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# It's not Just About Mental Health: Co-morbidities in a Cohort of Patients Prescribed Opioid Agonist Treatment by a Nurse Practitioner

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# Author Affiliations

- Stephen Ling
  - John Hunter Hospital, Hunter New England Local Health District and The University of Newcastle
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- Adrian Dunlop
  - Hunter New England Local Health District, NSW Ministry of Health and The University of Newcastle
    - The authors have no further declarations



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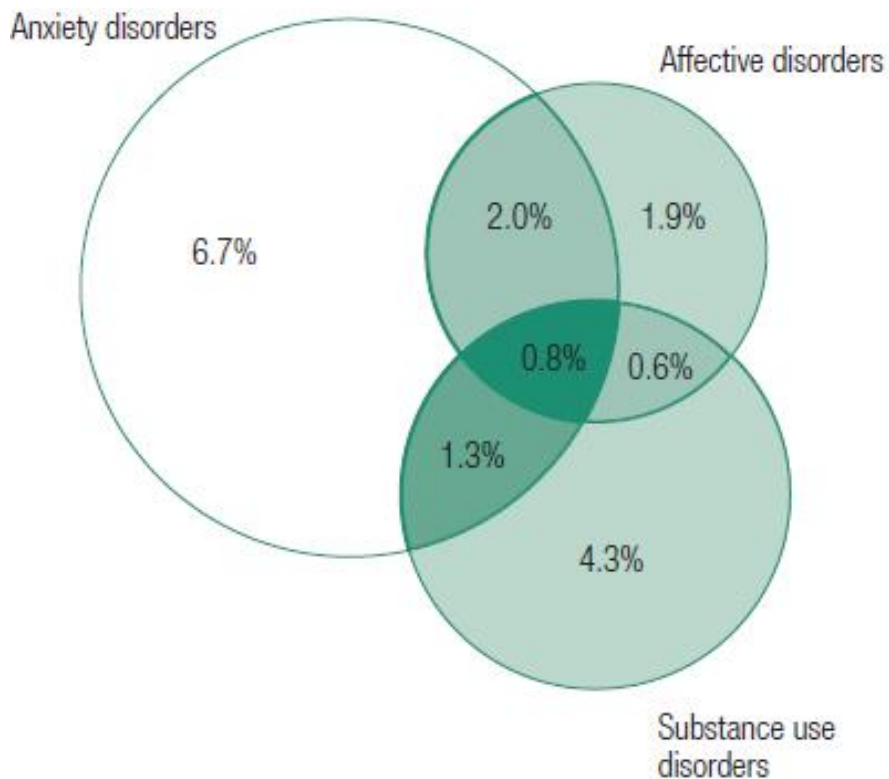
# Ethics Approval

- Ethics approval was provided by Research Ethics and Governance, Hunter New England Local Health District AU201703-11.

