Metro North Hospital and Health Service Putting people first

Strategies for dealing with opioid dependent persons

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Queensland Government

Disclosures

- Travel / accommodation / speaker's fees and conference support
- Janssen
- Lundbeck
- Indivior

- The views expressed are my own

40 years ago…

1977 the first Drug Dependence Clinic in QLD

24 years ago…

GASTROENTEROLOGY 1993;104:1832–1847

SPECIAL REPORTS AND REVIEWS

Side Effects of Nonsteroidal Anti-inflammatory Drugs on the Small and Large Intestine in Humans

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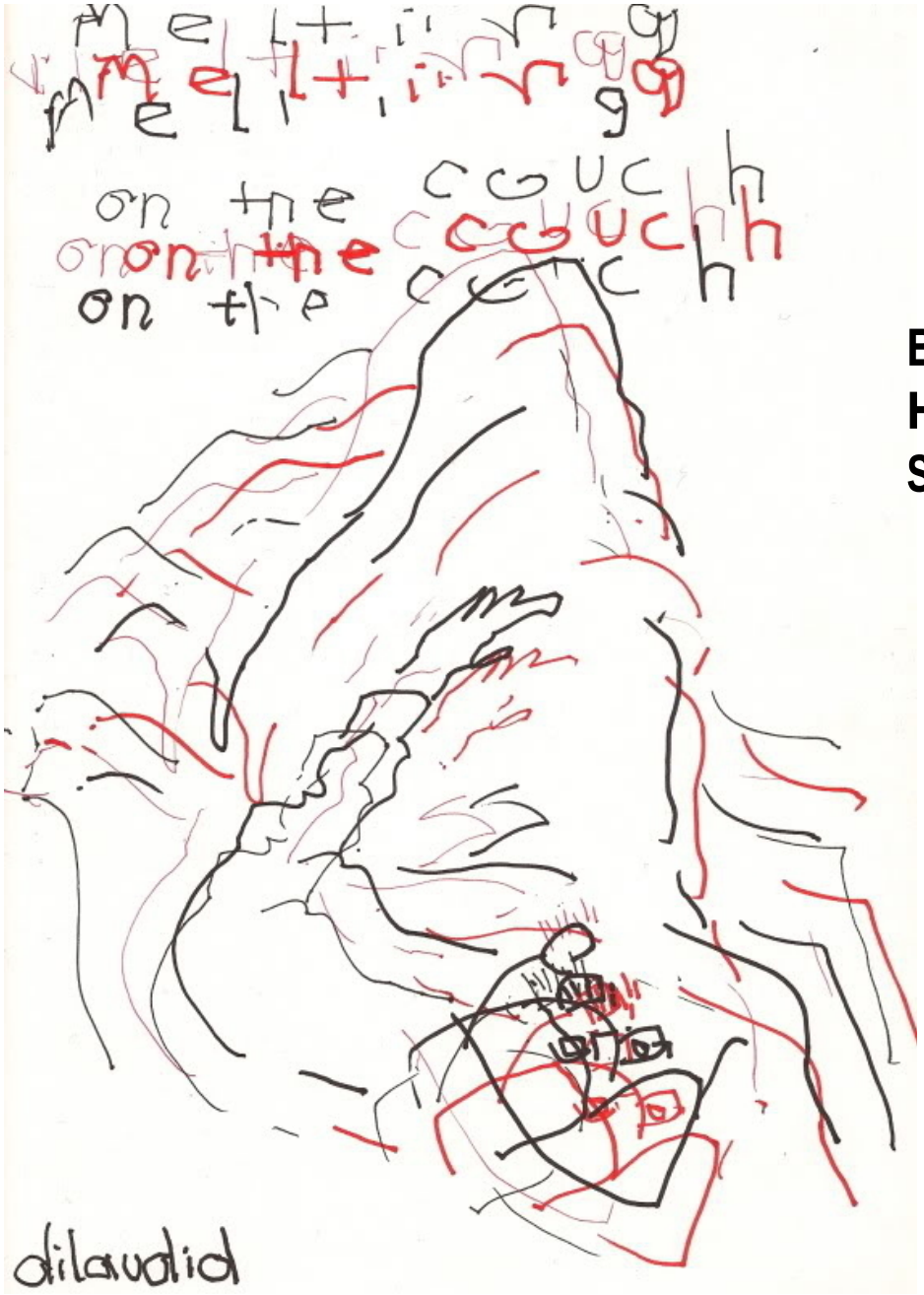
Contents

- Patient history
- Codeine and current harms from opioids
- Scale of the challenge
- Defining Opioid Use Disorder
- Recognising the patient
- Treatment of Opioid Use Disorder
- Outcomes



Bryan Lewis Saunders
Hydromorphone
Self portrait

19 year old woman

- History of ‘period pains’ since early teens
- Using Nurofen Plus® 60-70 tablets daily for 12/12
- Smokes tobacco 15 cigs/day 5 years
- No injecting drug use
- H/O anxiety, prejudicial childhood, lives with grandmother
- Iron deficiency anaemia and hypoalbuminaemia
- Presents with sudden onset epigastric then generalised abdominal pain

C.D.C. Reports a Record Jump in Drug Overdose Deaths Last Year

By SHEILA KAPLAN NOV. 3, 2017

A harm reduction worker in the Bronx demonstrated how to test heroin for traces of fentanyl. A surge in U.S. drug deaths in 2016 has been attributed largely to synthetic opioids like fentanyl.
Ryan Christopher Jones for The New York Times

