



# The complexities of chronic pain: findings from a cohort of 1,500 Australians taking prescription opioids for non-cancer pain

Medicine

National Drug and Alcohol Research Centre

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# Acknowledgements and disclosures

- Thanks to our participants!
- **Advisory Committee:** A/Prof Fiona Blyth, Ms Lesley Brydon, Ms. Elizabeth Carrigan, Dr. Malcolm Dobbin, Prof. Julia Fleming, Prof. Roger Goucke, Dr. Simon Holliday, Mr. Denis Leahy, A/Prof Andrea Mant, Prof. Jake Najman, Dr. Milana Votrubic, Prof. Jason White
- **Pharmacy Guild of Australia**
- **POINT study team:** Gabrielle Campbell (coordinator), Bianca Hoban, Kimberley Smith, Ranira Moodley, Sarah Freckleton and Rachel Urquhart-Secord
- **NDARC collaborators :** Briony Larance, Gabrielle Campbell, Michael Farrell, Richard Mattick, Suzi Nielsen
- **External collaborators:** Raimondo Bruno, Wayne Hall, Nicholas Lintzeris, Milton Cohen, Fiona Shand
- **NHMRC project grants :** #1022522
- **NHMRC fellowships:** Louisa Degenhardt, Briony Larance, Suzi Nielsen, Richard Mattick
- **Conflict of interest statement - untied educational grants** from Reckitt Benckiser to conduct post-marketing surveillance of OST medications; from Mundipharma to conduct post-marketing surveillance of Reformulated Oxycontin.

# Background

- Chronic non-cancer pain (CNCP) is a common complaint
  - Low back pain, neck pain and migraine were the 1<sup>st</sup>, 4<sup>th</sup> and 8<sup>th</sup> largest contributors respectively to global non-fatal health loss
- CNCP has a major impact on quality of life, mental health, health status, relationships and employment
  - in 2007 it was estimated to cost \$34.3 billion in Australia
- CNCP is a complex phenomenon and may be caused by many factors, including trauma
  - May be caused by many factors, which might explain varied treatment responses
  - Physical and psychological factors also moderate the experience of pain
  - Relationships, occupational setting and culture also affect the experience and expression of pain

# Background

- There have been considerable increases in prescribing of opioids for pain
  - In Australia this has particularly involved increased oxycodone (Endone, Targin and OxyContin) use
- Concern about harms related to pharmaceutical opioids
  - Most overdoses in Australia now involve pharmaceutical opioids (Roxburgh, in preparation)
  - Will it lead to greater problems with opioid dependence?
  - Will there be considerable diversion of these medications?
  - And most importantly, is long-term use of opioids for chronic pain even effective?

# Outline

- Give a brief overview of the overall POINT study aims and method;
- Describe the socio-demographic, physical and mental health profile of the cohort at baseline;
- Report on pharmaceutical opioid use, non-adherence, and opioid use disorders in the cohort;
- Report on the use of cannabis by POINT participants to control pain.

# OVERALL METHODOLOGY

# Overall study aims

1. To examine patterns of opioid use in a cohort of people prescribed opioids for chronic non-cancer pain (CNCP).
2. To examine the demographic and clinical predictors of adverse events including opioid dependence, medication non-adherence and diversion, other drug use, and overdose.
3. To identify factors which predict poor pain relief and other clinical outcomes.

# Outcomes

- **The Four “A’s” of Pain Treatment Outcomes**
  - Analgesia
  - Activities of daily living (psychosocial functioning)
  - Adverse effects (side effects)
  - Aberrant drug taking (non-adherence, dependence)
- **Predictors of outcomes**
  - Mental health
  - Drug and alcohol use history (including parental substance use)
  - Child sexual abuse
  - Other medications
  - Other illnesses and disabilities