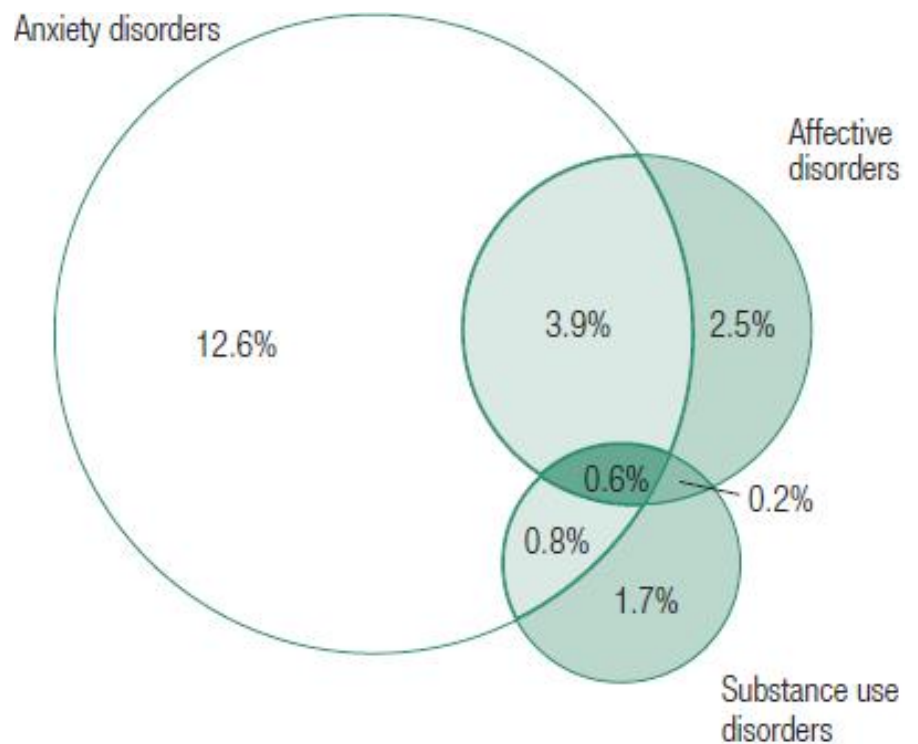


# Co-morbidity and Substance Use, Slade et al 2009

## Men



## Women



# 5 Common Conditions and OST

- Obesity ( $n=53$ )
  - 47% overweight – 6% underweight
- Cardiac ( $n=42$ )
  - 17% abnormal ECG
- Pulmonary ( $n=43$ )
  - 13% abnormal spirometry
- Gynaecology ( $n=21$ )
  - 48% no pap smear prior 2 years
- Hepatitis C ( $n=55$ )
  - 40% RNA PCR detected –
  - FibroScan  $n=44$ , fibrosis 34% (7% severe, 18% cirrhosis)
  - Islam et al (2013).

# Other Conditions

- 27% abscess
  - 9% septicaemia
    - 4% endocarditis - Topp et al, (2008).
- Chronic pain and OST - 37%
  - Rosenblum et al (2003).
- Chronic pain and substance use disorders
  - Up to 43%
  - 5-24% aberrant medication taking
    - Martell et al, (2007).

# Methods

- Retrospective clinical file audit
  - Medical records
  - CHIME
  - CAP
  - DMR
- Authorities approved for a Nurse Practitioner between 30/4/10-31/1/17
- John Hunter Hospital
  - Inpatients
  - Outpatients
- Newcastle Pharmacotherapy Unit



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# Data Collected

- Gender
- Age
- Income
- Accommodation
- Living arrangements
- Smoking status
- Time in treatment
- Primary opioid
- Treatment type
- Reason for treatment
- Co-morbid medical
- Co-morbid psychological
- Doses used
- Exit status and exit reason





# Patient Occasions and Authorities

- 137 patients
  - 5 patients re-treated
- 142 occasions of treatment
  - 9 patients changed treatment type
- 151 authorities

