



Kirby Institute

High uptake of direct-acting antiviral therapy for HCV and reduction in population-level viremic prevalence: Progress toward achieving HCV elimination among people who inject drugs

Heather Valerio¹, Maryam Alavi¹, David Silk¹, Carla Treloar², Andrew Milat³, Adrian Dunlop⁴, Jo Holden⁵, Charles Henderson⁶, Janaki Amin⁷, Phillip Read^{1,8}, Louisa Degenhardt⁹, Gregory Dore¹, and Jason Grebely¹ on behalf of the ETHOS Engage Study Group

¹The Kirby Institute, UNSW Sydney, Sydney, Australia, ²Centre for Social Research in Health, UNSW Sydney, Sydney, Australia, ³Centre for Epidemiology and Evidence, NSW Health, Australia, ⁴Drug and Alcohol Clinical Services, Hunter New England Local Health District, Newcastle, Australia, ⁵Population Health Strategy & Performance, NSW Health, Australia, ⁶NSW Users and AIDS Association, Australia, ⁷Macquarie University, Sydney, Australia, ⁸Kirketon Road Centre, Sydney, Australia, ⁹National Drug and Alcohol Research Centre, UNSW Sydney, Sydney, Australia

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This presentation will include the discussion of the investigative use of medical devices (Xpert HCV Viral Load Fingerstick, Cepheid)

Background/Aims

Background: Australia has had unrestricted government subsidised direct-acting antiviral therapy for HCV since March 2016.

Aims: Gauge the progress toward eliminating HCV among people who inject drugs by measuring

- **HCV treatment uptake**
 - **Current HCV infection**
-

Study Design and Participants - ETHOS Engage Cohort



ETHOS ENGAGE

Study design: Observational cohort study

Study setting: Drug treatment clinics and needle and syringe programs (25 sites)

Study recruitment period: May 2018-September 2019

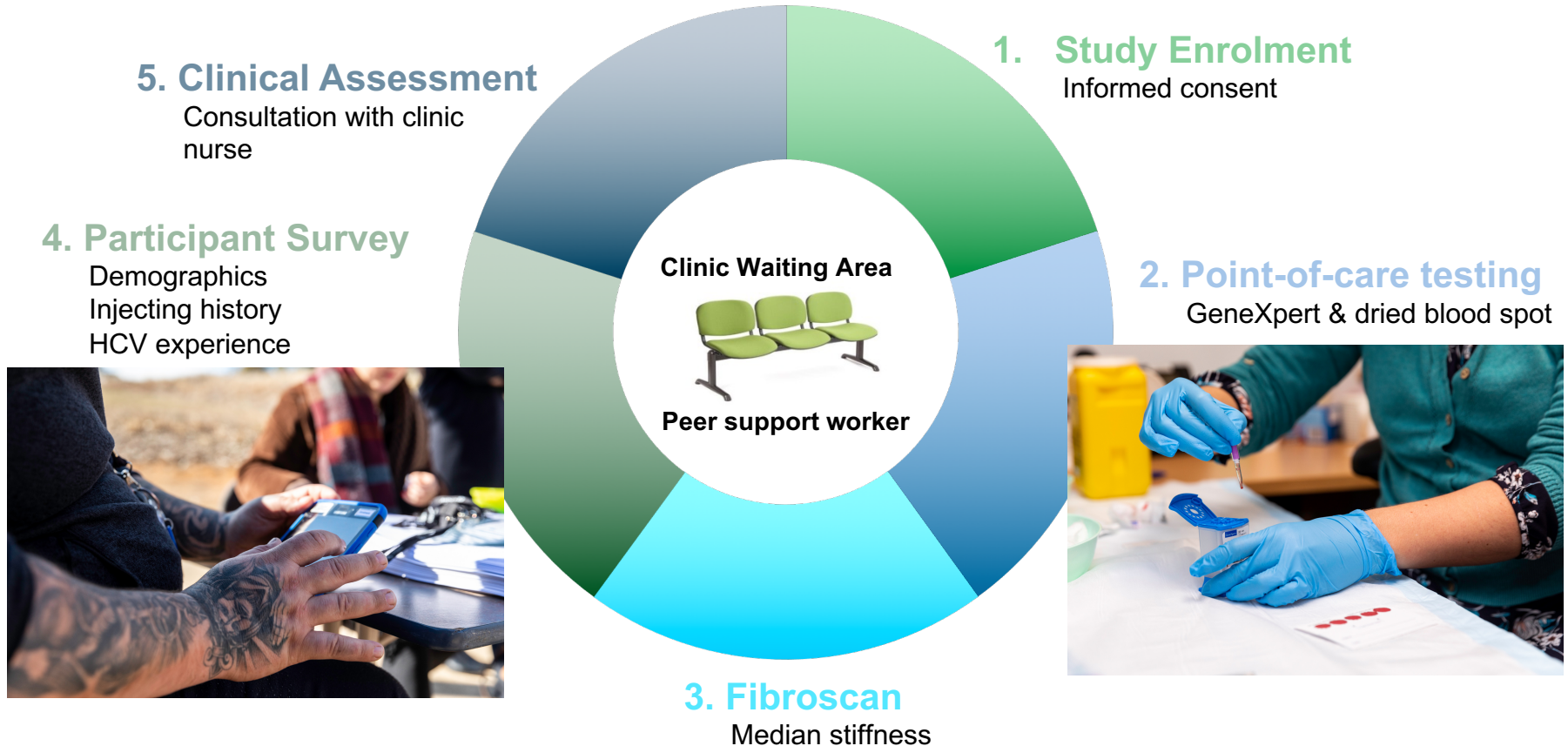
Inclusion criteria:

- 18 years of age or older;
- Written informed consent;
- History of injecting drug use;
- Recent injecting drug use (previous 6 months) OR currently receiving OST.

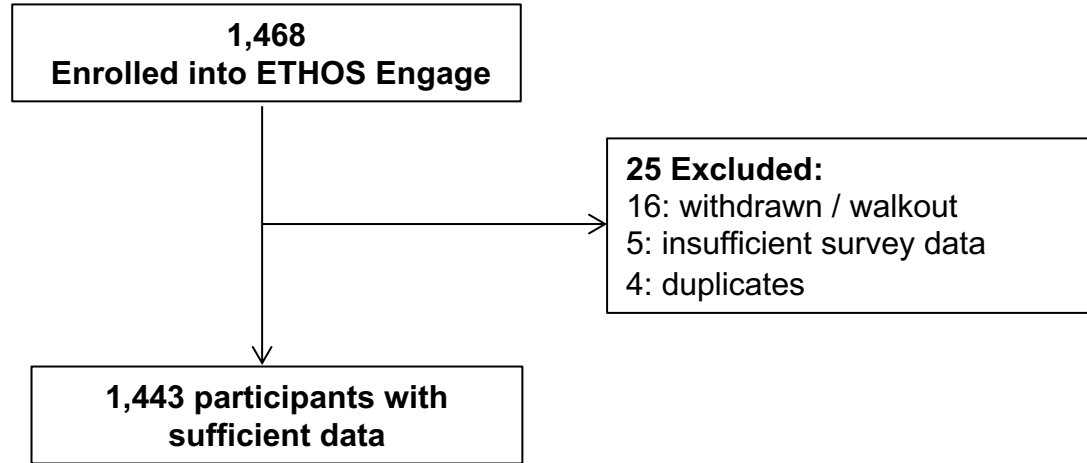
Exclusion criteria:

- Women who are pregnant

ETHOS Engage campaign recruitment days



Participant Disposition

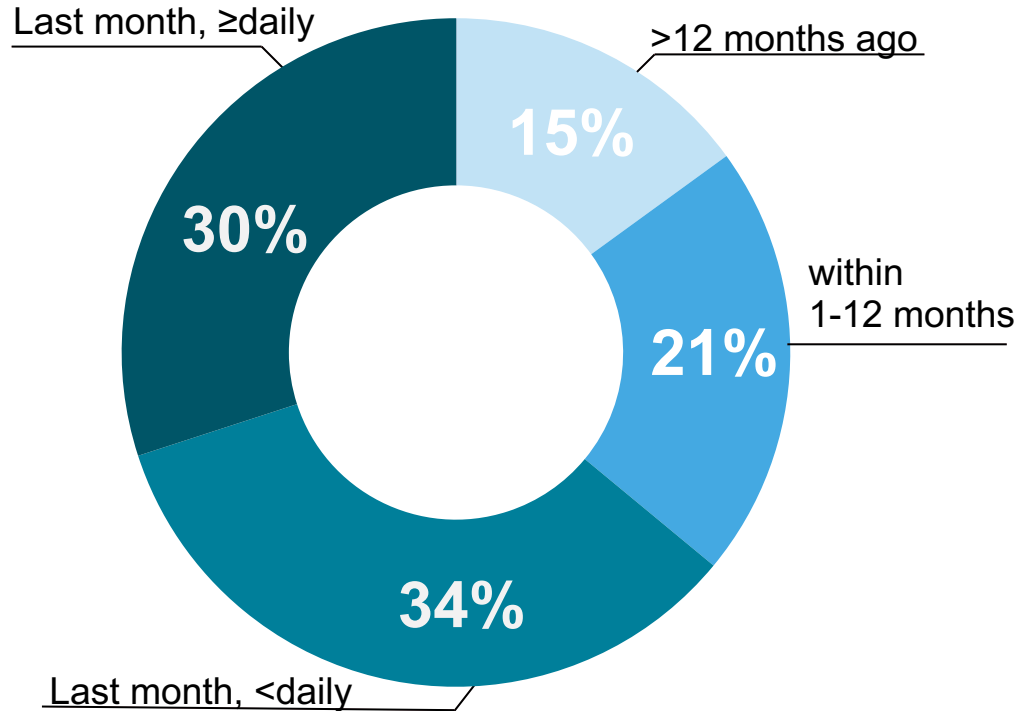


Participant characteristics

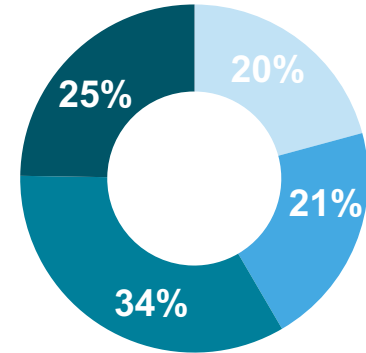
- ❖ 1,443 participants
Mean age: 44 (SD: 10); 65% male; 23% Indigenous ethnicity
- ❖ 157 (11%) currently **homeless**
- ❖ 974 (68%) ever **imprisoned**,
259 (18%) within last year
- ❖ 1070 (74%) currently receiving **opioid substitution therapy**
- ❖ 525 (36%) **excessive alcohol consumption**
as defined using AUDIT-C

Recent injecting drug use

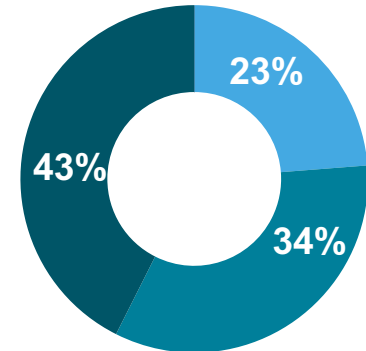
Total population:



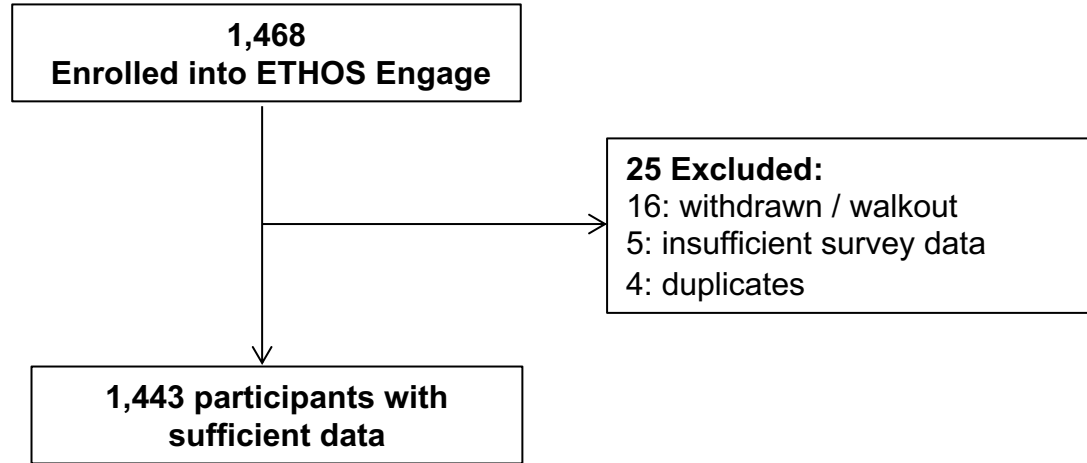
Current OST (n=1,070):



