Supplement to the Viral Hepatitis Mapping Project: Hepatitis C – National Report 20232024 Movement data by Primary Health Network

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Background and source information

Estimation of variation in the prevalence of chronic hepatitis C (CHC) in Australia relies on cases of hepatitis C notified to the National Notifiable Diseases Surveillance System (NNDSS), however data do not account for movement of individuals after diagnosis when calculating treatment uptake. Assessment of variation in movement among people who have a history of hepatitis C provides additional context to treatment uptake data. Regions where a higher proportion of people than average have moved away from the PHN over time may be more likely to have treatment uptake underestimated, as there are fewer people living with hepatitis C in that region than would be expected based on historical case counts.

These data were sourced from the Australian Bureau of Statistics (ABS) Person-Level Integrated Data Asset (PLIDA), comparing region of residence data over time. The source cohort is all individuals who have ever had hepatitis C nucleic acid testing or hepatitis C direct-acting antiviral treatment at any time during 2011-2023 via Medicare (total cohort of 252,144 people). Movement is derived using combined address data, which uses source information from linked data across Census, Centrelink, and Australian Taxation Office datasets. Data cover the period of available combined address data (2006-2021).

These data will not include individuals who have never received Medicare-funded hepatitis C testing or treatment; for example, individuals who are undiagnosed, or those who have only ever received services via non-Medicare funding streams (such as public hospital laboratory testing not billed to the Medicare Benefits Schedule, compassionate access programs for treatment, and importing generic treatment privately or being treated outside Australia). This may lead to bias in estimates of movement, if this non-Medicare billing of hepatitis C services is geographically clustered.

Supplementary Table 1: Movement of people with a history of hepatitis C by Primary Health Network, 2006–2021, ranked by proportion living in a different PHN $\,$

PHN of residence in 2006	Proportion of people who were living in a different PHN in 2021
Western Queensland	65.6%
Northern Territory	51.6%
Nepean Blue Mountains	49.5%
Brisbane North	46.4%
Darling Downs and West Moreton	46.2%
Gold Coast	46.2%
Northern Sydney	45.1%
Murrumbidgee	44.9%
Country WA	43.6%
Western Sydney	43.3%
Brisbane South	43.1%
Eastern Melbourne	41.9%
Central Queensland, Wide Bay, Sunshine Coast	39.9%
Country SA	39.1%
Murray	38.8%
Western NSW	38.5%
Central and Eastern Sydney	38.2%
NATIONAL AVERAGE	37.2%
Gippsland	35.4%
Perth South	35.2%
Northern Queensland	35.0%
Perth North	34.7%
North Coast	34.7%
South Western Sydney	33.7%
Australian Capital Territory	33.7%
South Eastern Melbourne	33.3%
North Western Melbourne	32.8%
South Eastern NSW	32.5%
Western Victoria	30.4%
Hunter New England and Central Coast	27.1%
Adelaide	25.5%
Tasmania	24.9%

PHN, Primary Health Network.

Data source:

Declaration regarding the use of PLIDA data

The results of these studies are based, in part, on data supplied to the ABS under the Taxation Administration Act 1953, A New Tax System (Australian Business Number) Act 1999, Australian Border Force Act 2015, Social Security (Administration) Act 1999, A New Tax System (Family Assistance) (Administration) Act 1999, Paid Parental Leave Act 2010 and/or the Student Assistance Act 1973. Such data may only used for the purpose of administering the Census and Statistics Act 1905 or performance of functions of the ABS as set out in section 6 of the Australian Bureau of Statistics Act 1975. No individual information collected under the Census and Statistics Act 1905 is provided back to custodians for administrative or regulatory purposes. Any discussion of data limitations or weaknesses is in the context of using the data for statistical purposes and is not related to the ability of the data to support the Australian Taxation Office, Australian Business Register, Department of Social Services and/or Department of Home Affairs' core operational requirements.

Legislative requirements to ensure privacy and secrecy of these data have been followed. For access to PLIDA and/or BLADE data under Section 16A of the ABS Act 1975 or enabled by section 15 of the Census and Statistics (Information Release and Access) Determination 2018, source data are de-identified and so data about specific individuals has not been viewed in conducting this analysis. In accordance with the Census and Statistics Act 1905, results have been treated where necessary to ensure that they are not likely to enable identification of a particular person or organisation.