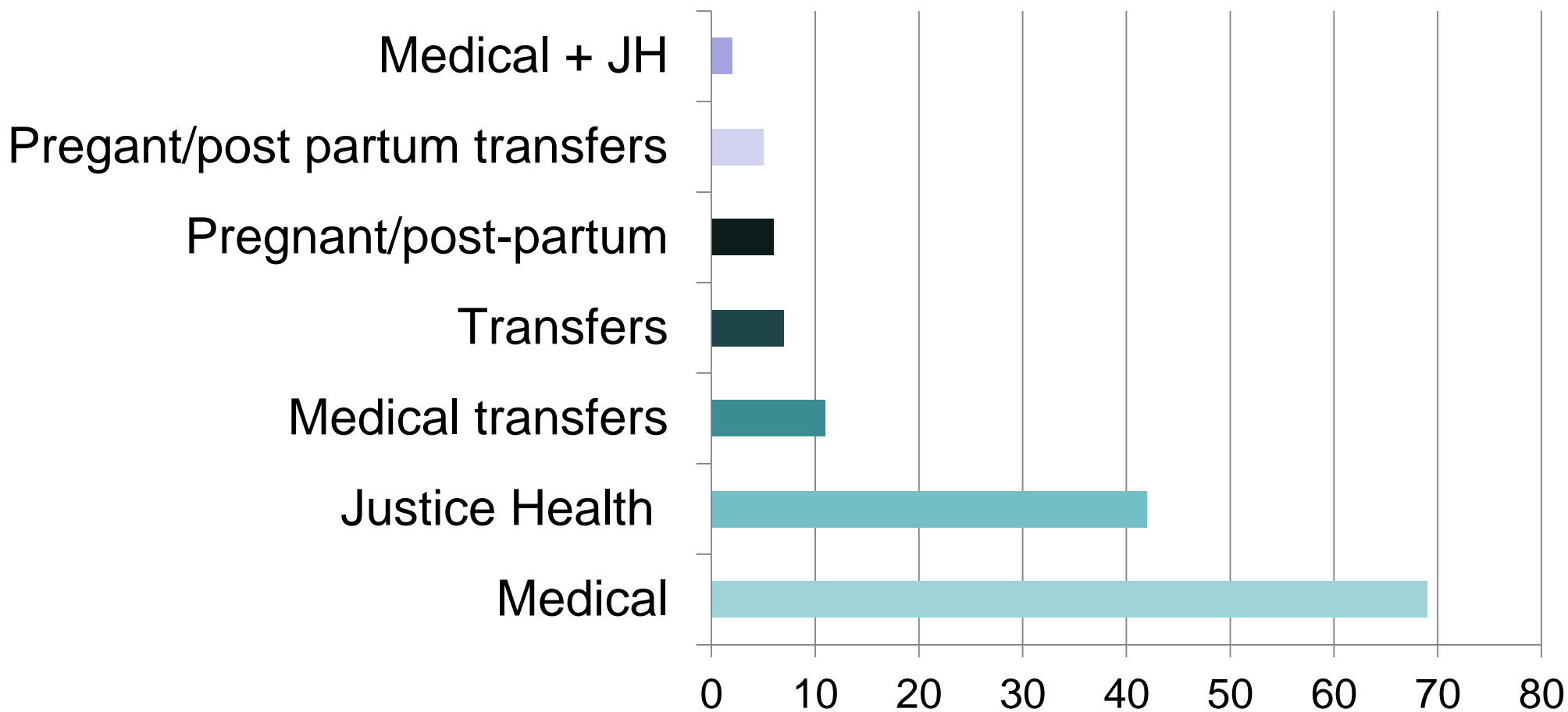


# Basic Demographics

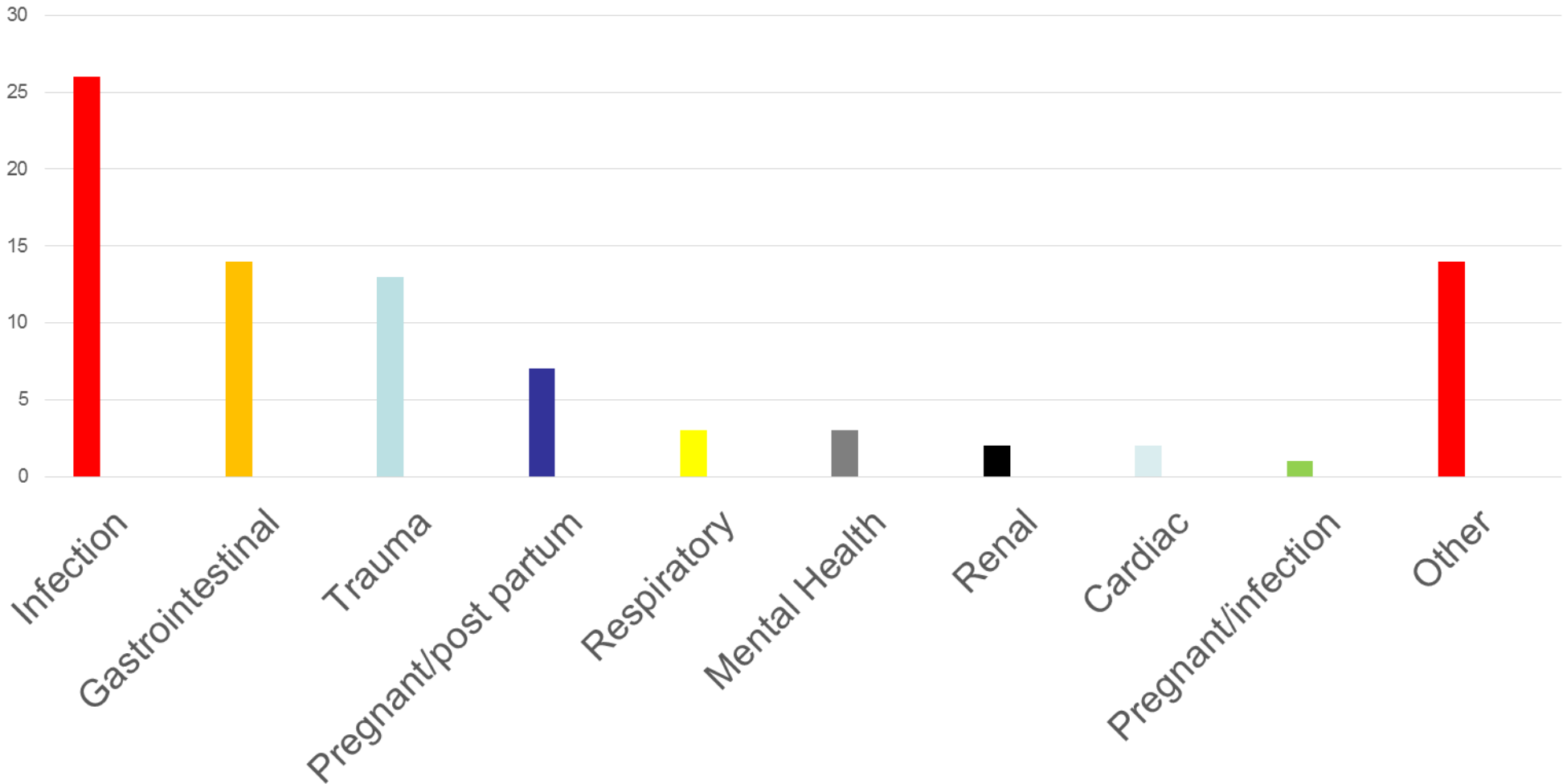


Age ( <i>n</i> =142 occasions)		18-74 (mean 38 years)
Gender ( <i>n</i> =137 patients)	Male	92 (67%) [94]
	Female	44 (32%) [46]
	Transgender	1 (1%) [2]
Income	Pension	61 (43%)
	Newstart	53 (47%)
	Other	28 (10%)
Accommodation	Private Rental	35 (25%)
	Dept Housing	34 (24%)
	Family/Friends	20 (14%)
	Own	17 (12%)
	Other	36 (25%)