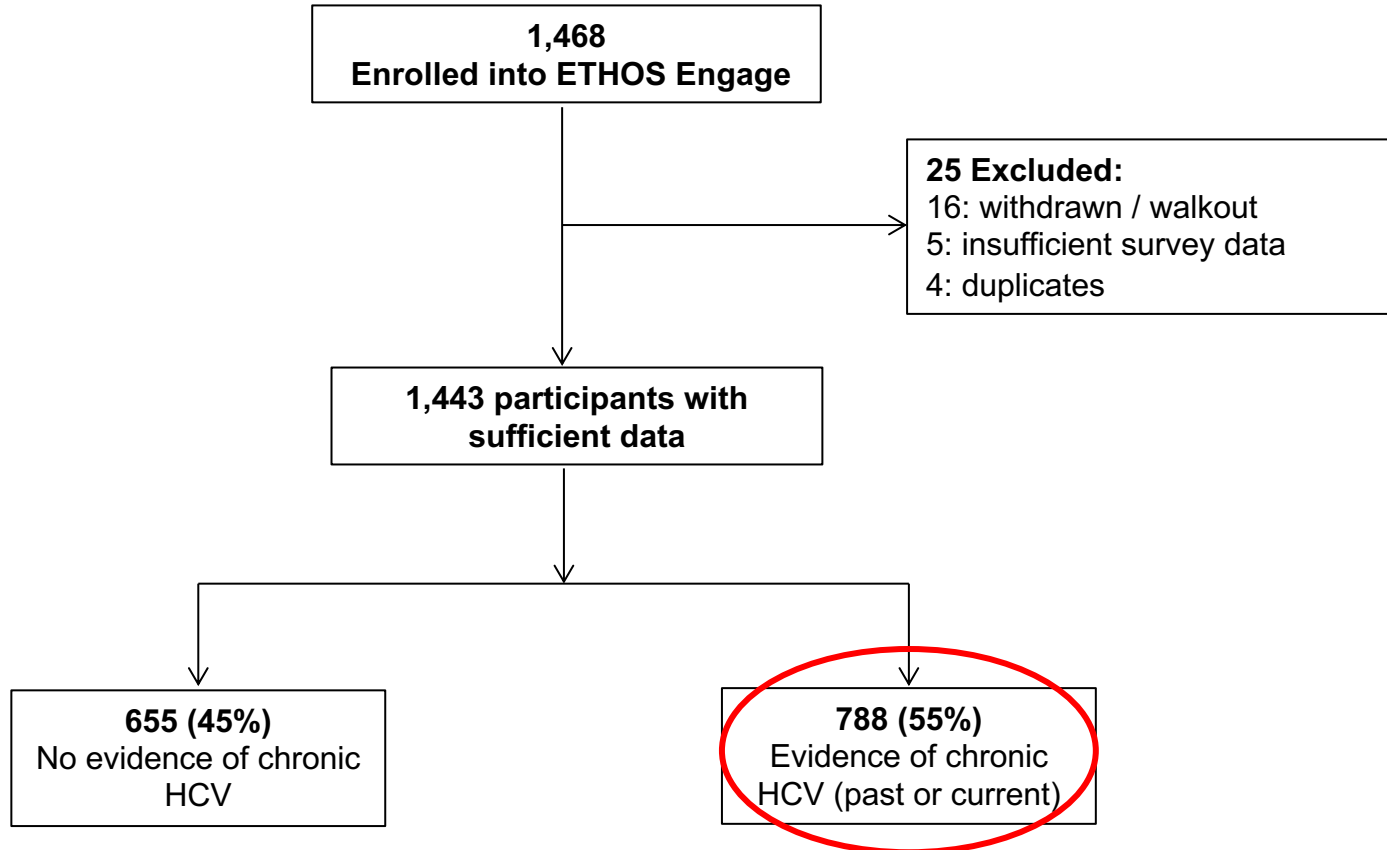
No current OST (n=373):



