

Characteristics of the drug treatment population in New South Wales – focus on amphetamine type substances (ATS)

A COQI Project

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Emma Black^{1,2,3}, Rachel Deacon^{1,2}, Llewellyn Mills^{1,2}, Adrian J Dunlop^{4,5}, Nadine Ezard^{3,6,7}, Raimondo Bruno^{3,8}, Anthony Shakeshaft³, Michael Farrell³, Jennifer Holmes⁹, Michelle Cretikos⁹, Mark Montebello^{2,3,10}, David Reid^{11,13}, Steven Childs¹², Krista Siefried^{6,7}, Kristie Mammen¹ and Nicholas Lintzeris^{1,2,13}

¹ Drug and Alcohol (D&A) Services, South Eastern Sydney Local Health District (LHD), Sydney, Australia, ² Discipline of Addiction Medicine, Sydney University, Sydney, Australia, ³ Faculty of Medicine, University of NSW, Sydney, Australia, ⁴ D&A Clinical Services, Hunter New England LHD, Newcastle, Australia, ⁵ School of Medicine and Public Health, University of Newcastle, Newcastle, Australia, ⁶ D&A Services, St Vincent's Hospital, Sydney, Australia, ⁷ National Centre for Clinical Research into Emerging Drugs, Sydney, Australia, ⁸ School of Medicine, University of Tasmania, Hobart, Australia, ⁹ Centre for Population Health, NSW Ministry of Health, Sydney, Australia, ¹⁰ D&A Services, North Sydney LHD, Sydney, Australia, ¹¹ D&A Services, Illawarra and Shoalhaven LHD, Wollongong, Australia, ¹² D&A Services, Central Coast LHD, Gosford, Australia, ¹³ NSW Drug and Alcohol Clinical Research and Improvement Network (DACRIN)

Acknowledgements

- Clients of participating treatment services
- Staff across participating NSW Local Health Districts (LHDs), including:
 - Directors and Managers of Drug and Alcohol Services,
 - Data Managers and Custodians
 - Clinicians
 - Project Officers, Research Officers & Administrative Staff
 - Research Governance and Ethics teams
- The funder: NCCRED
- The COQI and MA Data Project Teams



Background – what makes this project unique?

- ~2016 Introduction of EMR to AODTS: CHOC
- Presents a new research opportunity to inform treatment
- Enables us to ↑ understanding of real-life large-scale clinical data
 - across client populations
 - at a point in time, and
 - over time
- Focus on public outpatient treatment
 - excludes detox, NGOs, private providers

CHOC data includes

- Pre-existing NSW MDS-DATS, such as
 - age
 - sex (*binary*)
 - principal drug of concern (*main drug people are seeking treatment for*)
 - main treatment type (*e.g. counselling, case management, OST*)
- Addition of Australian Treatment Outcomes Profile (ATOP)

Ryan et al. 2014 – past 28 day

- **substance use** (*alcohol, heroin, other opioids, cannabis, amphetamines, cocaine, benzodiazepines, tobacco, injecting*)
- **life situation & stressors** (*days work/study, homelessness/risk of eviction, caring for/living with children, arrest, violence to self/others*)
- **health and wellbeing** (*self rated psychological wellbeing, physical wellbeing, overall quality of life*)

Background – why amphetamine-type substances?

- 2nd most common drug of concern in AOD services, after alcohol *AIHW, 2018*
 - However, limited understanding of these clients as a group *Bartu et al, 2004; McKetin et al., 2018*
- Gaps in population level knowledge:
 - characteristics of people who use ATS in AOD services
 - their participation in health services
 - AOD treatment outcomes
- Topic of ongoing media and political interest
 - we need evidence to inform these discussions!
- **Improving our understanding of this important and diverse group of people will enable us to better meet their treatment needs.**

Today's aims:

1. Provide preliminary example of the type of work that can be done
2. Describe characteristics of people who use ATS in the NSW public outpatient AOD treatment population
 - Currently gathering data that includes follow ups – will enable us to look at outcomes

Specific question:

Is there a difference in the health and wellbeing of clients who have recently used ATS at entry to treatment compared to clients who have not?

Wellbeing at treatment entry



N=3,031 outpatient clients across 4 NSW Local Health Districts,
Jan-Dec 2017

Wellbeing: self-ratings of physical health, psychological health &
quality of life (good/poor)