RELATED COVERAGE


The First Count of Fentanyl Deaths in 2016: Up 540% in Three Years SEPT. 2, 2017


The Facts on America's Opioid Epidemic OCT. 26, 2017

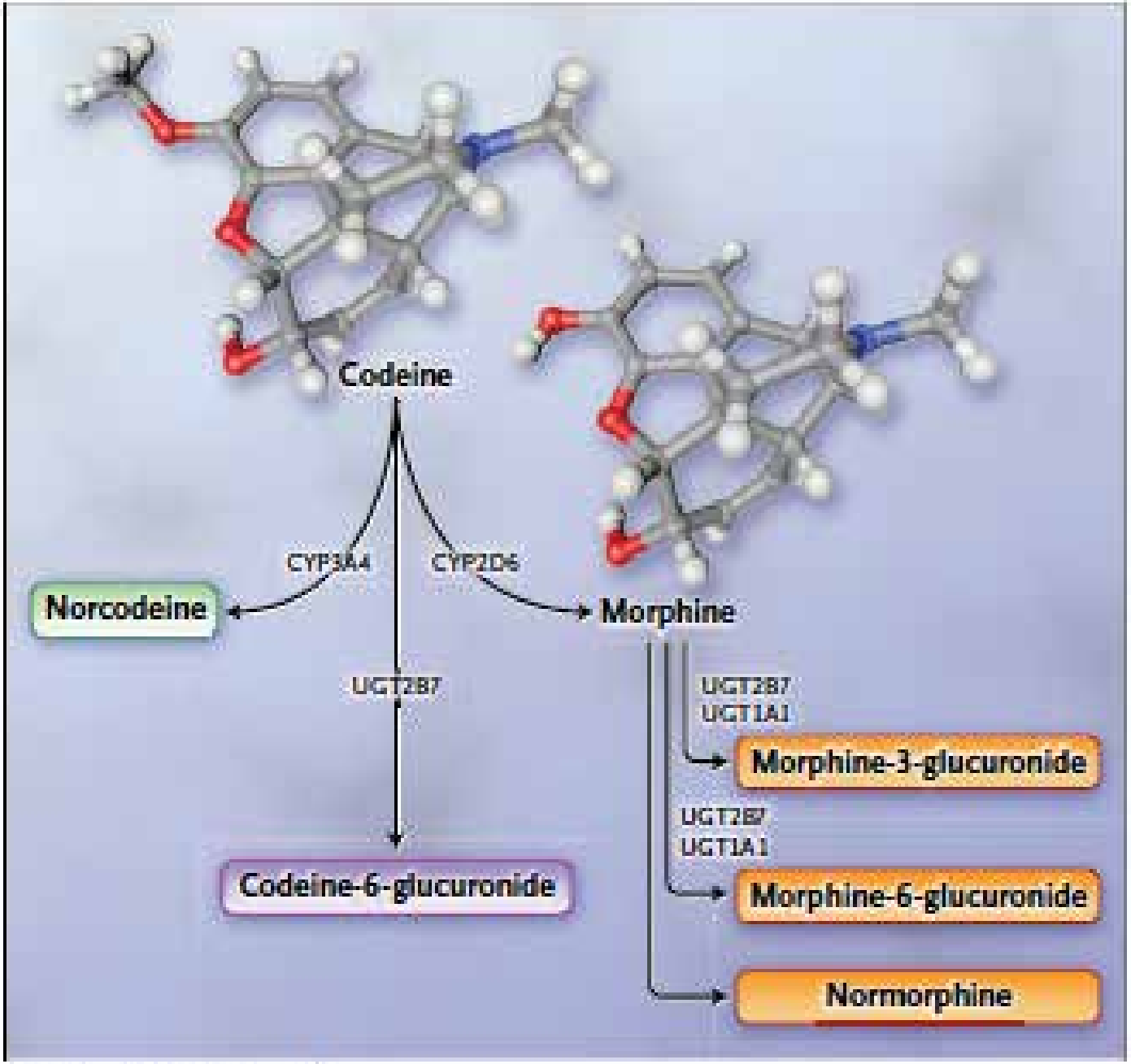

The Opioid Epidemic: A Crisis Years in the Making OCT. 26, 2017


Panel Recommends Opioid Solutions but Puts No Price Tag on Them NOV. 1, 2017

USA: 64,000 overdose deaths in 2016 - ~20 / 100,000, a 17% increase on 2015

Why is codeine such a poor choice?

- A pro-drug with variable metabolism (O-demethylation to morphine by CYP450 2D6)
  - Ultra-Rapid Metabolisers – overdose deaths in infants
  - ~10% non responders
  - Acute pain ED no added benefit (Chang et al 2017)
- Oxford League Table (2007) NNT for 50% relief at 4-6 hrs
  - codeine 60 mg: 16.7 v etoricoxib 100 mg: 1.6
  - ibuprofen 800 mg: 1.6 & diclofenac 100 mg 1.8
- Hopkins et al (2018): 441 deaths in Australia where codeine implicated (40/year)



Codeine Metabolism Pathway.

CYP2D6:

Inhibitors

Fluoxetine
Paroxetine
Celecoxib
Duloxetine
Methadone
CBD

Substrates

Codeine
Oxycodone
Tramadol
Venlafaxine
TCA
Olanzapine

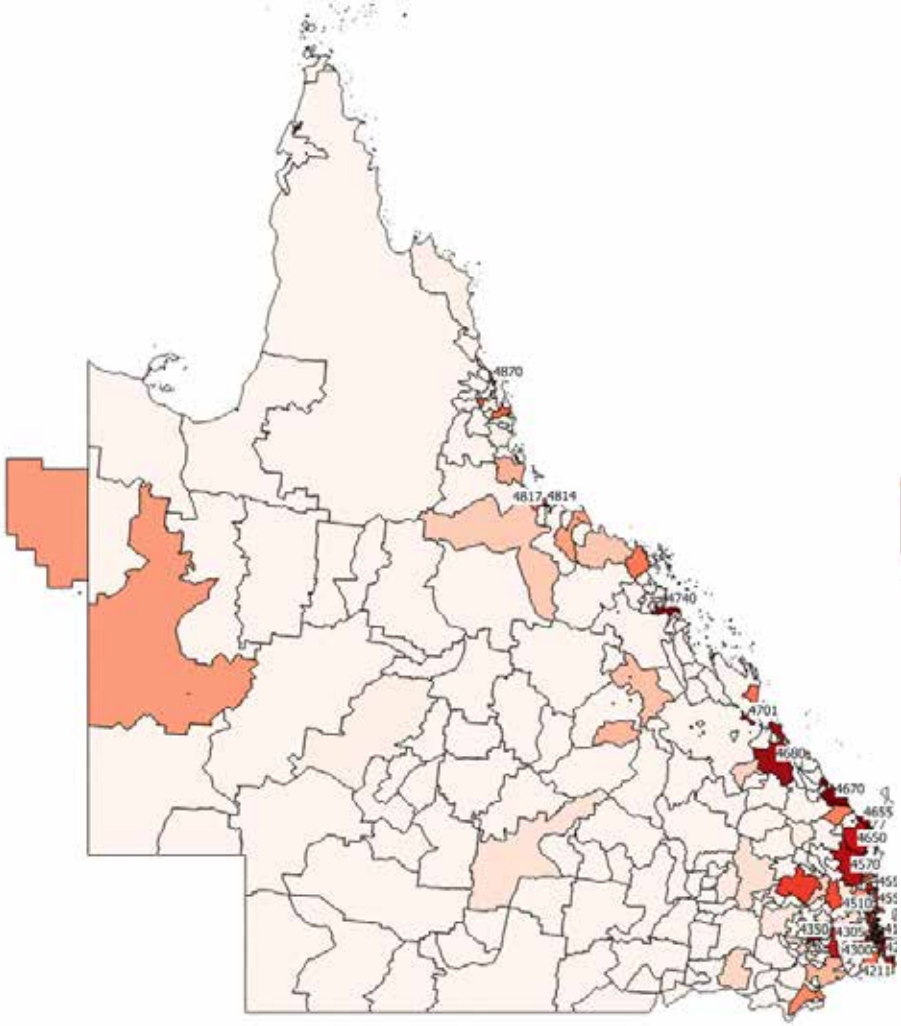
Inducers

Dexamethasone
Haloperidol
Rifampicin

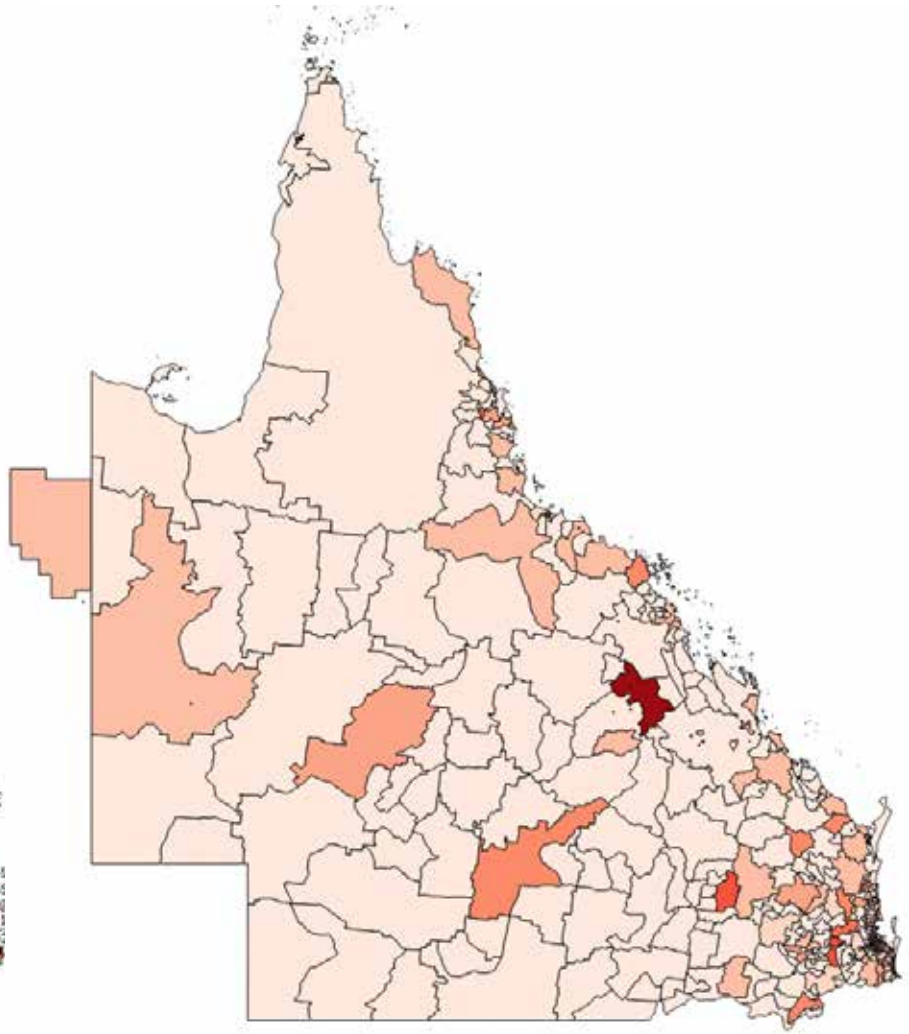
Codeine Data

(thanks to Dr Mark Daglish)

