

A NATIONAL PROGRAM TO SCALE-UP DECENTRALIZED HEPATITIS C VIRUS POINT-OF-CARE TESTING AND TREATMENT IN AUSTRALIA

Authors:

Grebely J¹, Markus C², Causer LM¹, Silk D¹, Comben S¹, Hosseini-Hooshyar S¹, Davey S¹, Lloyd AR¹, Martinez M¹, Shaw I¹, Cunningham P^{1,3}, Fowle C⁴, Cunningham EB¹, Marshall AD^{1,5}, Byrne M¹, Treloar C⁵, Shih STF¹, Gray RT¹, Wiseman V^{1,6}, Applegate TL¹, Guy R¹, Martinello M¹, Hajarizadeh B¹, Lafferty L^{1,5}, Dimech W⁷, Cabuang L⁷, Schroder P⁸, Read P^{1,9}, Pedrana A¹⁰, Sheehan Y¹, Thompson AJ¹¹, O'Loan J¹², O'Flynn M¹², Dore GJ¹, and Matthews S² on behalf of the National 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, ⁴Hepatitis Australia, ⁵Centre for Social Research in Health, UNSW, ⁶Department of Global Health and Development, London School of Hygiene & Tropical Medicine, ⁷National Reference Laboratory, Australia, ⁸Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine, ⁹Kirketon Road Centre, South Eastern Local Health District, NSW Health, ¹⁰Burnet Institute, ¹¹Department of Gastroenterology, St Vincent's Hospital and the University of Melbourne, ¹²Kombi Clinic.

Background: Fingerstick point-of-care HCV RNA testing enables diagnosis and treatment in a single-visit, increases testing acceptability, and reduces loss to follow-up. This analysis evaluated HCV testing, RNA prevalence, and treatment uptake in a national program to scale-up point-of-care HCV testing.

Methods: Through an observational study, the National Australian HCV Point-of-Care Testing Program is evaluating the scale-up of point-of-care HCV testing (antibody: Bioline HCV test; RNA: Xpert HCV Viral Load Fingerstick test) at 90 sites in Australia, including drug treatment clinics, needle and syringe programs, prisons, mental health services, homelessness services, Aboriginal Community Controlled Health Organisations, and mobile outreach clinics. The program facilitates point-of-care testing for anyone at risk of HCV or attending a service providing care for people at risk of HCV. The program also includes standardised operator training for non-laboratory staff and a quality assurance framework. Immediate HCV RNA testing is performed in settings with high HCV antibody prevalence ($\geq 15\%$, drug treatment, needle syringe programs and prisons). HCV antibody testing with reflex RNA testing is performed in settings with low HCV antibody prevalence ($< 15\%$, mental health, homelessness).

Results: Between January 2022 and March 2023, 59 sites (community, n=47; prison, n=17) have been established in five states/territories (151 operators trained) with 8,027 HCV point-of-care tests performed (antibody, n=1,104; RNA, n=6,923), with 2,484 people tested in the community and 4,754 in prison. Among those receiving HCV RNA testing, 992 people (14%) have current HCV infection (community, 11%; prison, 15%). Among the evaluable population (reached 12 weeks post-testing), HCV treatment uptake is 86% (669 of 782) overall, including 51% (74/144) in the community and 93% (595 of 638) in prison.

Conclusion: Onsite point-of-care HCV testing has led to high treatment uptake across Australia, particularly in prison settings. Standardised operator training and quality assurance delivery and management have been critical for test performance.

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