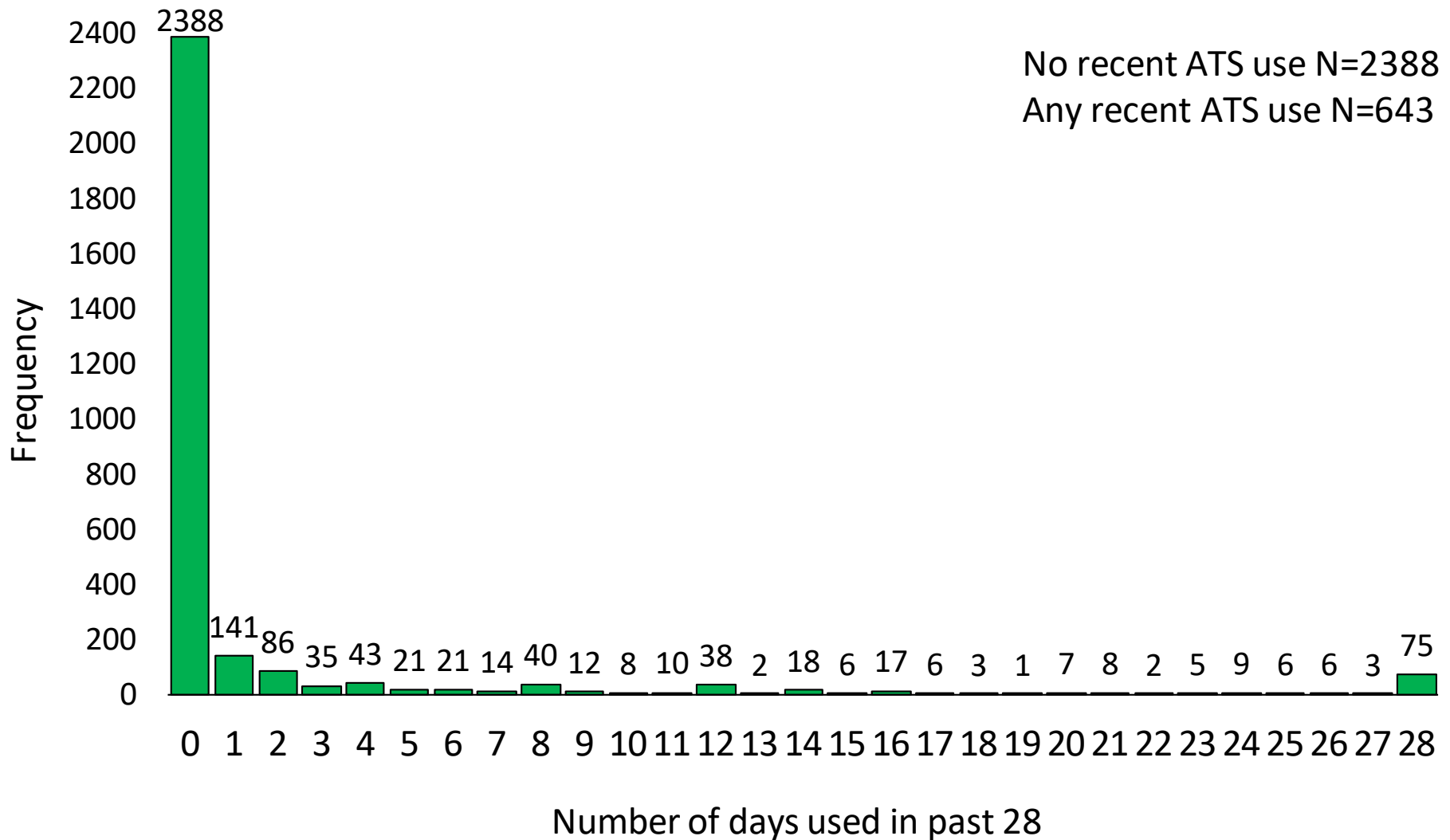
Client descriptors (N=3,031, calendar year 2017)

	Total clients N=3,031
Demographics	
Age: mean years (SD)	38 (11.9)
% Male	68%
Principal Drug of Concern	
Alcohol	44%
ATS	16%
Cannabis	16%
Opioids	24%

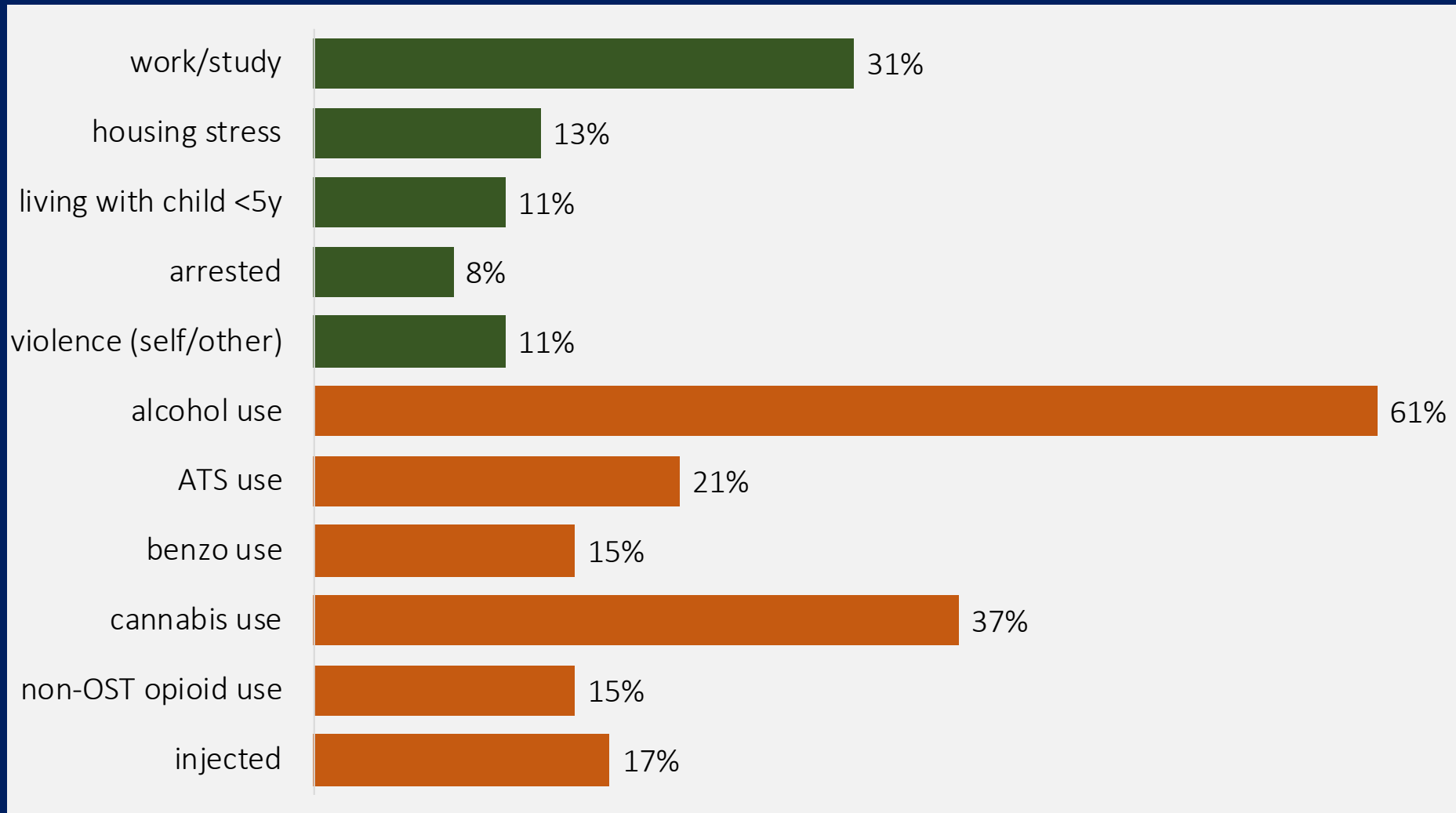
Client descriptors (N=3,031, calendar year 2017)