# Overall design

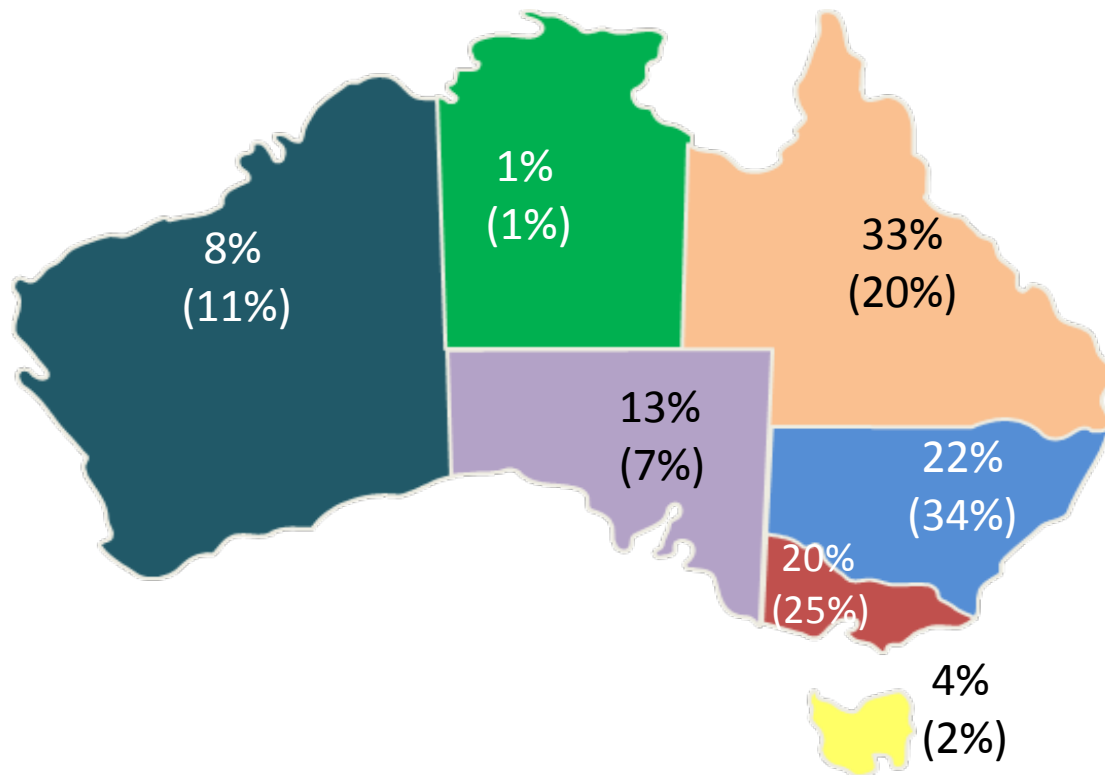
**Sample:** people living with chronic non-cancer pain, prescribed opioids  $\geq 6$  weeks

**Recruitment across community pharmacies in Australia**, with Pharmacy Guild support

Contacted 93% (n=5,332) of all community pharmacies in Australia via fax and phone  
33% agreed to involvement in recruitment

- **Four assessment waves:**
  - Baseline complete – n = 1,514
  - T2 follow up (3 months) complete – 80% follow-up
  - T3 follow up (12 months) underway
  - T4 follow up (24 months) underway
- Participants offered a small reimbursement for each assessment
- Permission to obtain medical records from Medicare for access to Medicare claim history and prescription history

