

PREVALENCE OF HEPATITIS C INFECTION AMONG PEOPLE RECEIVING POINT-OF-CARE TESTING AT COMMUNITY SERVICES IN AUSTRALIA

Stevens A¹, Cunningham EB¹, Markus C², Causer LM¹, Silk D¹, Comben S¹, Hosseini-Hooshyar S¹, Davey S¹, Abbott J¹, Lloyd AR¹, Shaw I¹, Cunningham P^{1,3}, Marshall AD^{1,4}, Treloar C⁴, Shih STF¹, Gray RT¹, Martinello M¹, Hajarizadeh B¹, Lafferty L^{1,4}, Read P^{1,5}, Pedrana A⁶, Sheehan Y¹, Thompson AJ⁷, O'Loan J⁸, O'Flynn M⁸, Dore GJ¹, Matthews S², and Grebely J¹ on behalf of the Australian Hepatitis C Point-of-Care Testing Program

¹The Kirby Institute, UNSW, ²Flinders University International Centre for Point-of-Care Testing, Flinders Health and Medical Research Institute, Flinders University,

³New South Wales State Reference Laboratory for HIV, St Vincent's Centre for Applied Medical Research, ⁴Centre for Social Research in Health, UNSW, ⁵Kirketon Road Centre, South Eastern Local Health District, NSW Health, ⁶Burnet Institute, ⁷Department of Gastroenterology, St Vincent's Hospital and the University of Melbourne, ⁸Kombi Clinic.

Background: Understanding HCV prevalence among different populations and settings is critical to monitor progress towards elimination and enhance testing and treatment. This study assessed HCV antibody and RNA prevalence and associated factors among people accessing community-based testing in the Australian HCV Point-of-Care Testing Program.

Methods: The Program is an observational study evaluating point-of-care testing scale-up at 106 sites in Australia. Testing is offered to people at-risk of HCV infection or attending a service for people at-risk. HCV antibody prevalence was defined as positive antibody test or self-reported history of HCV infection. Logistic regression assessed patient factors/settings associated with current HCV infection (HCV RNA detected).

Results: In 2022-2024, 13,225 point-of-care HCV tests (n=7,193 antibody; n=6,032 RNA) were performed in the community. Among people tested (n=11,566), 38% were female, median age was 45 years (IQR:36-54), and 38% reported injecting drugs in the previous 6 months. Testing in community settings included drug treatment clinics (n=2,265, 23%), needle/syringe programs (n=1,948, 17%), homelessness services (n=1,629, 14%), probation/parole (n=988, 9%), mental health services (n=381, 3%), and other settings (n=3,954, 34%). HCV antibody prevalence was 36% (setting range, 14-51%) and the proportion with current HCV infection was 8% (setting range, 1-11%) (Figure 1). Current HCV infection was associated with injecting drugs in the last six months (aOR, 16.43; 95%CI 11.80, 22.89), incarceration in the last six months (aOR, 1.50; 95%CI 1.22, 1.84) and opioid agonist therapy in the last six months (aOR, 1.17; 95%CI 1.00, 1.37). People tested at mental health (OR, 0.08; 95%CI 0.02, 0.24) and homelessness (OR, 0.74; 95%CI 0.59, 0.93) services had lower odds of current HCV infection compared to drug treatment clinics.

Conclusion: Current HCV infection prevalence varied across settings, with the lowest in mental health settings and highest in probation/parole settings. These data inform targeted testing and treatment strategies in different settings.

Disclosure of Interest Statement: JG has received research grants, speaker fees, and participated on advisory boards for AbbVie, Cepheid, Gilead Science and Merck. GD has received research grants from Abbvie and Gilead Sciences.

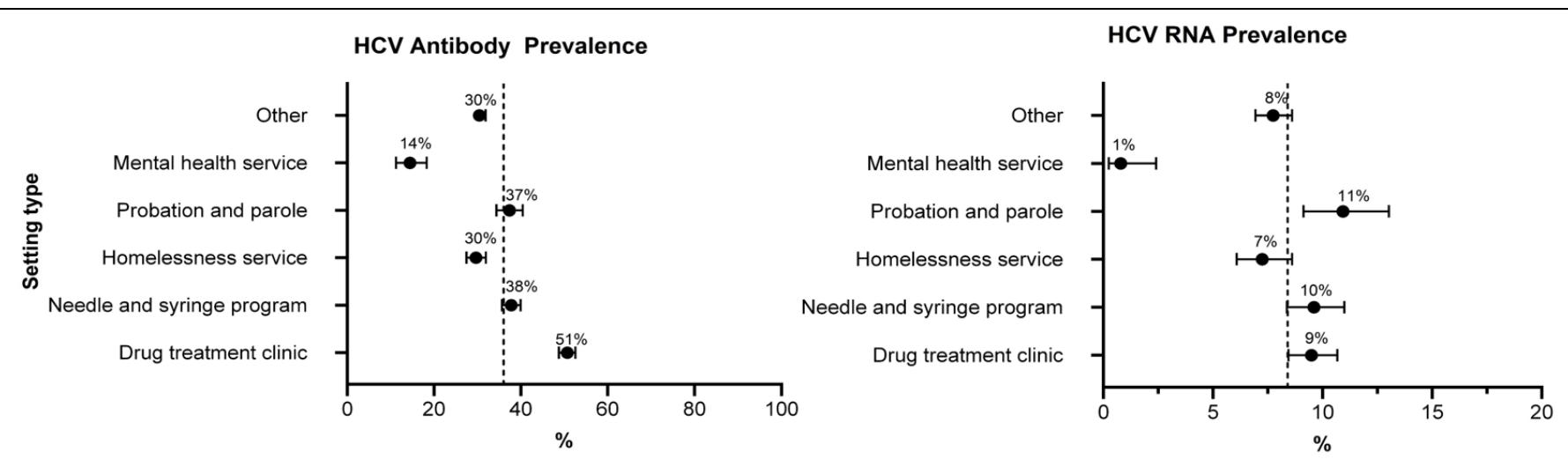


Figure 1: Proportion (%) of participants with HCV antibody positive and current HCV infection (RNA detected) by setting type