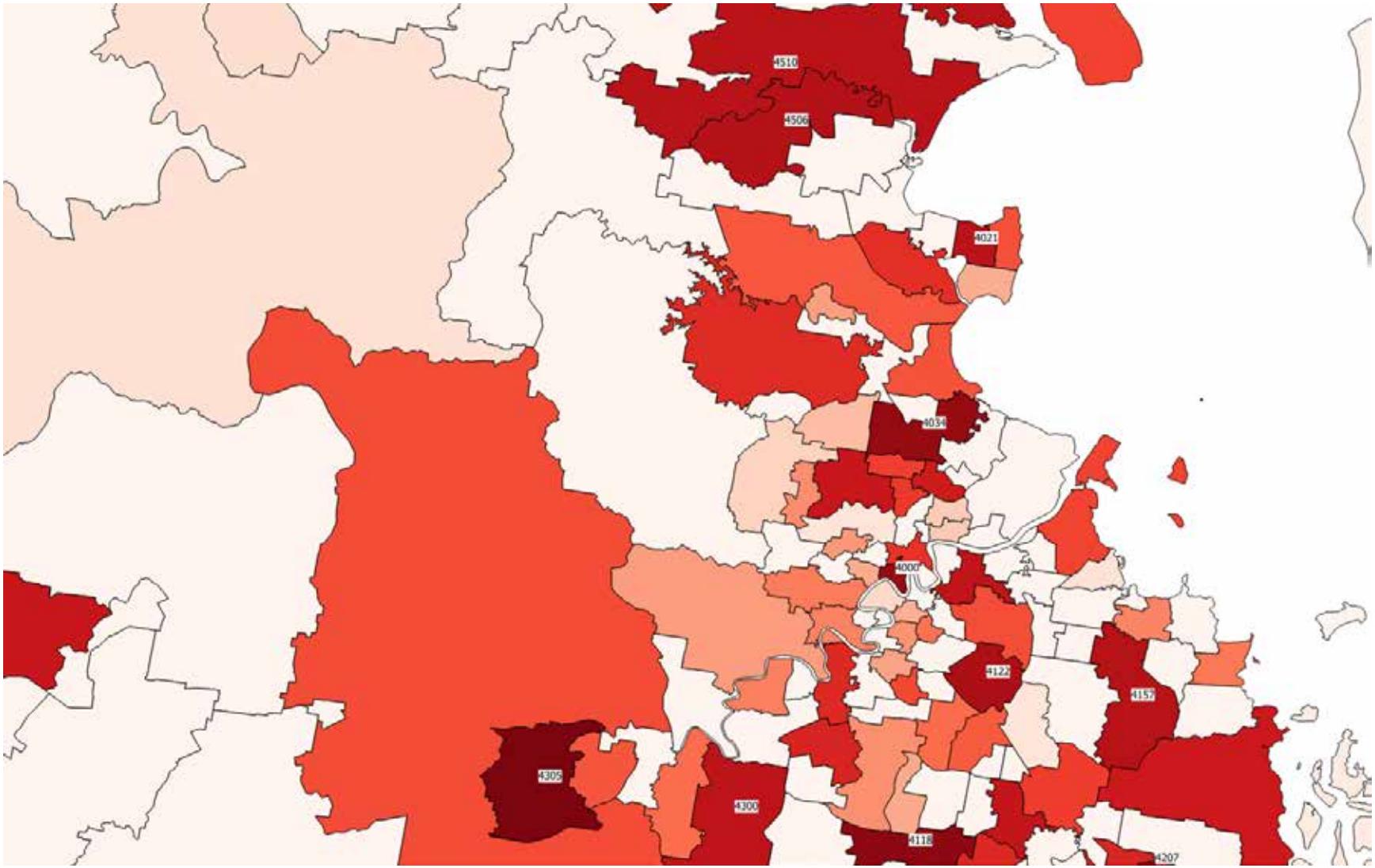
Sales



Sales/Population



Codeine Use (DDD) – SEQ



How many people are overusing codeine?

- NDSHS (2016) 3.6% of adult population (~20,000,000) with pharmaceutical misuse in past year
- ~720,000 adults total (heroin users ~80,000)
- 75% were misusing OTC codeine ie ~540,000
- What proportion will have a codeine use disorder?
  - 17-37% (Nielsen et al 2010, Sproule et al 1997)
  - between 92,000 – 200,000 Australian adults
- NOPSAD snapshot on 30/6/2015:
  - 48,000 people on Opioid Treatment Programs in Australia

Substance Use Disorder defined:

(DSM - 5)

A *maladaptive pattern* of substance use leading to *significant impairment or distress* characterised by the presence of, in the last 12 months:

1.	Larger / longer	Criteria A: Impaired Control
2.	Continued use	
3.	Time spent	
4.	Craving	
5.	Failure in a Major Role	Criteria B: Social impairment
6.	Interpersonal problems	
7.	Social / Occupational / Recreational	Criteria C: Risky use
8.	Hazard	
9.	Physical Psychological problems	
10.	Tolerance	Criteria D: Pharmacological
11.	Withdrawal	

2-3 mild, 4-5 moderate, 6+ severe….

Loss of control and impaired function

Screening Tool: OTC Codeine Assessment

1a **How often do you take OTC codeine?** (Choose one of the following)

Every day ☐ Most Days ☐	Proceed to question 1b
Once a week or more ☐ About once a month ☐ Every few months ☐ Once or twice a year ☐	Proceed to question 2

1b **How long have you been using OTC codeine with this frequency?**

Last week ☐ Last four weeks ☐	1 Point ☐
Last year ☐ Longer than one year ☐ Longer than three years ☐	2 Points ☐

2 **What was the main reason OTC codeine was taken the last occasion it was used?** (Choose one of the following)