# Proportion of participants from each jurisdiction (vs. total population)



# CHARACTERISTICS OF THE POINT COHORT

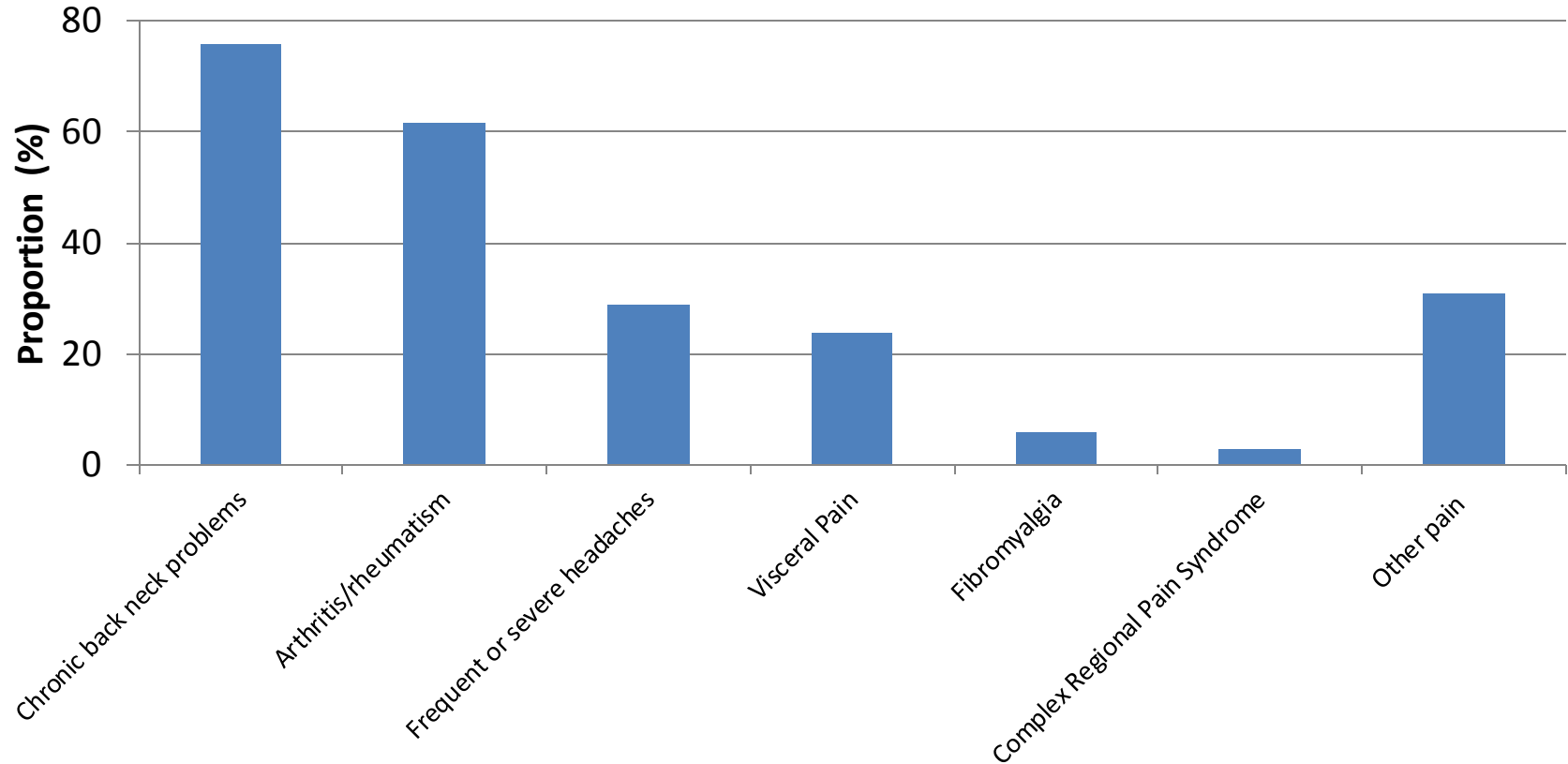
# Demographics

N=1514	
Median age (IQR) (range)	58 (48-67) (19-93)
Male (%)	44
Born in Australia (%)	80
Aboriginal and/or Torres trait Islander (%)	3
Highest level of education (%)	
Completed high school	45
Completed tertiary	35
Married/de-facto (%)	54
Employment status (%)	
Employed full-time	7
Unemployed	48
Retired	31
Self-reported change in employment due to pain (%)	64

# Pain and treatment experience

Total time experiencing pain (Median)	10 years
Time to first opioid prescription after onset of pain (Median)	12 months
On some type of opioid continuously (Median)	4 years
More than one pain condition (%)	85%
Number of pain conditions in the previous year (Median)	3
Back or neck problem most common pain condition	76%
Other chronic physical health problems (Median)	1

# Current chronic pain conditions

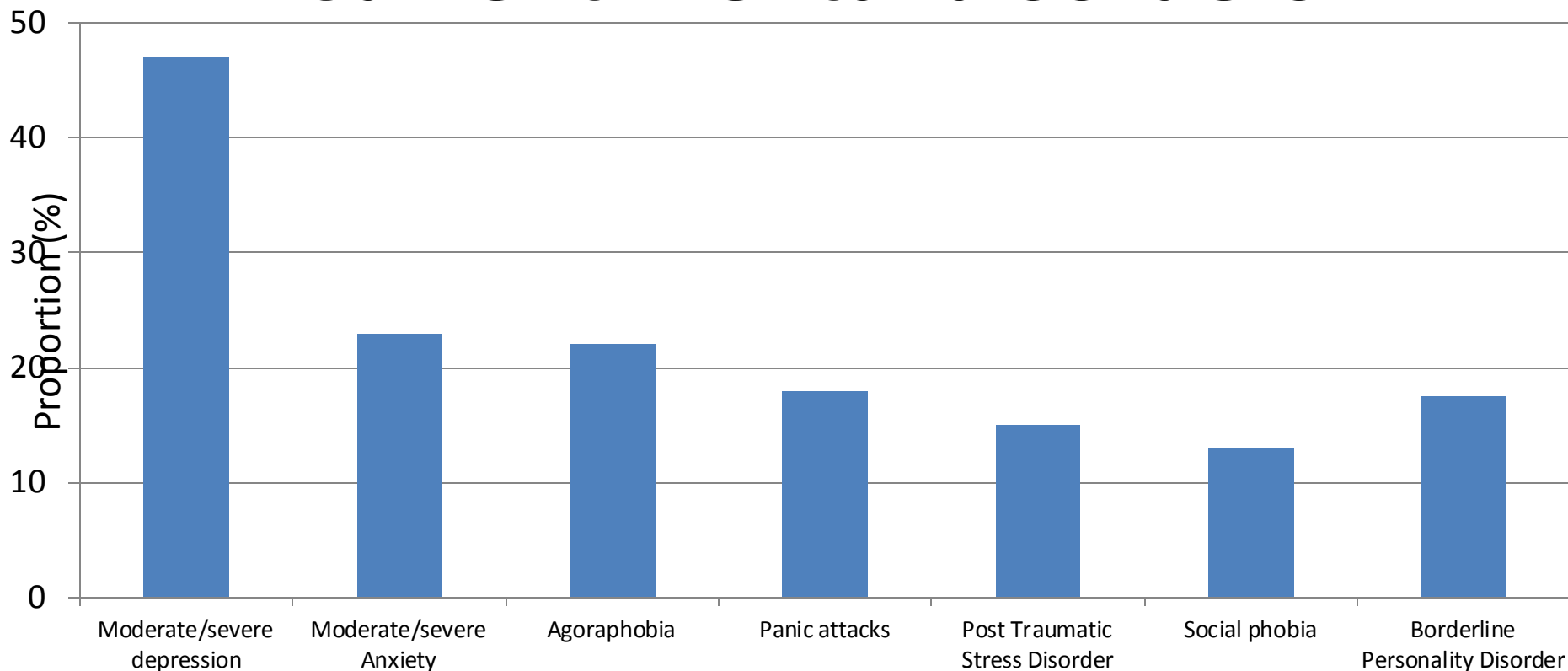


Campbell et al (under review). The Pain and Opioids IN Treatment (POINT) study: Characteristics of a cohort using opioids to manage chronic non-cancer pain. *Pain*.