# Reason for Treatment

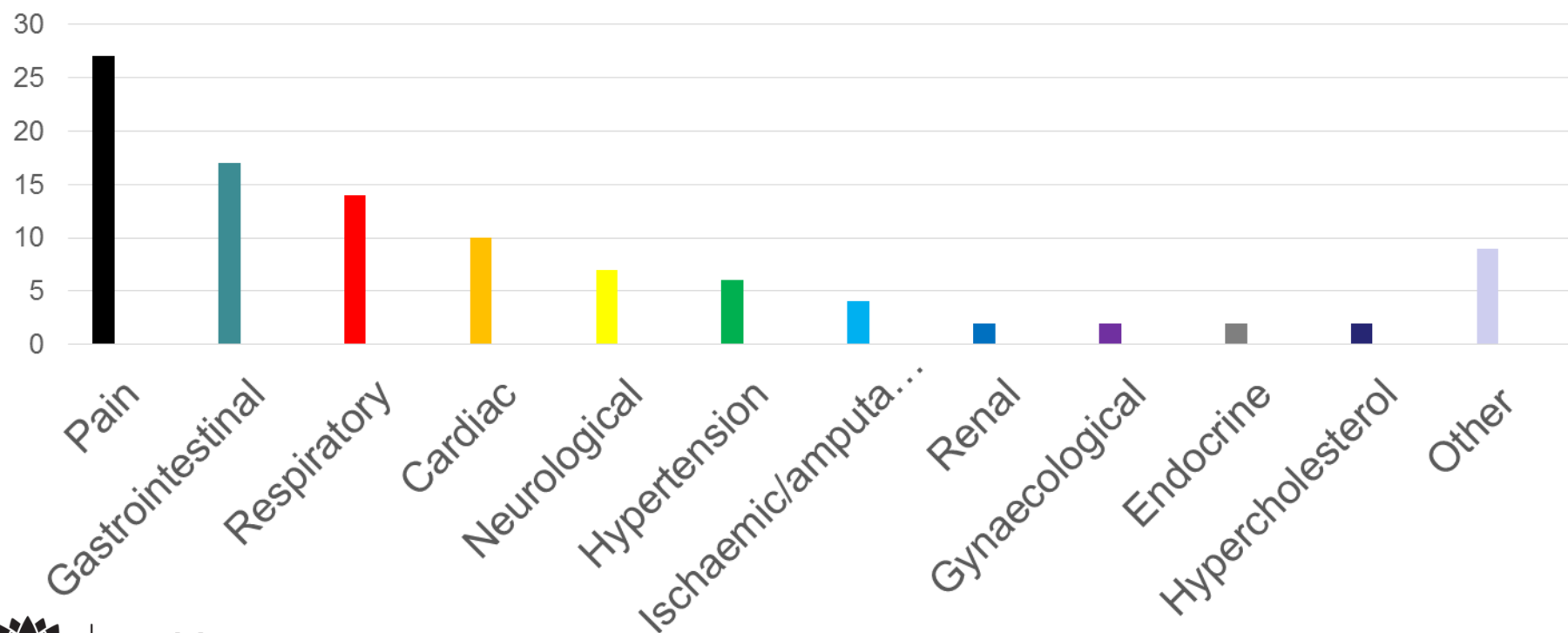


# Physical health – acute $n=85$ patients



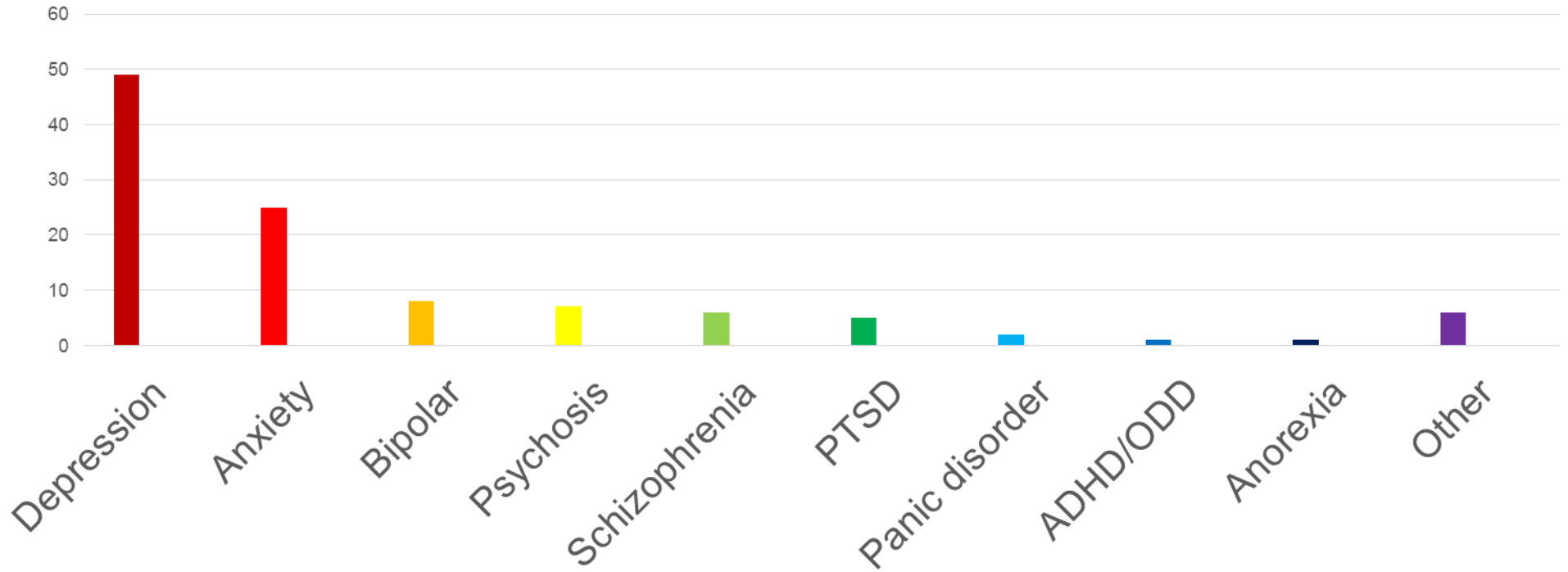
# Physical health – chronic $n=71$ patients

