Distance and diversity: Understanding the challenges to hepatitis B care in the Barwon South West region of Victoria.

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Background: The Barwon South-West (BSW) region (population~440,370) has an estimated 1,541 people living with hepatitis B virus (HBV); 13% engaged in care and 24% who need treatment accessing it. Engagement and treatment rates fall short of the national elimination goals. Understanding the distribution of populations that need HBV testing and care will guide the development of improved care pathways.

Methods: We provide a descriptive geographic spatial analysis of: populations in need of a test (born in a country with an HBV prevalence ≥2%; identifying as Aboriginal and/or Torres Strait Islander (2021 ABS Census)) by postal area (POA), estimated rates of initial HBV surface antigen (HBsAg) testing (pathology services) by POA, HBV notification rates (Department of Health Victoria) by Local Government Area (LGA), and HBV care services, from 2015-2022 in BSW. HBsAg test rates excluded antenatal tests.

Results: Across BSW 57/1000 people needed a test; overseas-born 43/1000 population (migrating from 24 countries), and Aboriginal people 14/1000 population. The five POAs with the highest proportion of people born overseas were located in Greater Geelong (GG) (64/1000 – 126/1000 population). Four of the five POA with the highest Aboriginal population were in GG (388-702 people). HBsAg testing rates for BSW were 24.7 individuals/1000 population/year. The five POA with the highest proportion of people born overseas had testing rates of 57.7-24.2 individuals/1000 population/year. The LGA with the highest notification rate was GG (0.1 notifications/1000 population/year). Care services in GG included one public clinic, private gastroenterology services, an outreach nurse and three S100 GPs. Outside GG there was one private gastroenterology service, the outreach nurse and one S100 GP.

Conclusion: People requiring HBV care in BSW have diverse cultural and linguistic needs. In this low prevalence region a community of practice incorporating HBV care providers and GP practices in priority POAs may improve the care cascade.

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