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# Current mental disorders

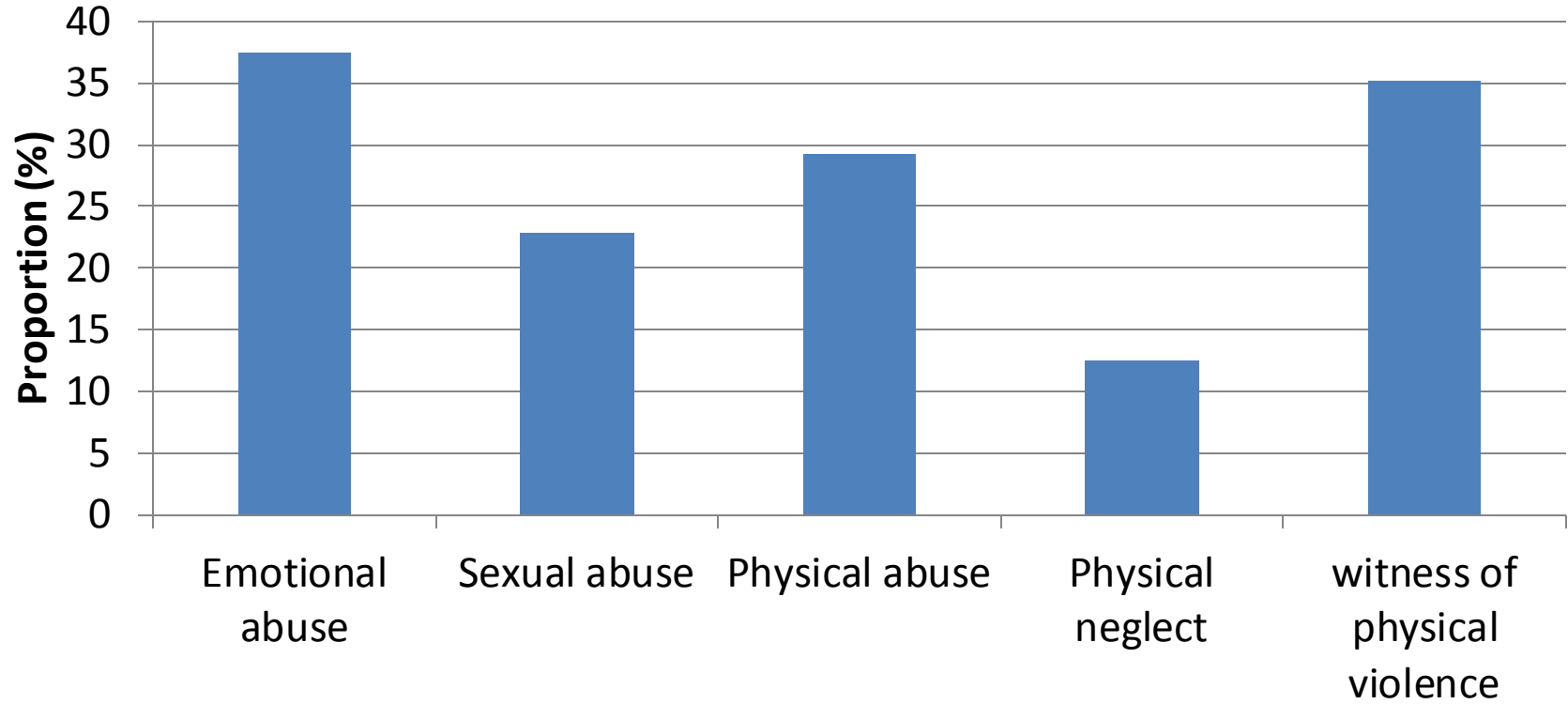


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# Childhood maltreatment



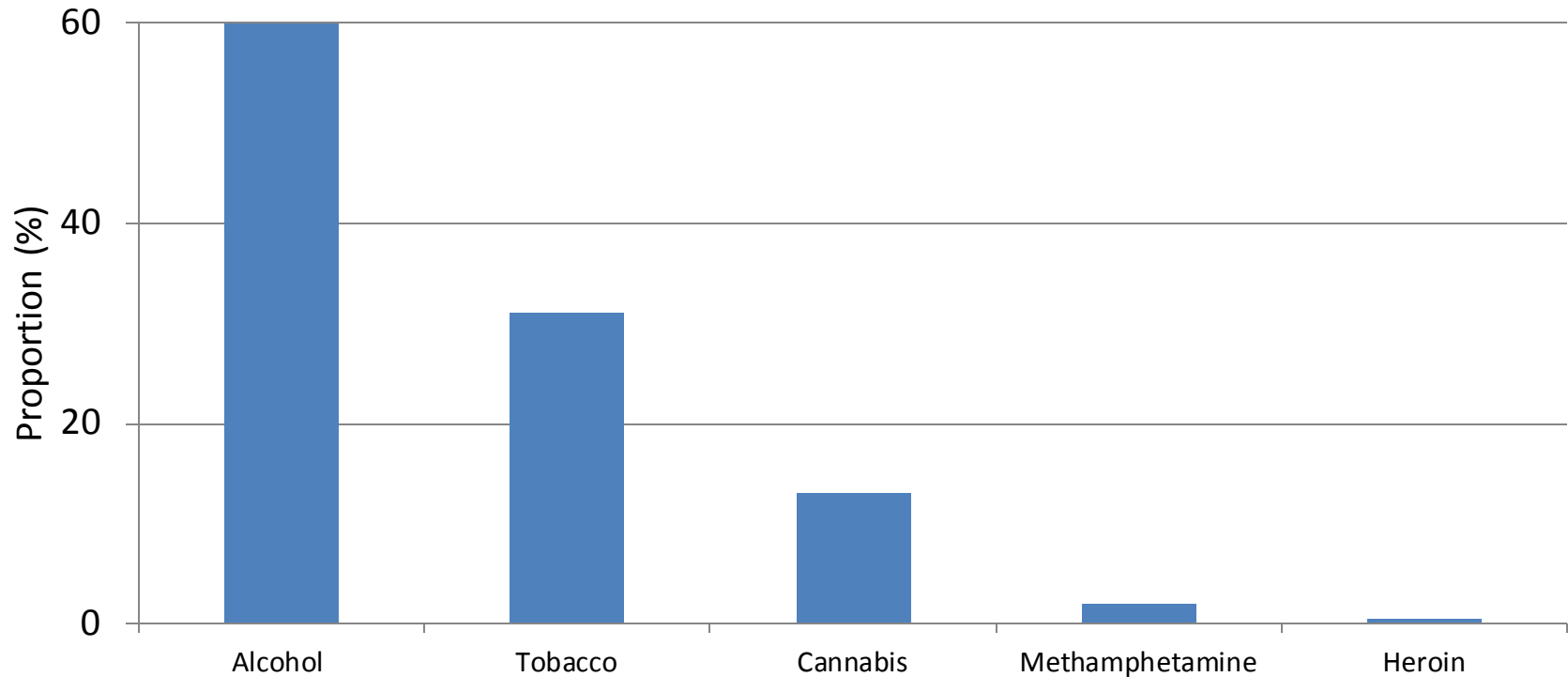
Campbell et al (under review). The Pain and Opioids IN Treatment (POINT) study: Characteristics of a cohort using opioids to manage chronic non-cancer pain. *Pain*.