	Not used ATS in past 28d N=2,388	Used ATS in past 28d N=643	<i>Sig.</i>	Total clients N=3,031
Demographics				
Age: mean years (SD)	39 (12.3)	35 (9.7)	p<0.001	38 (11.9)
% Male	68%	69%	ns	68%
Principal Drug of Concern				
Alcohol	53%	11%	p<0.001	44%
ATS	8%	49%		16%
Cannabis	17%	11%		16%
Opioids	22%	29%		24%

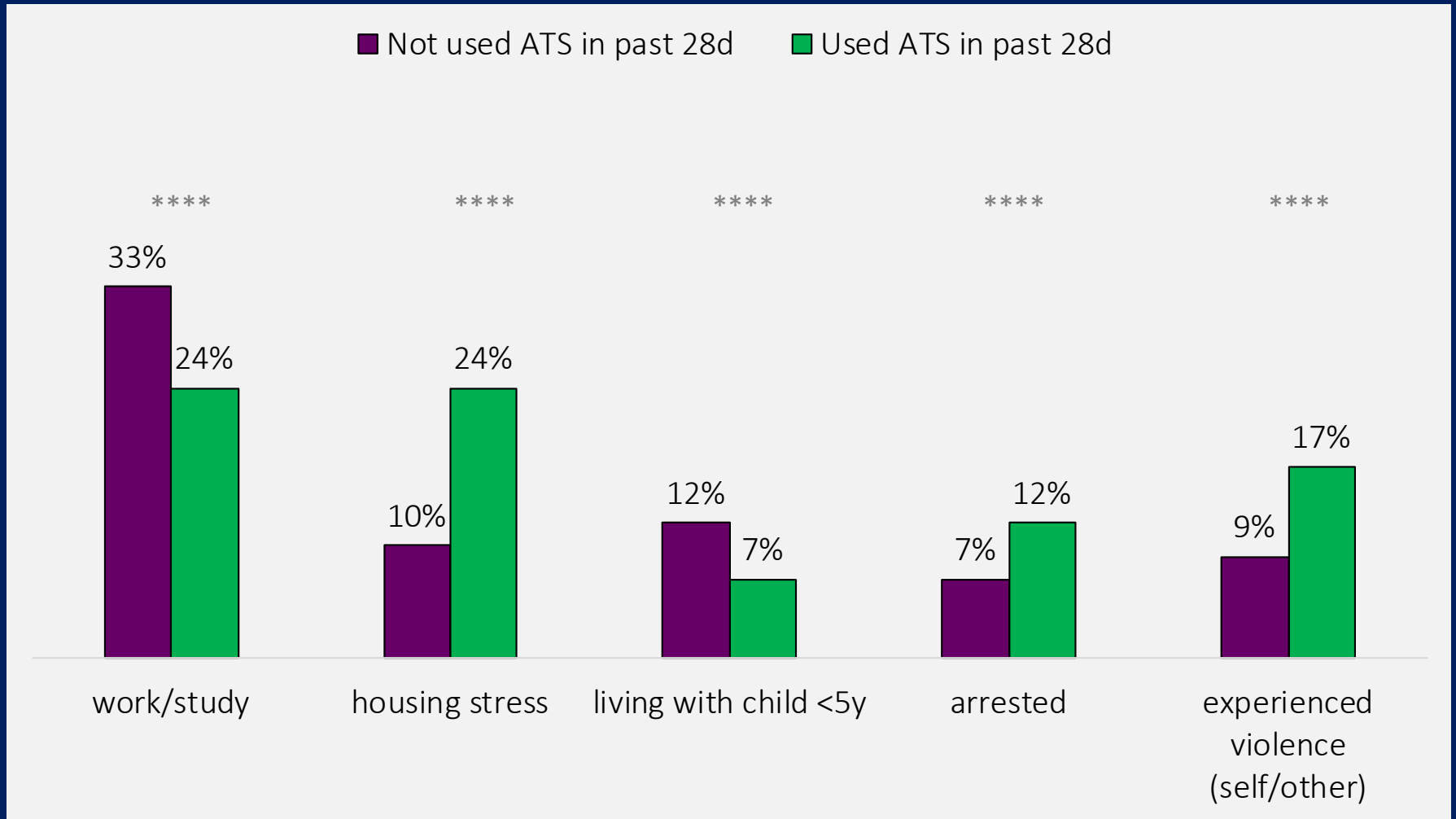
At Assessment: days of ATS use, past 28 days