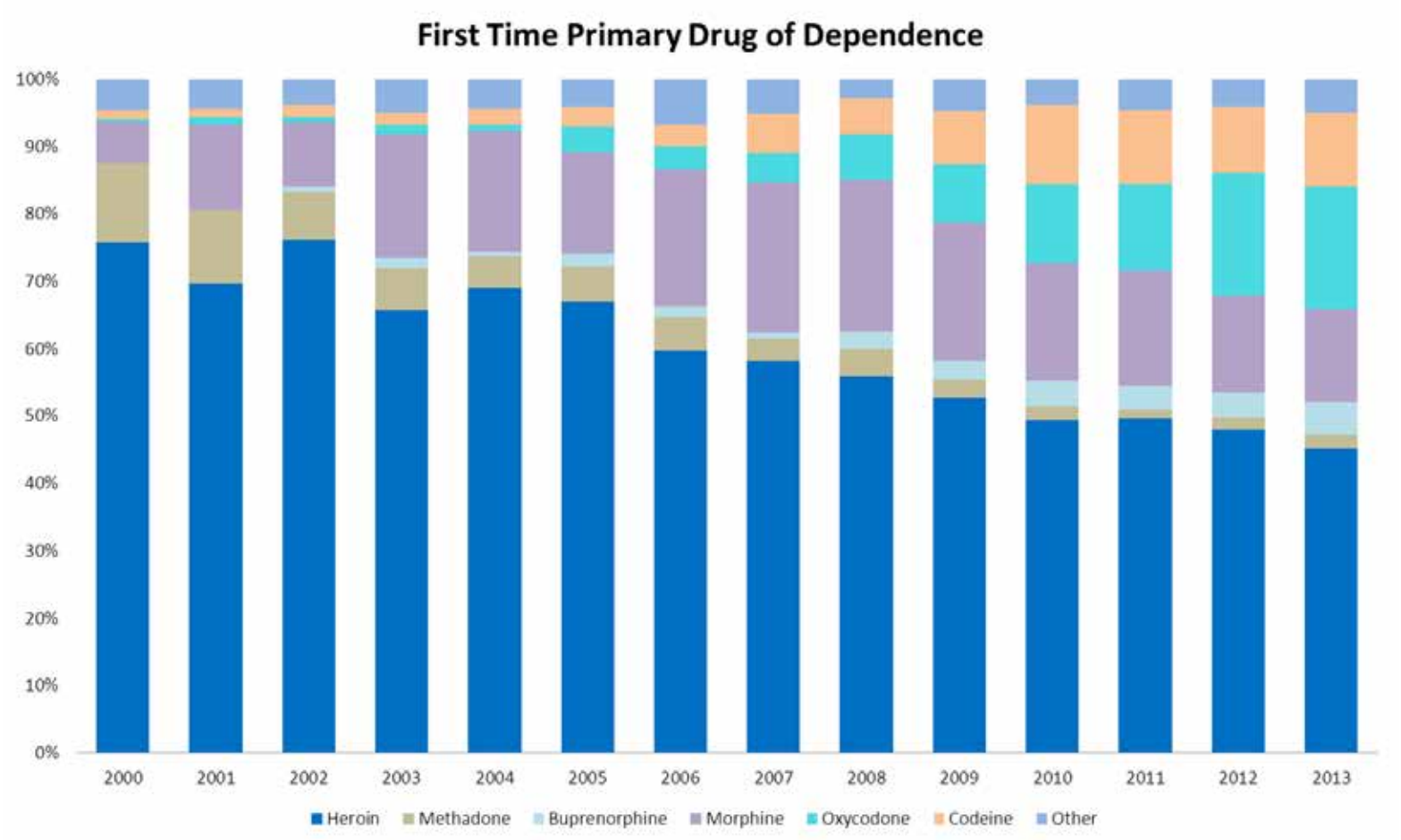
Headache ☐ Back pain ☐ Dental pain ☐ Migraine ☐ Period pain ☐ Any other physical pain ☐	0 Points ☐
To relax ☐ To feel better ☐ To sleep ☐ Other _____ ☐	1 Point ☐

3 **In the past 12 months, how difficult did you find it to stop or go without OTC codeine?** (Choose one of the following)

Not difficult ☐	0 Points ☐
Quite difficult ☐	1 Point ☐
Very difficult ☐	1 Point ☐
Impossible ☐	1 Point ☐

NDARC
National Drug & Alcohol Research Centre

A score of **2 or more** indicates high likelihood of meeting criteria for dependence (McCoy, Bruno and Nielsen, Codeine Dependence Scale 2017)


First Time Primary Drug of Dependence
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Heroin
Methadone
Buprenorphine
Morphine
Oxycodone
Codeine
Other

1-year retention and social function after buprenorphine-assisted relapse prevention treatment for heroin dependence in Sweden: a randomised, placebo-controlled trial