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# Past 12-month substance use



Campbell et al (under review). The Pain and Opioids IN Treatment (POINT) study: Characteristics of a cohort using opioids to manage chronic non-cancer pain. *Pain*.



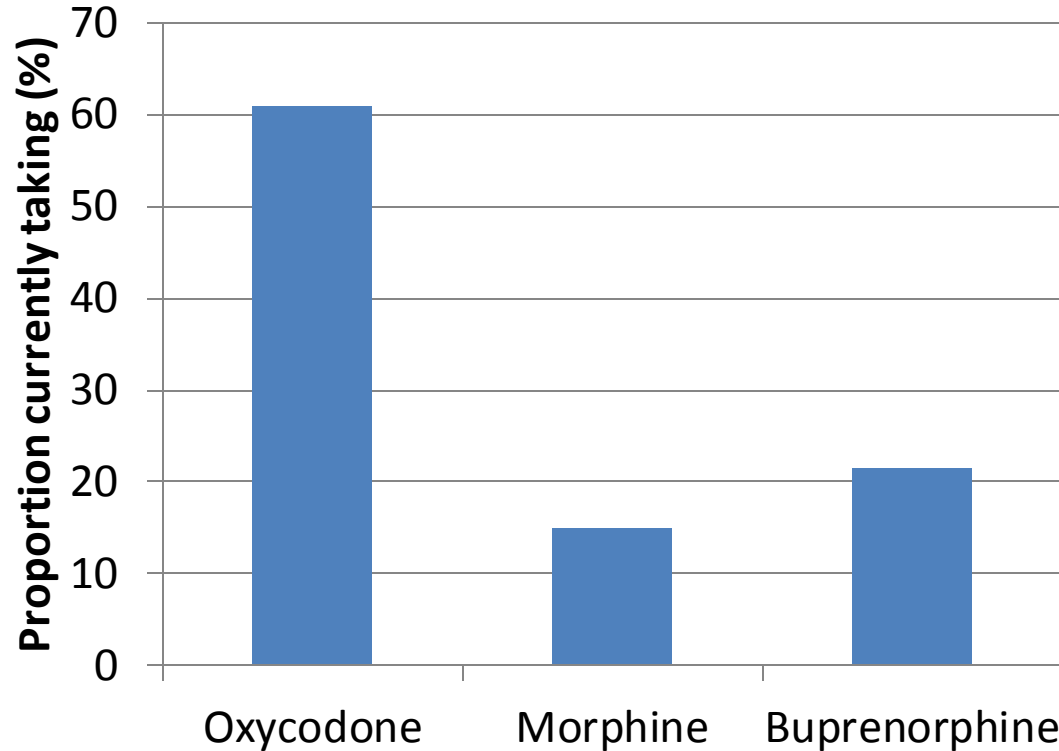
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# Age-related differences

