Title: Bridging the access gap: Medicare ineligibility in people living with chronic hepatitis B

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Abstract:

People living in Australia on temporary student or work visas are excluded from Medicare access and can face barriers to adequate healthcare, even if they are privately insured. This analysis aimed to quantify this issue in relation to people living with chronic hepatitis B (CHB), the majority of whom in Australia were born overseas. The data suggest that an estimated 25,000 people living with CHB in Australia are ineligible for Medicare, 10% of the total number affected, with considerable potential impact in access to effective healthcare and prevention of adverse outcomes.

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Figure1.png

People living in Australia on temporary student or work visas are excluded from Medicare access and can face barriers to adequate healthcare, even if they are privately insured. This analysis aimed to quantify this issue in relation to people living with chronic hepatitis B (CHB), the majority of whom in Australia were born overseas. The data suggest that an estimated 25,000 people living with CHB in Australia are ineligible for Medicare, 10% of the total number affected, with considerable potential impact in access to effective healthcare and prevention of adverse outcomes.

Text:

The majority of people living with chronic hepatitis B (CHB) in Australia were born overseas, which can raise issues regarding adequate health service access. Access to national health insurance (Medicare) is available only to Australian citizens or permanent residents, with specific provisions also provided for some asylum seekers in the community, and citizens of a limited number of countries with Reciprocal Health Care Agreements (RHCA). All people living with CHB require regular monitoring of their liver function and hepatitis B viral load, and approximately 15% require antiviral treatment¹. These tests and treatments are covered by Medicare^{2,3}, however they attract high out-of-pocket costs when purchased without subsidy. Even those temporary residents who hold compulsory health insurance (such as student visa holders) can find themselves out of pocket for health care in the public system, and antiviral treatment is often denied on the grounds that CHB is a pre-existing condition, even when not previously diagnosed. Currently in Australia, less than 20% of people living with CHB are receiving adequate care⁴, which contributes to continued adverse outcomes for those affected⁵. Exploring potential barriers to access is crucial to improving quality of life for those living with CHB. Research regarding this issue of Medicare eligibility and access in relation to HIV treatment has demonstrated considerable anxiety and concern among those affected⁶.

In order to explore the extent of this issue, we collected and analysed data from a variety of sources to estimate the number of people living in Australia with CHB who are potentially ineligible for Medicare coverage. Current estimates of the number of people living with CHB⁴ are based on a combination of Census data⁷ (which includes all residents, regardless of immigration status) and published seroprevalence estimates derived from linkage of notifications data and antenatal testing records⁸, among other sources⁹. This analysis combined those seroprevalence estimates with data recording the number of people residing in Australia at 31 December 2016 whose residency status was temporary, including students, skilled migrants, and those on bridging visas¹⁰. These data do not include individuals on temporary visas whose application for permanent residency is under consideration, most of whom are eligible for Medicare access¹¹. These data are made available according to country of birth by the Australian Government Department of Home Affairs. Countries of origin which are eligible for Medicare coverage through RHCA were excluded¹², as were temporary entrants categorised as visitors. The published seroprevalence estimates were applied to these population data, to generate an estimate of the number of people in each residency category estimated to be living with CHB.

The result of this analysis is that an estimated 24,734 people were living with CHB in Australia in 2016 who were ineligible for Medicare based on their visa status. This represents 10% of the total estimated 237,894 people living with CHB in Australia in 2016⁴. The majority fell into the Students and Graduates category, making up more than half (Table 1). The most common countries of birth for those living with CHB and ineligible for Medicare were estimated to be China (8,527 people), Taiwan (3,000), and Vietnam (2,219). These countries alone comprise nearly two-thirds of the total. The proportion of all people living with CHB estimated to be Medicare ineligible was similar across jurisdictions, however was lower in states where those born overseas make up a smaller proportion of people living with CHB⁴, such as the Northern Territory, Tasmania, and South Australia.