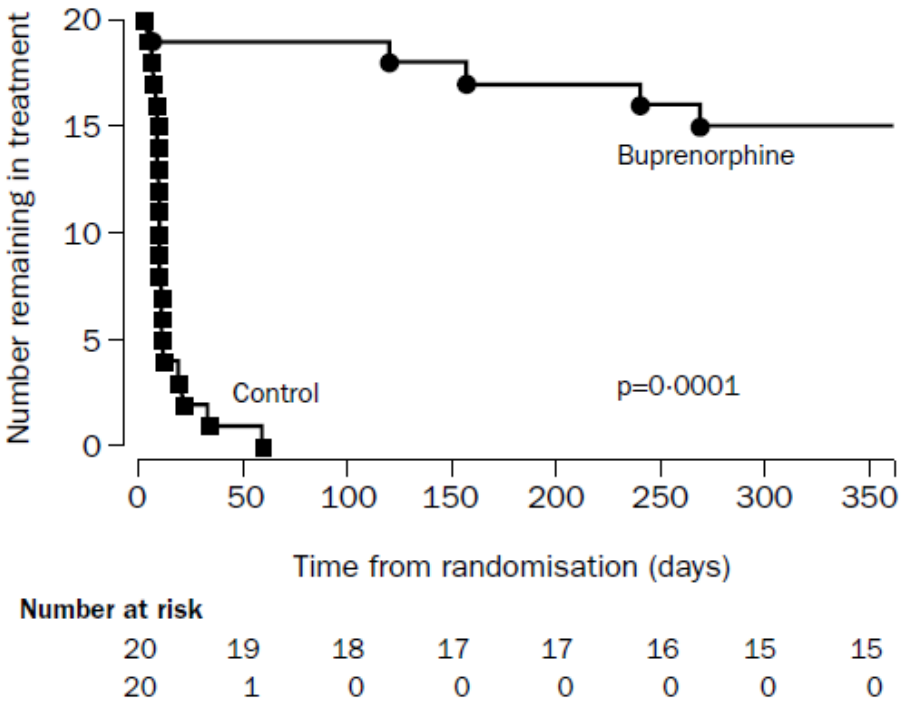


Figure 2: **Kaplan-Meier curve of cumulative retention in treatment**

Total n = 41
5 discharged
from bup group
re UDS +ve

75% UDS clear

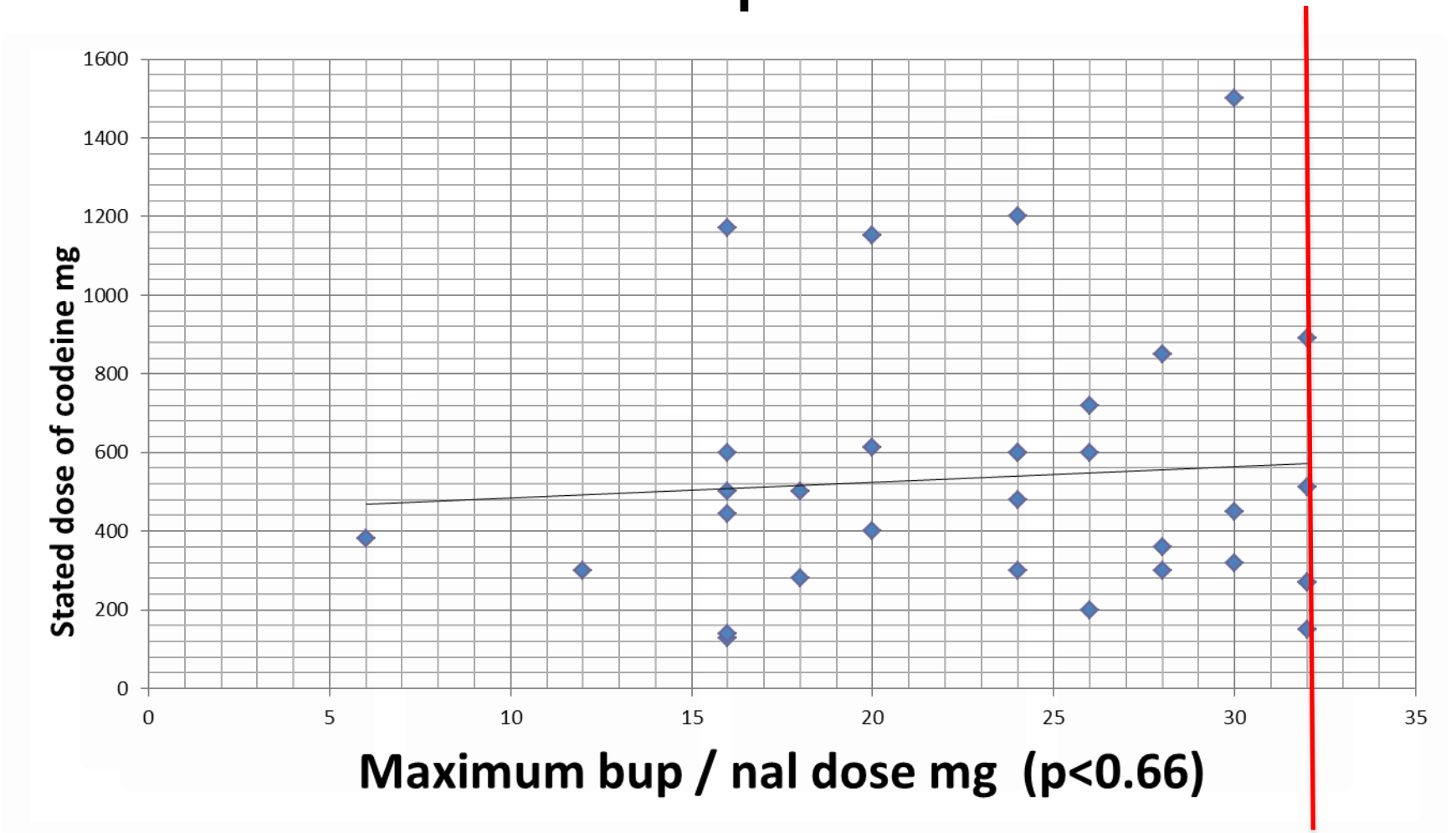
RR 58 of being drug free

All controls +ve UDS
4 deaths in controls
over 365 days

Chart Audit: OTP Patients Melaleuca Clinic, Chermside

- Codeine “primary drug of choice”
- 35/310 patients, 32 on bup/nal, 3 on methadone
- Mean age 43.6 yrs, 66% female
- Codeine mean dose: 550 mg (OME ~82.5mg)
- Bup/nal mean highest dose: 24 mg (OME ~960mg!)
- Bup/nal mean current dose : 20 mg
- Duration OTP mean: 7 years
- Current / past tobacco use: 88% (McMillan & Tyndale 2015 – nicotine / codeine interaction..)