- On almost every measure, younger participants had worse functioning:
  - Higher levels of mental health problems, substance use
  - Worse pain, functioning and coping
  - Poorer adherence
- Some details of this in the poster sessions

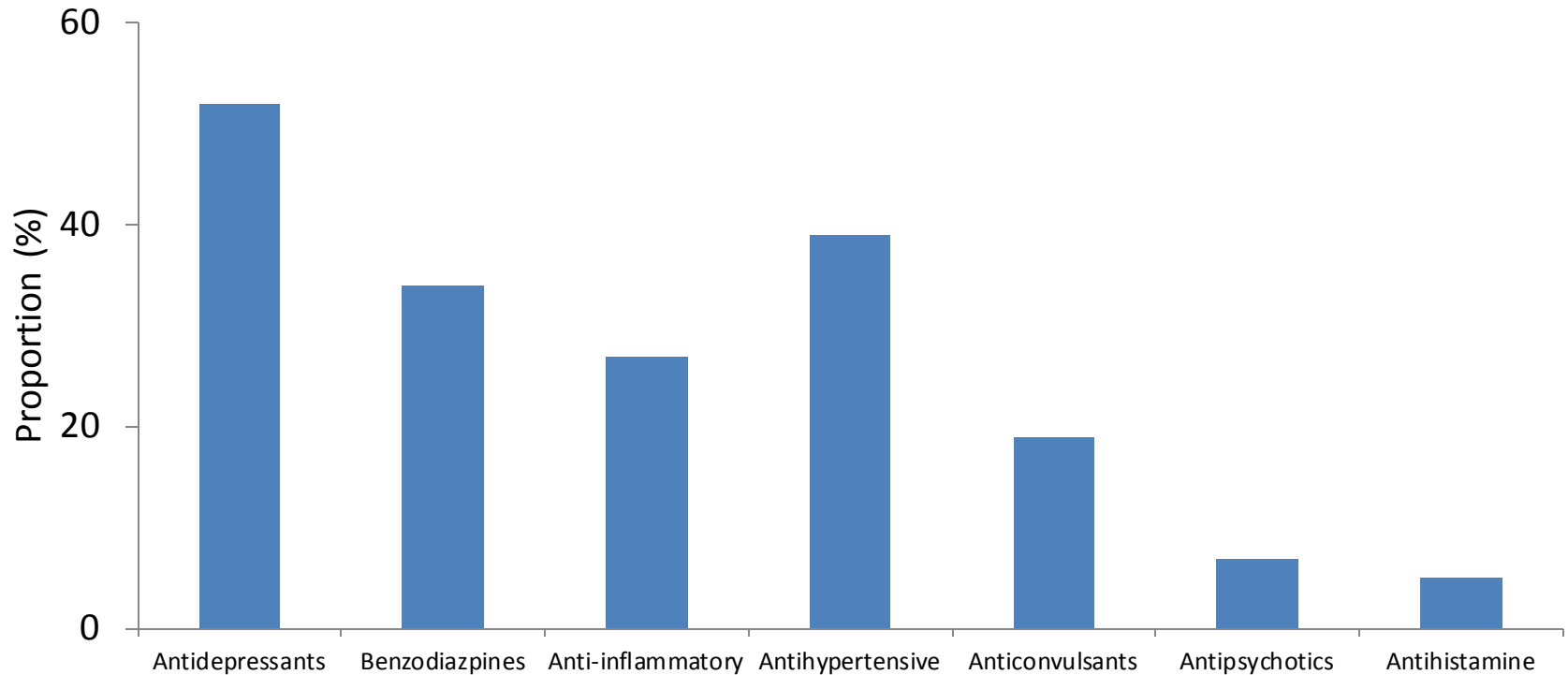
# PHARMACEUTICAL OPIOID USE

# Prescription opioids



- Median oral morphine equivalent (OME) mg per day – 75mg
- 9% taking over 200 OME per day
- Taking opioids for a median of 4 years (range 1-12 years)