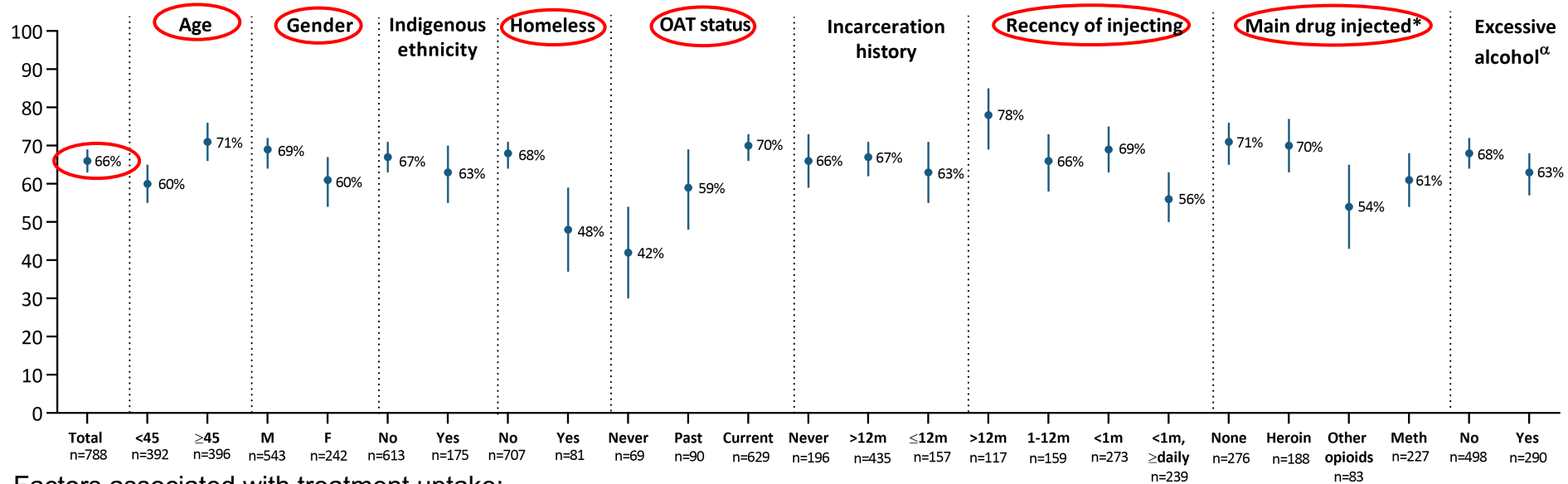
Participant disposition



Participant disposition



HCV treatment uptake and associated factors



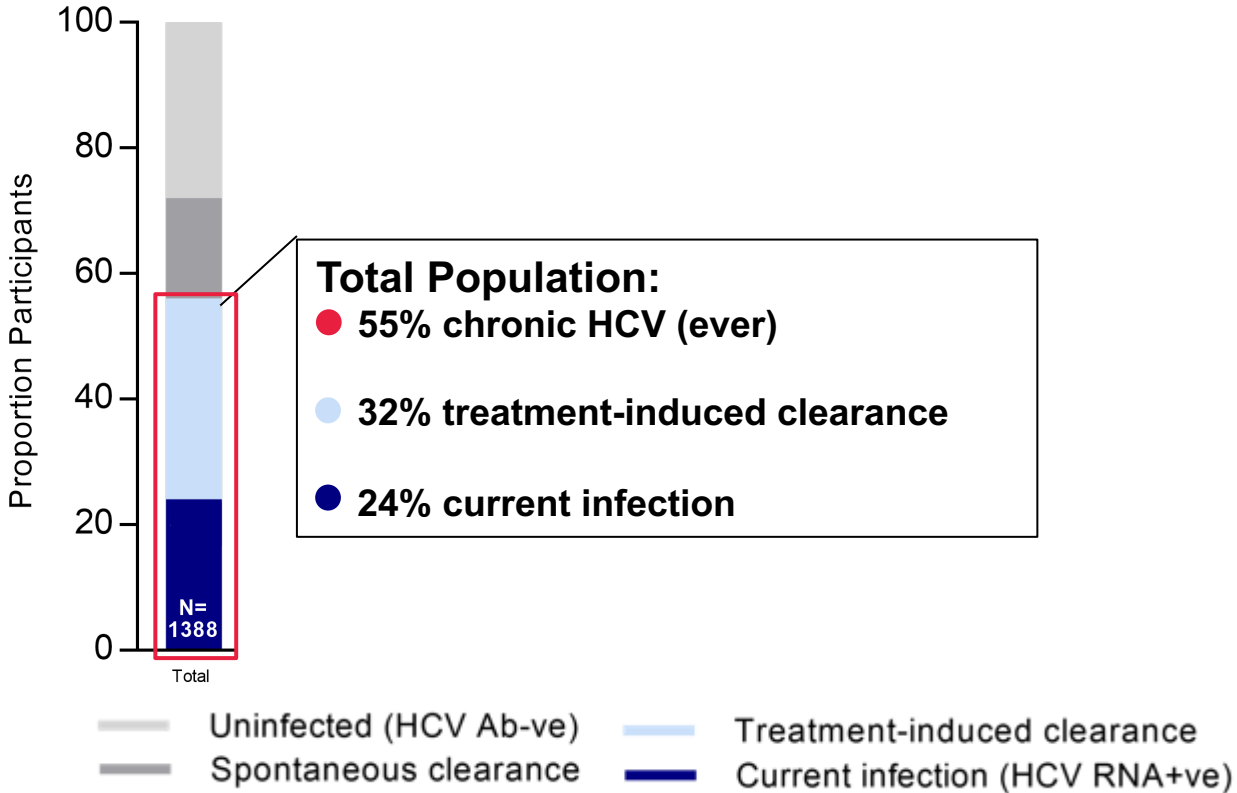
Factors associated with treatment uptake:

- **Age ≥45**, aOR: 1.46, 95%CI: 1.06 – 2.01
- **Female**, aOR: 0.67, 95%CI: 0.47 – 0.95
- **Homelessness**, aOR: 0.59, 95%CI: 0.38 – 0.96
- **Current OAT**, aOR: 2.54, 95%CI: 1.48 – 4.39
- **≥Daily IDU**, aOR: 0.50, 95%CI: 0.29 – 0.86

Chronic HCV (ever) determined by combination of results obtained by point of care serology and self-reported HCV status

