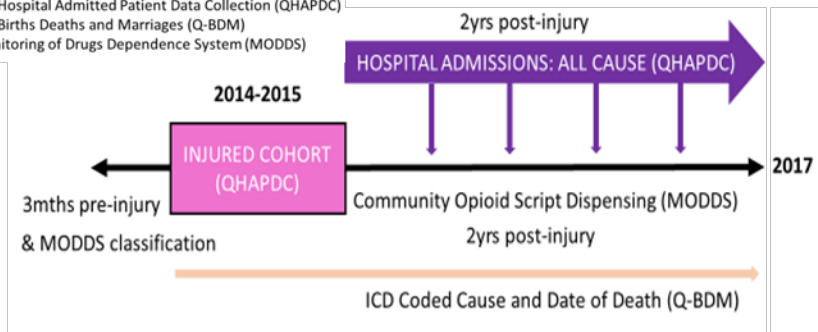


No data on opioid use following traumatic injury

### Study Design: Data Linkage

#### DATA SOURCES:

- Qld Hospital Admitted Patient Data Collection (QHAPDC)
- Qld Births Deaths and Marriages (Q-BDM)
- Monitoring of Drugs Dependence System (MODDS)



#### Total Extraction: 152,483 persons

- 7,181 (4.7%) non-Qld residents
- 1,923 (1.3%) first encounter deaths

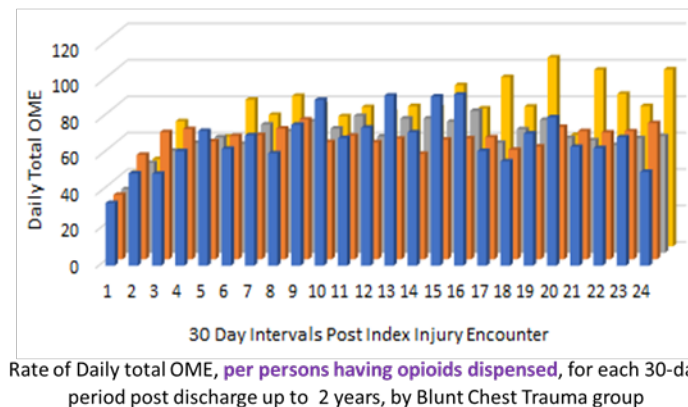
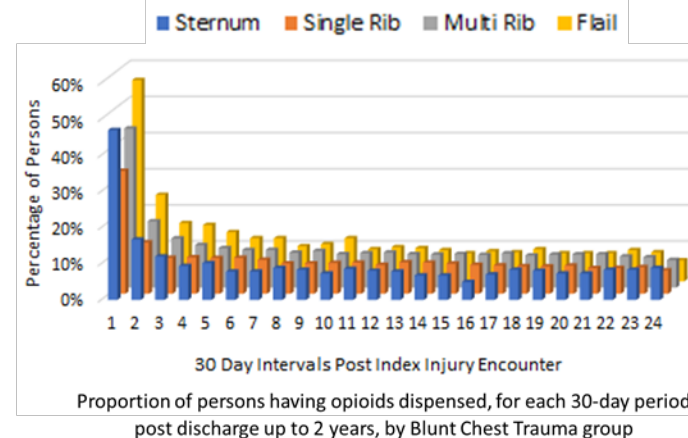
#### Injured Cohort: excluding non-Qld and index encounter deaths

- N = 143,463 persons
- Male: 55% Female: 45%

#### MODDS records matched to Injured Cohort

- 42.6% of injured cohort had an opioid record
- Most frequently dispensed: Oxycodone (Endone) 5mg
- Pre-injury Opioid = 15,767 (11.0%)
- Treatment program = 1,294 (0.9%)

### The case of Blunt Chest Trauma (N=5870)



#### Factors associated with long-term opioid dispensing up to 24mths after Blunt Chest Trauma

	Adjusted Rate Ratio (ARR) <sup>§</sup>	95% Confidence Interval
Blunt Chest Trauma Group		
Sternum	Reference	
BCT Single Rib	-	-
BCT Multi Rib	1.37*	(1.15-1.64)
Flail	2.00*	(1.58-2.53)
Age		
15-44 years	Reference	
45-64 years	1.15*	(1.02-1.29)
65+ years	1.45*	(1.28-1.63)
Sex		
Males	Reference	
Females	1.29*	(1.17-1.41)
Pre-Injury Opioids		
No	Reference	
Yes	5.87*	(5.18-6.65)
Compensation Status		
No	Reference	
Yes	1.52*	(1.35-1.70)
Surgical Procedures		
0-1	Reference	
2+	1.56*	(1.42-1.72)
Died in 24mths		
No	Reference	
Yes	3.11*	(2.65-3.65)

<sup>§</sup>Zero-Inflated Negative Binomial Regression

### Summary

- Whilst the proportion of patients receiving opioids drops significantly after the first 1-2 months following Blunt Chest Trauma, 10-15% of patients continue to have long-term opioid dispensing
- Despite the proportion of patients receiving opioids decreasing, the Total Daily OMEs significantly increased over the 2 years post-injury
- Several key factors are associated with long-term dispensing of opioids (with pre-injury opioid use the most significant association)