

Viral hepatitis notifications: a cohort study of place-based management in Victoria

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Background: Innovative models to increase viral hepatitis testing and linkage to care and treatment are required to achieve the national 2030 elimination targets, especially in regional Australia. This retrospective cohort study assessed the intervention of enhanced local public health unit (LPHU) management of hepatitis B and hepatitis C notifications on linkage to care and treatment, compared to central Department of Health standard of care (SOC) management, in the Barwon South West (BSW) and Gippsland regions in Victoria.

Methods: Study periods were March – August 2022 (SOC), and September 2022 – February 2023 (Intervention). Notifications from correctional facilities were excluded. Outcomes by study period compared time to complete hepatitis C diagnosis, hepatitis C treatment initiation, hepatitis B viral load measurement and referral for hepatitis B care. A Kaplan-Meier survival analysis and Cox regression model was performed.

Results: Of 190 notifications that met inclusion criteria, 174 were included in the analysis – 133 hepatitis C notifications and 41 hepatitis B notifications (16 were lost to follow-up). The probability of having an incomplete hepatitis C diagnosis within 180 days from notification was 2.33 (95% CI 1.40, 3.89) times higher among patients in the SOC group compared to the Intervention group. The probability of not being referred to hepatitis B care within 90 days from notification was 2.78 times (95% CI 1.13, 6.82) higher among patients in the SOC group compared to the Intervention group.

Conclusion: The enhanced public health response by LPHUs in BSW and Gippsland increased the proportion of hepatitis C notifications with a complete diagnosis and hepatitis B notifications referred to a care provider. The establishment of LPHUs presents a unique opportunity to accelerate progress towards achieving the 2030 viral hepatitis elimination targets in Victoria.

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