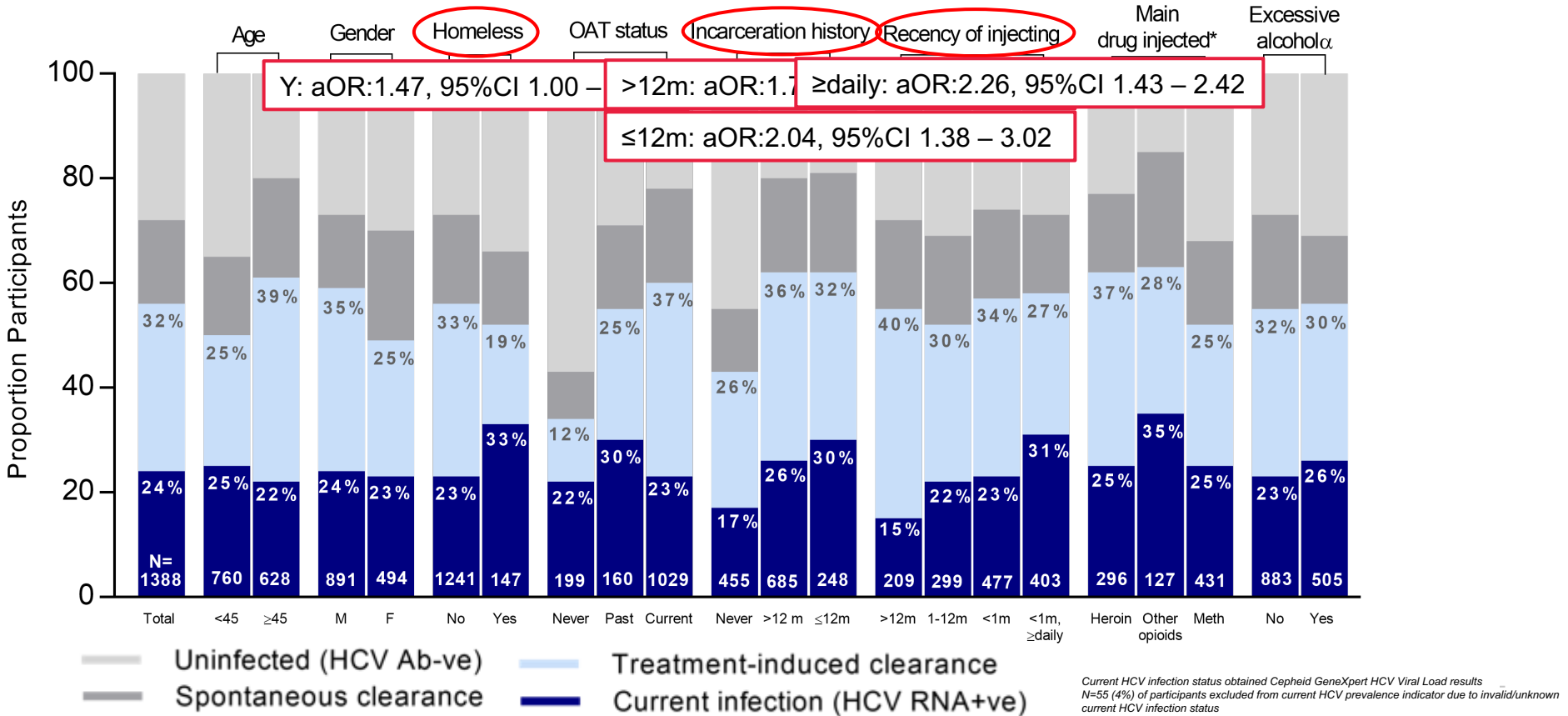
*Main drug injected in last month, excludes data for participants injecting other drugs (n=28); variable not used in adjusted analysis due to collinearity with recency of injecting

Current HCV infection



Current HCV infection status obtained Cepheid GeneXpert HCV Viral Load results
N=55 (4%) of participants excluded from current HCV prevalence indicator due to
invalid/unknown current HCV infection status

Current HCV infection and associated factors



Conclusions

- Unrestricted DAA access in Australia has produced high treatment uptake (66%) among people who inject drugs, across marginalised populations
- High treatment uptake has led to a reduction in the proportion of people with current HCV infection to 24% (>50% reduction among those with history of chronic HCV)
- To maintain momentum toward HCV elimination and achieve targets, sub-populations with significantly higher viremia and those significantly less likely to initiate HCV therapy may require additional support to encourage engagement with HCV care

ETHOS Engage – Future Directions



follow us:
@ETHOSII

Wave 1:

- **Complete!**
- Treatment uptake and outcomes assessed

Wave 2:

- Revisiting all sites
- POC RNA test results available same day
- Prescriber onsite



ETHOS ENGAGE



Acknowledgements

All participants who have contributed their time and data to our study, and:

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Michael Christmass
Craig Connelly
Angela Cooper
Mark Montebello

Protocol Steering Committee

Nicky Bath
Emma Day
Nikitah Habraken
Kyle Leadbeatter
Clarke Scott

Questions/more information:

Email: jgrebely@kirby.unsw.edu.au
Tweet: @jasongrebely