Codeine v bup / nal doses



Nielsen et al 2016: 19 patients, mean 560 mg codeine, days 7 and 28, Rx 12 and 16 mg bup/nal (p<0.03)

32 OTP Patients at Melaleuca
Codeine and Complexity

- 44% pain history
- 19% serious complications re combined products
- 19% major medical conditions
- 19% major MH diagnoses (of 35, 71% had received antidepressants)
- 12% history of seizures (not apparently re tramadol toxicity)
- Tobacco aside, other significant Substance Use Disorders
  - 16% past heroin use, including OTP
  - 37% THC use
  - 10% alcohol
  - 6% amphetamine
  - 6% BZD / Z drug
  - 3% polysubstances

OxyContin Tablets Reformulated
Generic Ingredients: oxycodone hydrochloride
Company Mundipharma Pty Limited

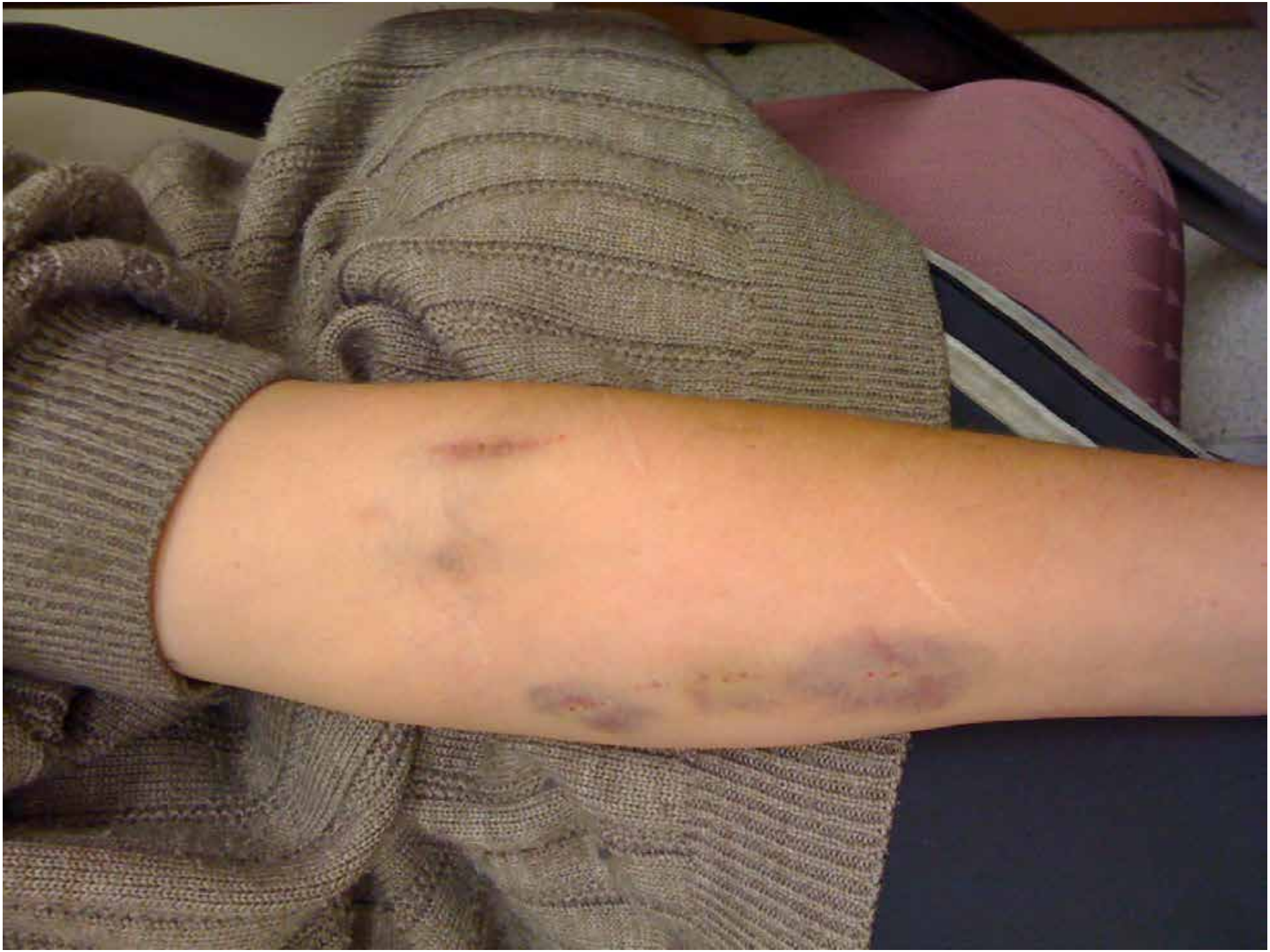
CUT AND PASTED FROM MIMS
My emphasis

MIMS Class: Narcotic analgesics - Analgesia
Pregnancy Category C*

Hyperkatafeia?
Hypersensitivity to emotional distress
Ballantyne 2013

Banned in sport
ARTG: Registered medicine

Use: Opioid analgesic. Mod-severe chronic pain unresponsive to non-narcotic analgesia
Contra: Opioid hypersensitivity; acute respiratory depression; cor pulmonale; arrhythmia; acute asthma, other obstructive airways disease; suspected mechanical GI obstruction (eg bowel obstruction, stricture), surgical abdomen; condition affecting bowel transit (eg ileus); severe renal (ClCr < 10 mL/min), hepatic impairment; delayed gastric emptying, acute alcoholism; delirium tremens; brain tumour; raised ICP, CSF pressure; head injury (due to risk of incr ICP); severe CNS depression; convulsive disorder; hypercarbia; concurrent MAOIs (or within 2 wks of their use); preop use, first 24 hrs postop; pregnancy
Prec: Not for nasogastric, gastric, other feeding tube, rectal admin; hypothyroidism; opioid dependence; hypotension, hypovolaemia; biliary tract disease; pancreatitis; IBD; prostatic hypertrophy; adrenocortical insufficiency (Addison's disease); toxic psychosis; chronic pulmonary, renal (ClCr < 60 mL/min), hepatic disease; myxoedema; pain relieving surgery incl cordotomy within 24 hrs; after abdominal surgery (until bowel function normal);intestinal obstruction predisposition (eg oesophageal, colon cancer, small GI lumen); swallowing difficulty; oesophageal narrowing; diverticulitis; nonmalignant pain;
substance/ opioid abuse, addiction risk eg alcohol, drug, prescription medicine abuse incl history (personal, family), major psychosocial issues (eg psychological, psychiatric disorder); **predominant emotional distress treatment** (avoid); prolonged use; high dose; abrupt withdrawal; female; use 80 mg tabs in opioid tolerant patients only; elderly (debility); infirm; not recommended immediately prior to, during labour; lactation;),



West J Emerg Med. 2012 November; 13(5): 416–421.
doi: 10.5811/westjem.2012.4.11600
PMCID: PMC3556950

How Frequently are "Classic" Drug-Seeking Behaviors Used by Drug-Seeking Patients in the Emergency Department?