All clients at assessment: life situation, stressors & substance use, past 28 days

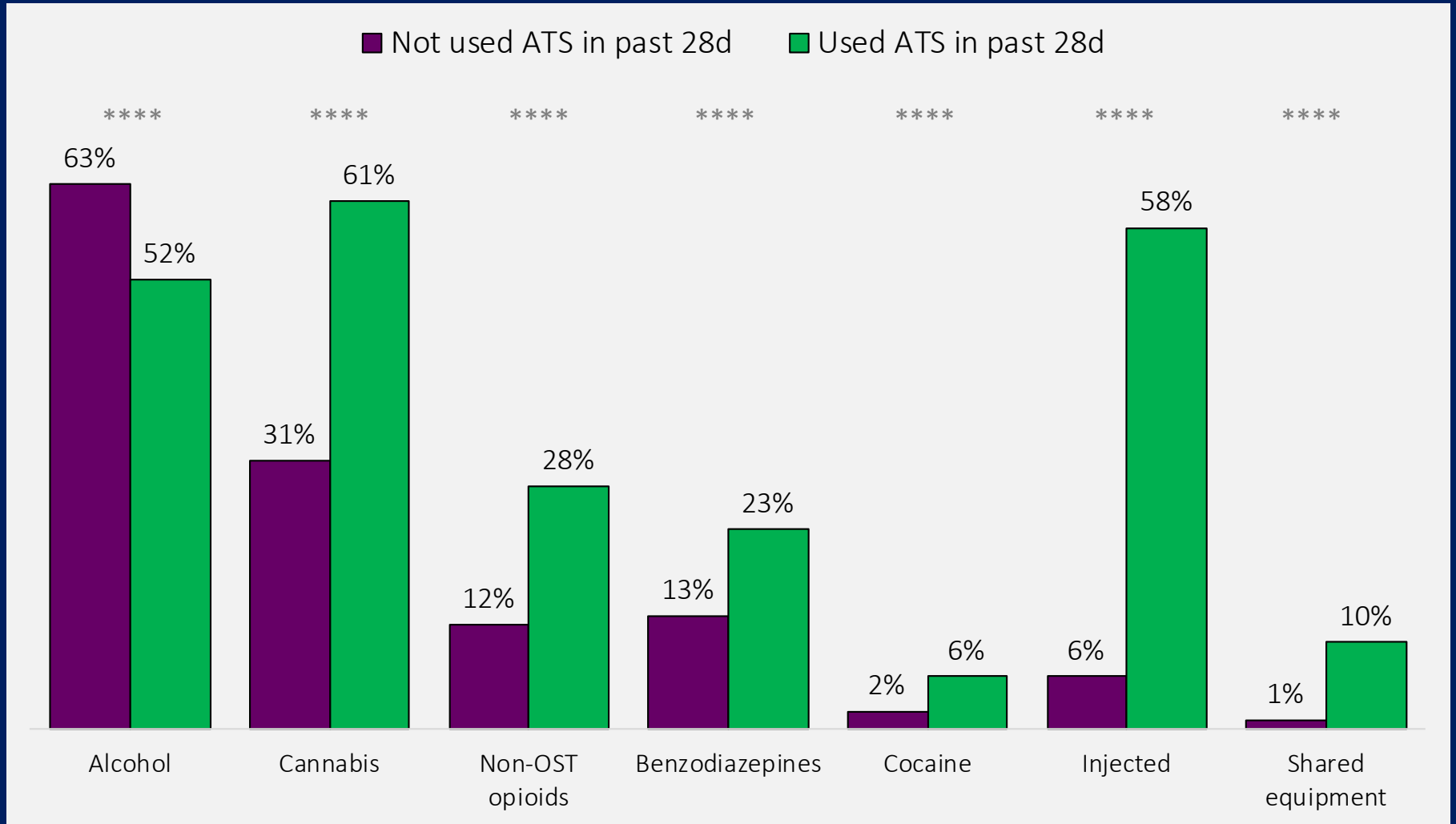


At Assessment: life situation and stressors, past 28 days



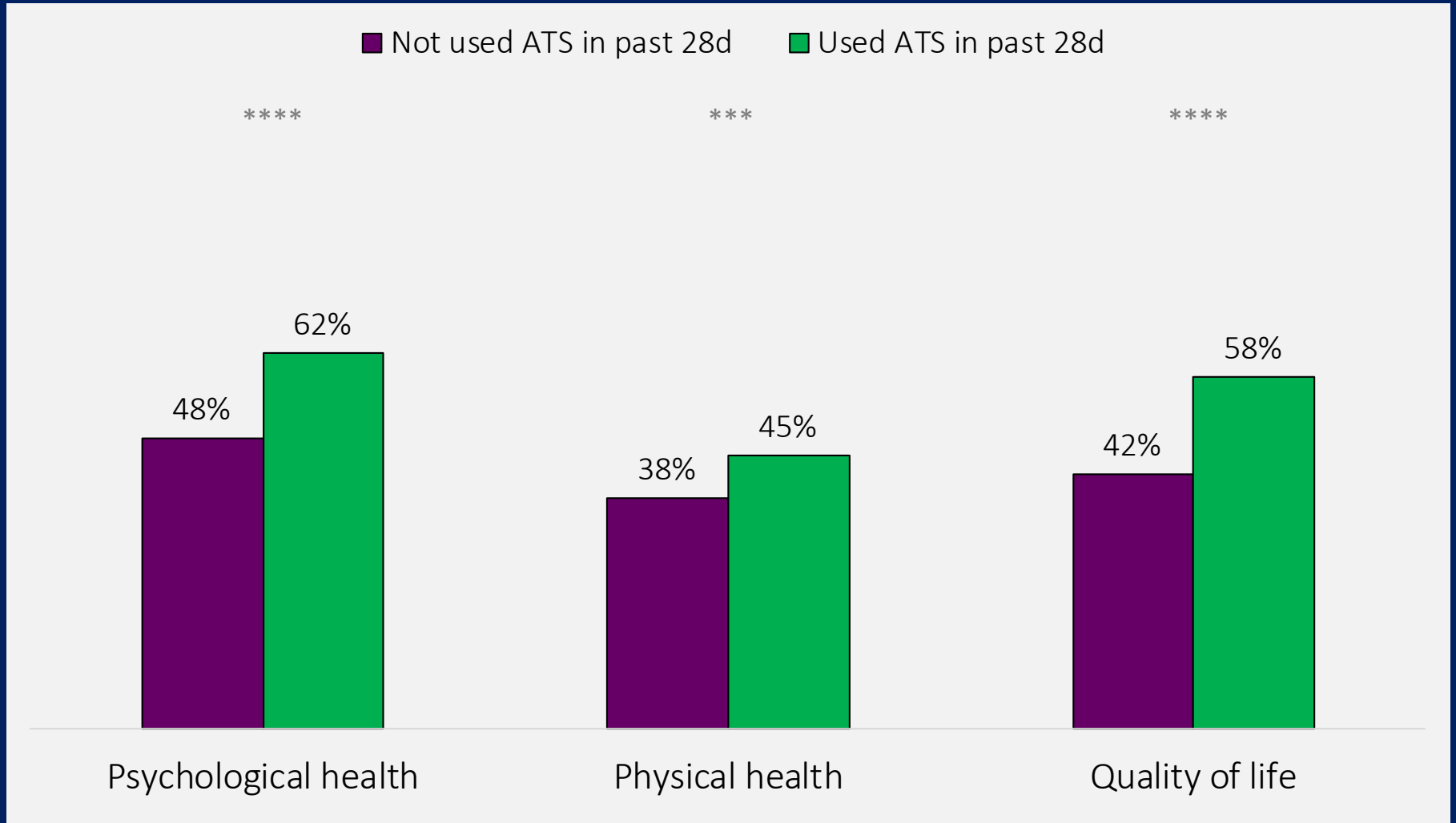
**** p<0.001

At Assessment: substance use & injecting, past 28 days