# Past month other prescription drugs

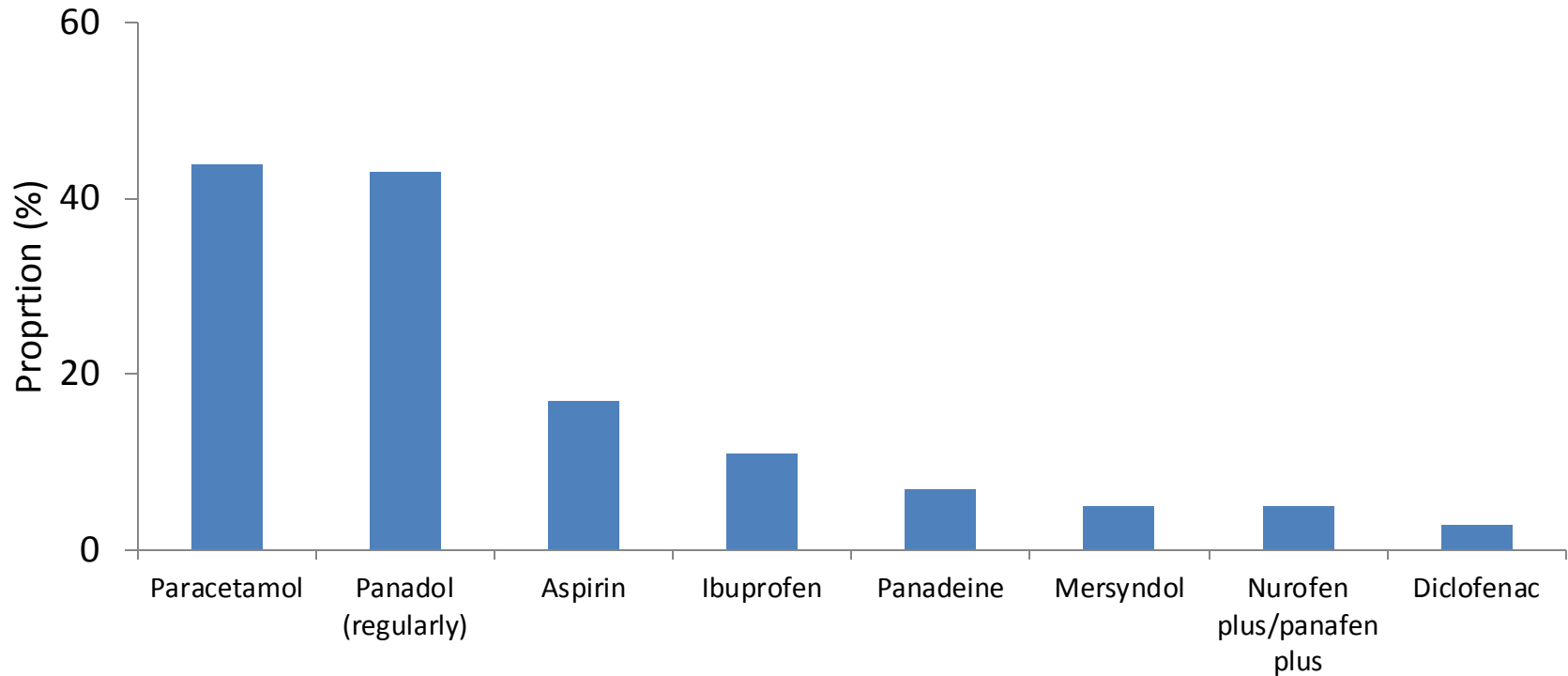


See also Nielsen et al (in press). Benzodiazepine use amongst chronic pain patients prescribed opioids: associations with pain, physical and mental health and health service utilization. *Pain Medicine*



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# Past month over-the-counter medication



Hoban et al (under review). The use of paracetamol above recommended maximum daily doses by people with chronic non-cancer pain.



# **NON-ADHERENCE AND PROBLEMATIC USE OF OPIOIDS**

# Diversion vs. non-adherence

Selling  
Trading  
Sharing/giving away



“diversion” to  
another person

Removing all or part of a  
supervised dose  
Splitting doses  
Stockpiling doses  
Taking more or less than  
prescribed  
Injection, snorting, dissolving,  
crushing, chewing



“non-adherence”  
by a client



# Non-adherence

- Diversion or selling of opioids extremely uncommon in this group (4% ever, usually once, to a family member in pain)
- Indicators of non-adherence, past 3 months:
  - 1% seeing a different doctor to obtain more opioids
  - 11% ran out of opioids early and required an early renewal
  - 2% used someone else's opioids
  - 1% taken via another route (e.g. injecting)
  - 5% altered dose in another way (e.g. cutting in half)

# Opioid dependence in the POINT cohort

- One in 12 (8.5%) met lifetime ICD-10 criteria for pharmaceutical opioid dependence
- One in 20 (5%) were dependent in the previous year
- Average age of onset 45 years (SD=19.7)
- Only 12% had ever received treatment for problems related to their opioid use

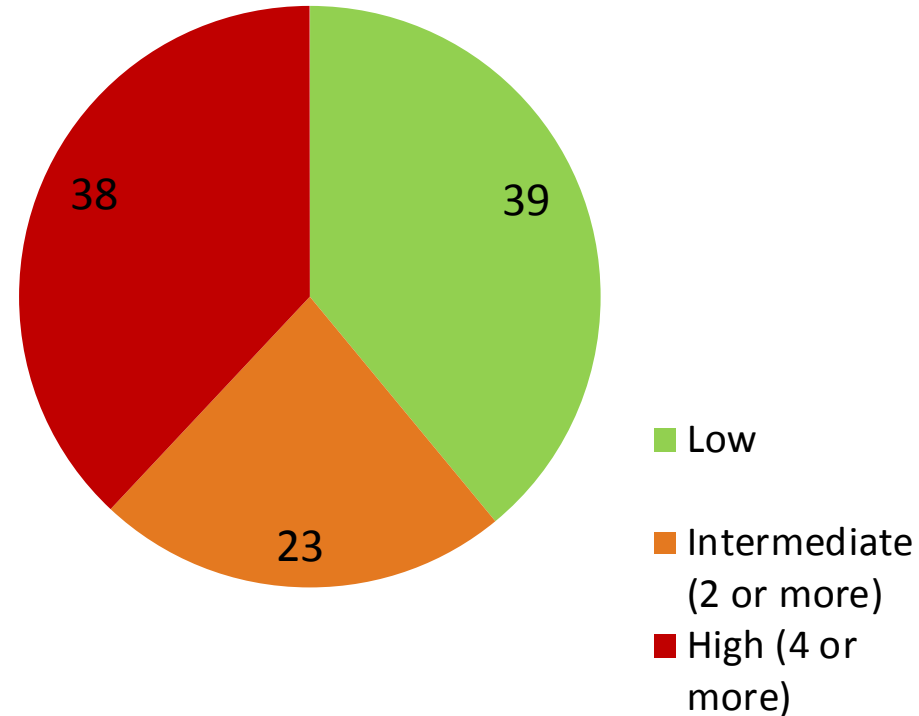
# Prescribed Opioids Difficulties Scale (PODS)

