The hepatitis C cascade of care for opioid agonist therapy recipients in ACCESS participating clinics in Australia.

Authors:

<u>Griffin S</u>^{1,2,3}, Asselin J¹, Wilkinson AL^{1,2,4}, Donovan B⁵, Guy R⁵, Dimech W⁶, Thompson A^{3,7}, Winter R^{1,2,3}, Traeger M¹, Penn M⁸, Stoové M ^{1,2,9}, Hellard M^{1,2,5,10}, on behalf of the Australian Collaboration for Coordinated Enhanced Sentinel Surveillance of sexually transmissible infections and blood-borne viruses (ACCESS).

¹Disease Elimination, Burnet Institute, Melbourne, VIC, Australia, ²School of Public Health and Preventive Medicine, Monash University, Melbourne, VIC, Australia, ³Department of Gastroenterology, St Vincent's Hospital, Melbourne, VIC, Australia, ⁴University of Melbourne School of Population and Global Health, Melbourne, VIC, Australia, ⁵Kirby Institute, University of New South Wales, Sydney, NSW, Australia, ⁶National Serology Reference Laboratory, Melbourne, VIC, Australia, ⁷Department of Medicine, University of Melbourne, Melbourne, VIC, Australia, ⁸North Richmond Community Health, Melbourne, VIC, Australia, ⁹Australian Research Centre in Sex, Health and Society, La Trobe University, Melbourne, VIC, Australia, ¹⁰Department of Infectious Diseases, The Alfred and Monash University, Melbourne, Australia

Background: People prescribed opioid agonist therapy (OAT) are a key population for hepatitis C virus (HCV) elimination. Health service engagement associated with OAT provision may facilitate HCV testing and treatment. We aim to quantify the testing and treatment cascade among people receiving OAT in Australia.

Methods: We extracted linked data from individuals attending any of 57 primary and sexual health clinics participating in the ACCESS surveillance network from 01-January-2016 to 31-December-2023. Outcomes included evidence of any HCV test (antibody or RNA) or direct-acting antiviral (DAA) prescription after first OAT prescription. Individuals with positive RNA were inferred as antibody positive, and individuals with a DAA prescription were inferred as RNA and antibody positive. To allow a minimum of 12 months to observe testing and treatment, individuals prescribed OAT were included until December-2022. We estimated the number of individuals at each stage of the following cascade by the end of the study period: (1) positive antibody, (2) positive RNA, and (3) DAA prescription. Among those with an observed positive RNA result, we calculated the average time between first positive RNA and DAA prescription.

Results: Among 15,391 individuals prescribed OAT, 44% (6,704/15391) had an HCV antibody or RNA test after their first OAT prescription. Of these, 65% (4360/6704) were antibody positive by the end of the study period. Of these, 65% (2,834/4360) were RNA positive, and of those, 71% (2,008/2834) were prescribed DAAs. The median time between first positive RNA test and DAA prescription was 86.5 days (IQR32-252).

Conclusion: A high proportion of people prescribed OAT were not engaged in care by their OAT provider or across the ACCESS network. Given the high prevalence of antibody and RNA positivity, integrating HCV care into regular OAT care should be a

priority for elimination. Once diagnosed, retention in care is high among those prescribed OAT.

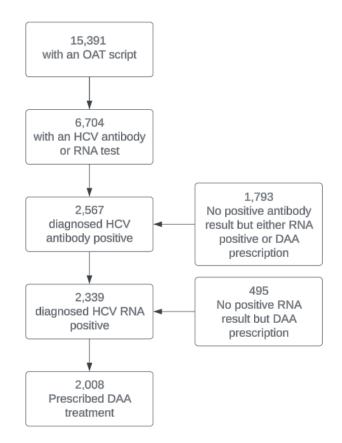


Figure 1 Patient flow chart through hepatitis C testing and treatment.