**** p<0.001

At Assessment: Clients reporting poor health & wellbeing

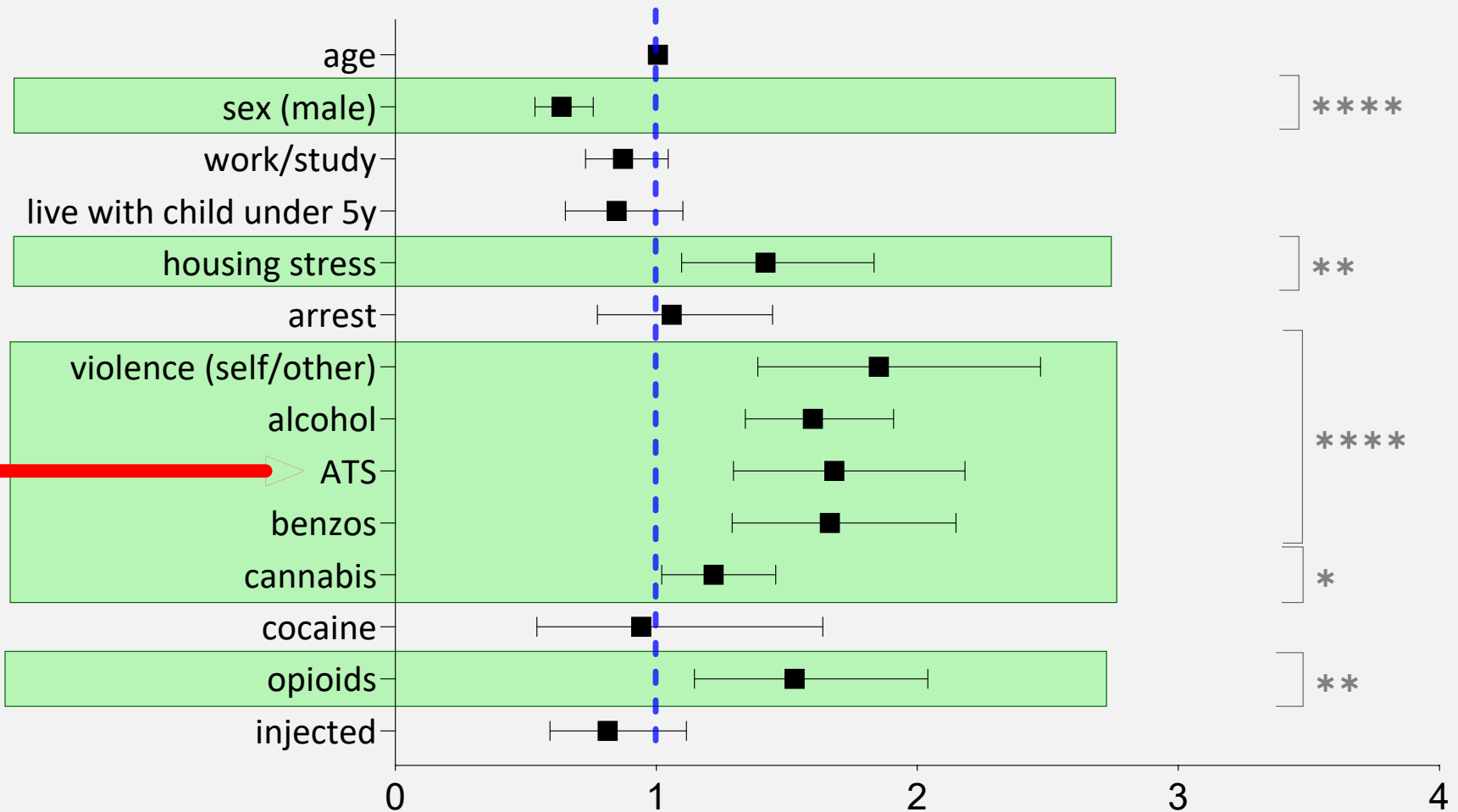


*** $p \leq 0.001$ **** $p \leq 0.0001$

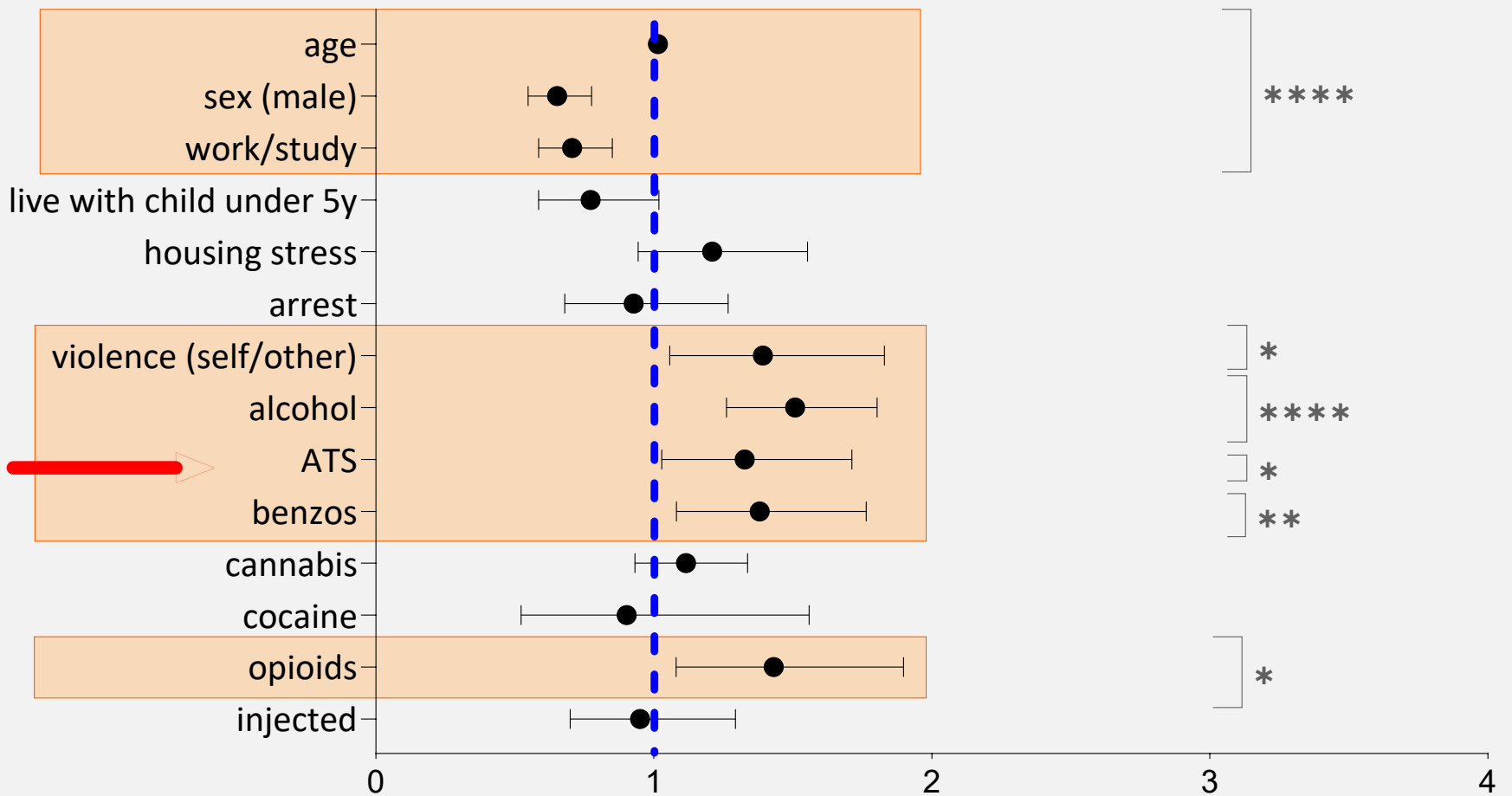
Analysis – binary logistic regressions