Casey A. Grover, MD,* Joshua W. Elder, MD, MPH,† Reb JH. Close, MD,‡ and Sean M. Curry, MD§

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- Retrospective 12 month chart review
- 178 patients in Case Mx program, mean 14 ED visits
- Pain – back, headache, dental
- Pain score 10/10 or greater!
- Lost or stolen script
- Requesting: repeat script(s), specific analgesic / BZD or parenteral dose
- Screening (SOAP-R, ORT, COMM, DIRE, ABC) little value in ED re time constraints, used in pain clinic settings
- Mean 1.1 behaviours per presentation

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- Pain – back (21%), headache (22%), dental (1%)
- Pain Score 10/10 (29%) or greater! (2%)
- Lost or stolen script (1%)
- Requesting: repeat script(s) (9%), named analgesic/ BZD (15%) or seeking parenteral dose (4%)
- Looking for multiple 'classic drug seeking behaviours' *little help* in diagnosing dependence
- Impossible to distinguish "pseudo- addiction"
- Suggest *using* real time prescription monitoring

Opioid withdrawal: symptoms and *signs*:

shivering	*hypertension*	dysphoria
tachycardia	*sweating*	insomnia
piloerection	*rhinorrhoea*	*mydriasis*
restlessness	'craving'	*vomiting*
nausea	diarrhoea	cramps muscles/abdo

Are you hanging out? May be a useful question;

- listen for sniffles
- look for restlessness
- look for big pupils (there may be other causes…)

Professional Responsibilities

- Recognise the problem
- Become involved
- Obtain as much information as possible
- Avoid being judgmental
- Maintain confidentiality
- ‘Chronic Disease Management’ – the long haul
- Recognise relapse is not failure

Challenges

- After 3-6/12 regular opioid use, abstinence is hard, particularly with ongoing symptoms (ie pain, anxiety)
- Usually multifactorial – pain +/- depression +/- THC +...
- Ideally a team approach:
  - Pain & Addiction Physicians
  - Psychiatrist
  - General Practitioner
  - Psychologist / Physio / OT
- Opioid Treatment Program developed for heroin users – *Command & Control*, supervised daily dosing etc
- Codeine using population different - with significant overlap
- What about medicinal THC? (Bachhuber et al 2014, POINT data from Australia

GS, 39 year old woman

- Period pains mid 20s: began ibuprofen/codeine
- Monthly use initially, escalated, waxed and waned
- MBA age 27, admitted: Rx morphine pain relief
- Use escalated to ~40 tablets per day
- 1 year later admitted herself to rehab 2/12
- Abstinent for 2/12 > relapse
- Use steadily increased to ~60 tablets / day
- Roster of 14 pharmacies / fortnight (‘no problems’)

GS, 39 year old woman

- History of depression, Rx escitalopram 20 mg
- Late teens used MA / heroin IV for ~18/12
- Ceased during pregnancy
- Smokes 20 cigarettes /day
- FH mother bipolar disorder – long spells in hospital; oldest sibling > substitute parent
- Father a distant figure – working all hours
- Younger brother: used heroin
- Son 18 at TAFE: THC +

GS, 39 year old woman

- Trained as nurse / midwife, not registered
- Marriage breakdown, moved in with parents
- Began in child care – working as a nanny 4/7
- Anaemic at presentation: Hb 8.9 g/L MCV 72pL
- Rx bup/nal with good effect ~7 yrs ago
- Several relapses – re work & pharmacy access, financial problems (ibuprofen / codeine)

GS, 39 year old woman

- Bup/nal ‘is fantastic’ (current dose 26mg)
- Mood: very good
- Rare cravings, no other opioids for >2 years
- Quit smoking 4 years ago
- No longer anaemic / requiring acid suppression
- Life back on track, son (ex-THC) apprenticeship
- Struggles to attend psychology review re work

GS, 39 year old woman
Summary and conclusions

- Began seeking pain relief – found emotional support – feels S4 rescheduling *long overdue*
- Final dose bup/nal c/w OME / bup equiv (~110mg /~2.7mg)
- H/O depression, childhood attachment issues, IDU in 20s
- Quit smoking
- Given up on AHPRA
- Past relapse at times of stress
- 7 years since commencing bup/nal, over last 2 years continuous Rx, ready to consider gradual reductions
- Context: a moderate / severe SUD (ie duration ~27 years)

(Dennis et al 2005)

MRQ (DDU) Advice: (07) 3328 9890

- Confidential telephone enquiry service for prescribers available 24 hours, 7 days a week.
- Information regarding:
  - Schedule 8 medicines dispensed
  - known drug dependence
  - current drug treatment reports / approvals
  - regulatory requirements
  - treatment options
  - Queensland Opioid Treatment Program history
- QLD S8 Rx information now updated weekly
- ‘Real time’ prescribing may be coming ...

Alcohol and Drug Information Service (ADIS) (1800 177 833)

- 24 hour 7 day Information Service
- Counselling
- + Clinical Advisory Service
  - Operates in southern states
  - Medical Addiction Specialist on call
  - 08.00am – 11.00 pm, 7 days a week
  - Commencing 15 January 2018
  - Dedicated number TBA

Thankyou