- 101 conditions
- Range 1-5



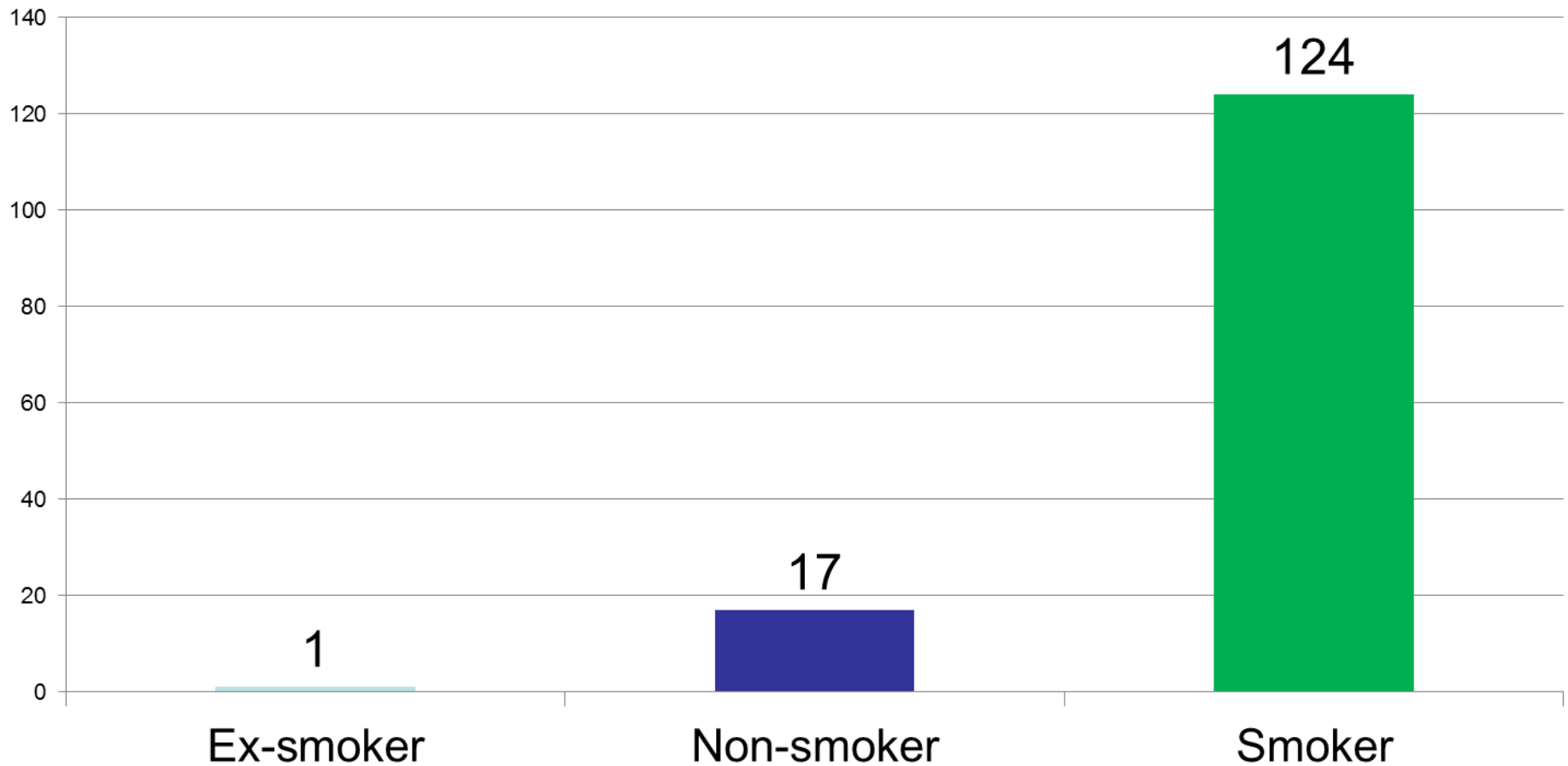
# Mental Health $n=82$ patients

- 110 conditions
- Range 1-3



- 17 Hepatitis B
- 56 Hepatitis C
- 1 HIV
  - Declining testing
  - Lost in translation
  - Insufficient retention
  - Self-report

# Smoking Status at Entry





# Urine Drug Screen Results (*n*=77)

- 11 known alcohol use disorder
- 66 patients no UDS

Total UDS	Opioids	Amphetamines	Benzodiazepines	Total negative
573	77	158	147	320

- 18 patients > 50% amphetamines
- 24 patients > 50% benzodiazepines



# Conclusion

- Most patients have multiple co-morbidities including co-morbid mental health problems with opioid dependence but also physical health co-morbidity
- Clinicians should remain cognizant of physical health problems in addition to mental health co-morbidity



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- These may be related to
  - toxicity of the drugs themselves,
    - the mode of administration
      - the broader implications of the drug use
- Substance users remain at risk of health problems unrelated to their substance use disorders.



# Thank You

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