- Is amphetamine use itself significantly associated with poorer health and wellbeing at treatment entry?
 - *or is it better explained by other factors (e.g. age, sex, housing stress, violence, other substance use)?*
- Ran 3 separate binary logistic regressions looking at:
 1. Psychological health
 2. Physical health
 3. Quality of life
- Full multivariate regression
- Sensitivity analyses (backwards & forwards stepwise regressions) yielded similar results

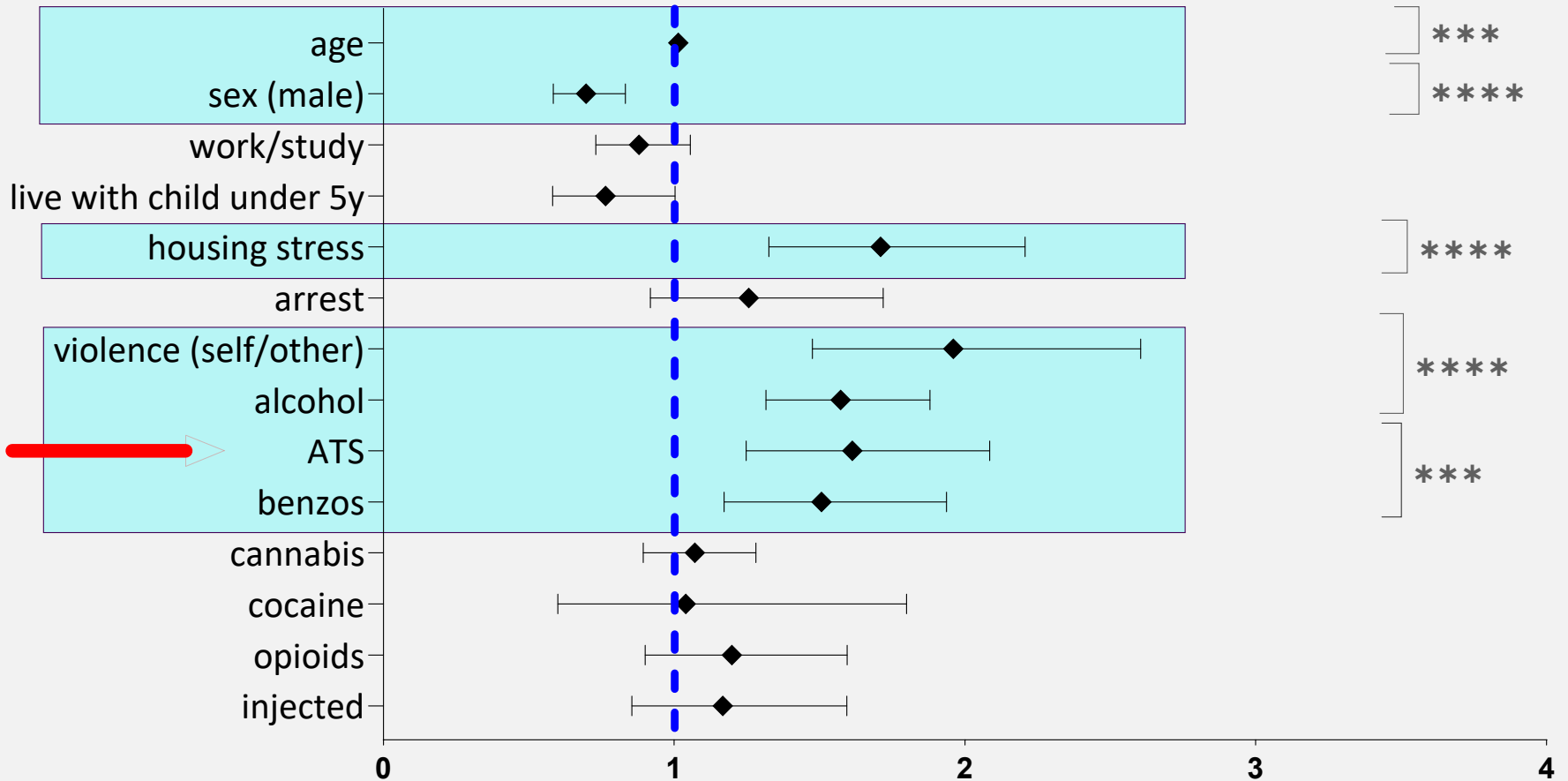
Factors associated with poor psychological health at treatment entry