Scale that assesses:

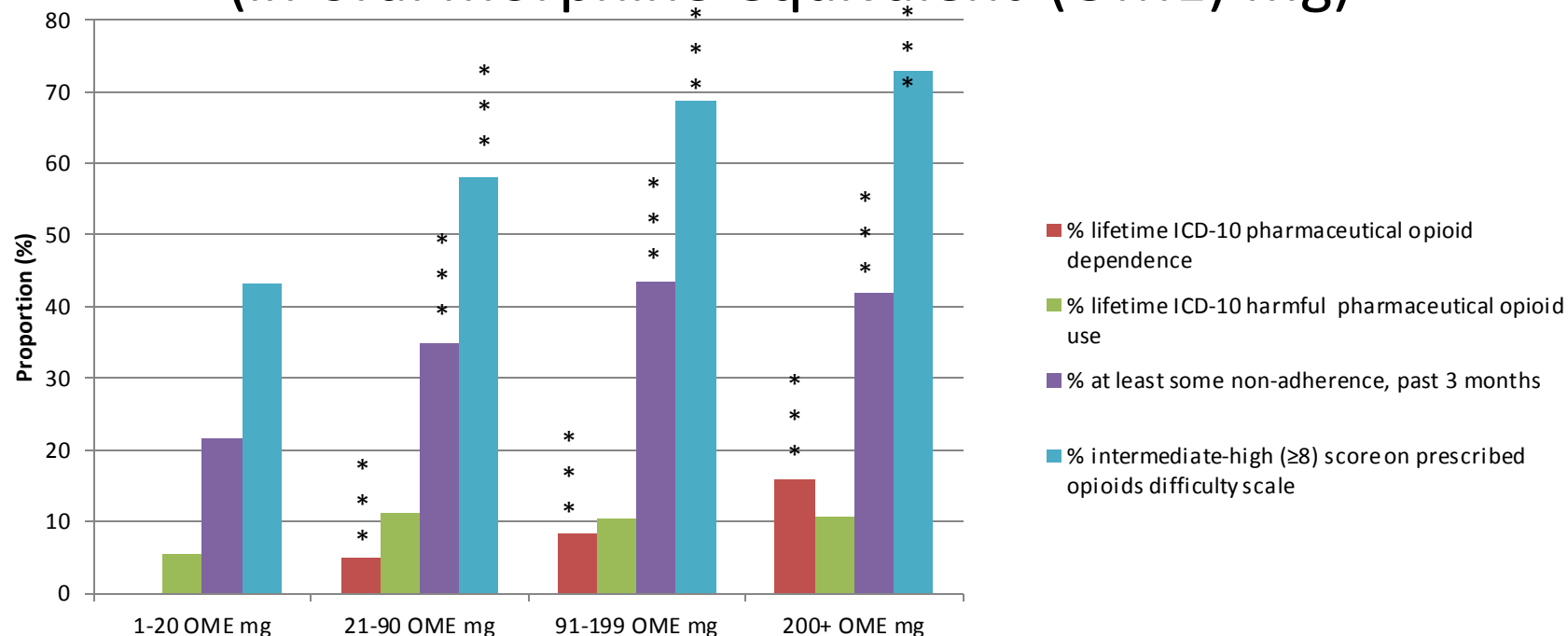
- Concerns about controlling opioid use
- Psychosocial problems related to opioid use

Those who scored intermediate or higher on this scale were also more likely to be:

- Younger
- Have current mental health problems
- Currently using oxycodone
- Also using schedule 4 opioids



# Indicators of problems with pharmaceutical opioids by daily dose (in oral morphine equivalent (OME) mg)



# SUMMARY AND DISCUSSION

# Summary

- Preliminary findings, but building a picture of the complex issues faced by people living with chronic pain in Australia
  - Fairly confident we have a good representation
  - A wide variety of pain conditions, indicating the varied profile
- Complex physical and mental health issues; high rates of multiple medications
  - Younger people seemed to have higher levels of adversity
- Aberrant behaviours were reported by a minority
  - A substantial minority do report problems related to their use

# POINT▶

PAIN AND OPIOIDS  
IN TREATMENT

For more information please contact:

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(02) 8936 1195

<https://ndarc.med.unsw.edu.au/project/point-study-pain-and-opioids-treatment>



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