

A ‘one-stop-shop’ intervention integrating point-of-care HCV RNA testing to enhance hepatitis C testing and treatment uptake among new receptions to prison: the PIVOT study

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Background: Prisons are key venues for hepatitis C (HCV) elimination, but complex clinical pathways and frequent prisoner movements remain barriers to efficient HCV care. This study evaluated the impact of an intervention integrating point-of-care (PoC) HCV RNA testing, Fibroscan®, nurse-led clinical assessment, and fast-tracked direct-acting antiviral (DAA) prescription (a ‘one-stop-shop’ intervention) on HCV testing and treatment uptake compared to standard of care among people recently incarcerated in Australia.

Methods: PIVOT was a historically controlled, before and after, study comparing HCV testing and treatment uptake during a ‘one-stop-shop’ intervention (n=301; June 2020–April 2021) compared to standard of care (n=240; November 2019–May 2020) at one reception prison. The primary endpoint was uptake of DAA treatment at 12 weeks from enrolment. Secondary outcomes included uptake of HCV testing and time from enrolment to DAA treatment initiation.

Results: Overall, 541 male participants were enrolled (median age, 32 years). The median age (32 vs. 31 years), history of injecting drug use (42% vs. 48%), and injecting drug use in the last month prior to imprisonment (27% vs. 31%) were similar between intervention and standard of care phases. The proportion of people receiving HCV antibody/RNA testing was higher among participants in the intervention phase compared to standard of care (99% vs 45%, p<0.001). Among people with active HCV infection, the proportion initiating DAA treatment within 12 weeks from enrolment was higher (93% vs 26%, p<0.001) and the median time to treatment initiation was shorter in the intervention phase compared to standard of care (6 days [IQR: 5-6] vs. 90 days [IQR: 62-127]; p<0.001).

Conclusion: A ‘one-stop-shop’ intervention integrating PoC HCV RNA testing, Fibroscan®, and fast-tracked DAA prescription enhanced testing and treatment uptake, and reduced time to treatment initiation, among people recently incarcerated in Australia, thereby overcoming key barriers to treatment scale-up in the prison sector.

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