These estimates could potentially over-estimate the number of ineligible individuals, as some residents may be eligible for Medicare access through specific arrangements such as for asylum seekers on bridging visas. Conversely, other data sources, based on Department of Education and Training records of enrolment data¹³ suggest the total number of international students is higher

than those recorded in DIAC data. These figures may be higher due to students who were enrolled but had not commenced study or were not residing in Australia at the time of visa data collection. Using these alternative data, the number of Medicare ineligible students may be as high as 35,000.

Although these estimates are also not a complete indicator of health service access overall, as many migrants in these categories have health insurance, the depth of the provision of CHB care through these systems is often limited, with many policies not covering expensive treatments such as those for CHB and only limited pharmaceutical coverage.

In addition to other benefits, the education of international students is Australia's third-largest export industry in terms of income, and contributed an estimated \$17.1 billion to Australia's Gross Domestic Product during the 2014-15 financial year¹⁴, which should be an important consideration when assessing the potential cost of providing more equitable access to health care to temporary residents while in Australia. Providing antiviral medication to Medicare ineligible students and graduates living with CHB who would be projected to need treatment (likely to be less than 10% of the total number given their relatively young age¹) would cost under \$6 million, or 0.04% of the export revenue. In addition, appropriate treatment of hepatitis B is estimated to be one of the most cost effective cancer prevention strategies available¹⁵, whether these benefits are realised for those residents destined to settle in Australia, or those who return to live in their countries of birth.

Based as these estimates are on routinely collected data, they are subject to administrative inaccuracies and imprecision. The equating of country of citizenship (as recorded in visa data) with country of birth in relation to CHB will not always be exact, due to individuals with multiple citizenship countries and those whose country of citizenship does not equate to their country of birth. Country of citizenship also may not always be an accurate proxy for RHCA coverage, as varying requirements based on country of residence and visa duration apply, such as excluding students and retirees. This particular limitation would therefore underestimate the number of people ineligible for Medicare, as some citizens of RHCA eligible countries may not themselves qualify for Medicare coverage. A small study of people living with CHB which assessed Medicare status found that 82 of 93 participants (88%) had a Medicare card, concurring with the proportion found here¹⁶.

These data highlight the issue of people who do not have access to the full range of social services in Australia when they require care for their CHB, which may contribute to the low number of people receiving adequate management and the continued occurrence of adverse outcomes, and could also impact care and treatment for other conditions. People lacking access to Medicare still deserve optimal care for hepatitis B, including access to diagnosis and treatment. While obtaining hepatitis B antivirals in Australia without PBS subsidy can be very costly, other options – including directly obtaining medications in their home country, or ordering medications online (often developed for access to HIV PrEP, but also available for the treatment of hepatitis B) – are legal and far less expensive¹⁷.

Further research regarding the associations between Medicare access and eligibility on uptake of care for CHB is needed to identify the potential impact of these via conditions on outcomes. With Australia and all other countries having committed to the elimination of viral hepatitis as a public health threat by 2030, examining ways to ensure treatment and care for all people living with CHB is a key priority.

Figure legends:

Figure 1: Number of individuals living with CHB and ineligible for Medicare according to country of citizenship for top 15 countries, by visa type, 2016

Tables:

Table 1: Estimated number of Australian residents living with CHB who are ineligible for Medicare, by state and territory and visa type, 2016

State/ territory	Students and graduates	Skilled workers and other temporary visa holders	Individuals on bridging visas	TOTAL living with CHB ineligible for Medicare	Total number living with CHB	Proportion living with CHB ineligible for Medicare
ACT	249	132	41	422	4,036	10.5%
NSW	5,074	3,253	1,146	9,473	83,812	11.3%
NT	136	61	36	233	4,057	5.7%
QLD	2,206	1,095	482	3,783	41,795	9.1%
SA	618	309	115	1,042	14,460	7.2%
TAS	111	43	23	177	3,551	5.0%
VIC	3,917	2,061	945	6,923	61,417	11.3%
WA	1,482	825	375	2,682	24,183	11.1%
AUSTRALIA	13,793	7,779	3,163	24,735	237,894	10.4%

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