

Preparing for the final phase of elimination: A test-and-treat approach to micro-eliminate hepatitis C in Cairns, Australia

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Background: Cairns, a regional city in Far North Queensland, Australia, with a population of ~150,000, was one of the first locations to lead a hepatitis C micro-elimination response in Australia. Between 2016-2020, >1,368 people received treatment and HCV RNA prevalence in a community sample of people who inject drugs dropped from 26% to 4%. However, in 2019 an outbreak in the local prison seeded a resurgence of new infections in the community, particularly among Aboriginal and Torres Strait Islander populations.

Methods: As Cairns gets closer to micro-elimination there is increased risk of ongoing outbreaks, requiring a continued effort to case-find new infections in a timely manner. The 'Final Phase of Elimination' program includes a same-day test & treat trial, which delivers rapid point-of-care (POC) RNA testing 60 minutes (GeneXpert®) and simplified same-day dispensing of treatment to reduce time to cure using a nurse-led approach, incentives, and peer-support.

Results: From July 2022-January 2023, 135 eligible clients were consented and 111 completed POC RNA testing. Median age was 41 years, majority were male (57%), unemployed (79%), 12% were experiencing homelessness and 8% were housed in supported/crisis accommodation. Over a quarter were Aboriginal (25%), Torres Strait Islander (7%) or Aboriginal and Torres Strait Islander (9%). Majority had injected drugs in the past month (87%), mostly methamphetamine (80%), and had a history of incarceration (55%). Of the 111 tested, 14 were RNA positive (12.6%), 11 were eligible for same-day treatment, with 9 initiating treatment (median time to script was 16 days, range 0-45 days). This model has engaged new clients (52%) by promoting POC testing, incentives (95%) and peer workers (35%).

Conclusions: Delivering a package of interventions involving POC testing, incentives, peer support and outreach nurse-led models is helping to find the remaining people who haven't yet engaged in HCV testing or treatment.

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