Predictors of poor physical health at treatment entry



Predictors of poor quality of life at treatment entry



<i>Regression Summary</i>	Poor psych health	Poor physical health	Poor quality of life
Older age		✓****	✓***
Sex (male)	✓**** (women rate more poorly)	✓**** (women rate more poorly)	✓**** (women rate more poorly)
Work/study		✓**** (not working = poorer)	
Live with child under 5y			
Housing stress	✓**		✓****
Arrest			
Violence (self/other)	✓****	✓*	✓****
Alcohol use	✓****	✓****	✓****
ATS use	✓****	✓*	✓***
Benzodiazepine use	✓****	✓**	✓***
Cannabis use	✓*		
Cocaine use			
Non-OST Opioid use	✓**	✓*	
Injected			

Take home messages

- Important to consider days of use, not just PDOC
 - ↑ ATOP completions → more informed service provision
→ hopefully better outcomes for clients!
- Huge potential for use of EMR data to inform services
 - *See COQI symposium on Wednesday morning for more info on this!*
- ATS use at entry to treatment is associated with poorer self-ratings of health and wellbeing at that time, *even when other factors accounted for*

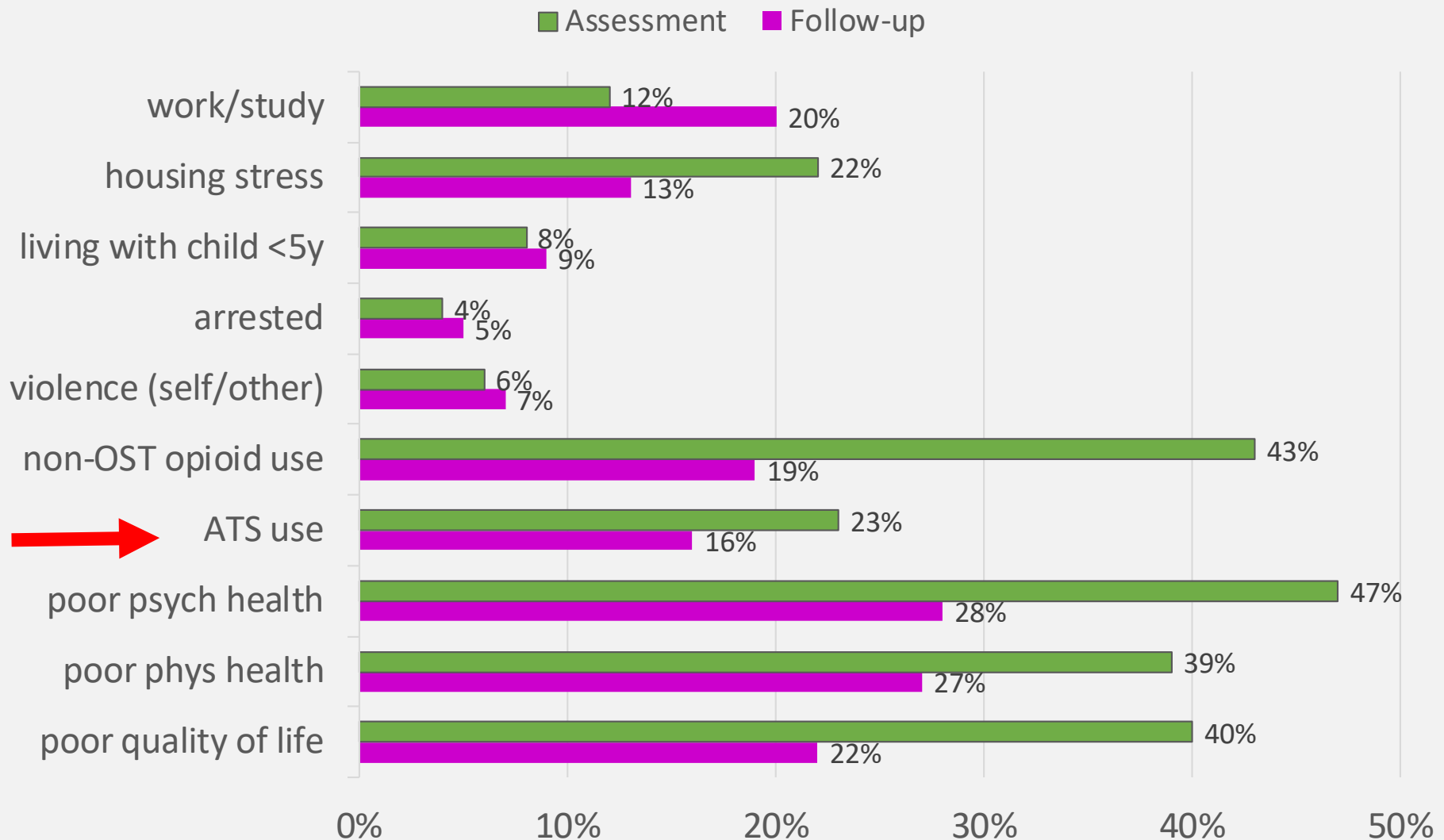
What next?



Treatment outcomes: do ATS use play a role?

- Similar, but larger, dataset
 - 6 LHDs
 - People entering AOD treatment mid-2016-mid 2019
 - Includes assessment and follow up ATOPs
- Combined dataset in preparation
- Focus on OST
 - Large % of Tx population; CHOC inc ATOP now permits us to look at use of drugs that are not principal drug of concern & outcomes (e.g. change in drug use; health & wellbeing)

Preliminary data: n=544 people entering OST with a follow up (3-9mths later), 3 LHDs



Thank you



Contact: emma.black@health.nsw.gov.au