One size does not fit all: healthcare worker perspectives on hepatitis B models of care in a low prevalence region in Australia

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Acknowledgment

Disclosures

- This work was funded in part by:
  - A Gilead Fellowship Grant awarded to CR in 2023 for this investigator-initiated research
  - Deakin University, Institute for Mental and Physical Health and Clinical Transformation (IMPACT) Seed Grant
  - Centre for Innovation of Infectious Disease and Immunology research (CIIDIR) Seed Grant

Background

- Association between treatment uptake and prevalence?
- Low prevalence regions are experiencing different challenges working towards elimination compared to high prevalence regions
- Western Victoria
  - Barwon South West
  - Grampians

PHN	PREVALENCE Proportion of the population living with CHB (%)	TREATMENT Proportion of people with CHB who received treatment (%)	CARE Proportion of people with CHB who received care (treatment or monitoring) (%)
NATIONAL AVERAGE	0.78%	12.9%	25.[illegible]%
NATIONAL STRATEGY TARGET	-	20.0%	50.0%
Northern Territory	1.72%	11.5%	24.2%
South Western Sydney	1.34%	20.6%	38.1%
Western Sydney	1.25%	18.0%	37.1%
Central and Eastern Sydney	1.22%	15.8%	30.5%
Northern Sydney	1.15%	16.4%	33.5%
Eastern Melbourne	1.12%	14.1%	30.8%
North Western Melbourne	1.09%	14.5%	30.1%
Brisbane South	0.91%	13.8%	29.0%
South Eastern Melbourne	0.91%	13.1%	27.9%
Country WA	0.80%	3.7%	6.2%
Perth North	0.76%	9.9%	14.2%
Perth South	0.75%	9.7%	14.7%
Adelaide	0.68%	12.0%	18.0%
Western Queensland	0.67%	[illegible]	#
Australian Capital Territory	0.63%	15.8%	30.6%
Northern Queensland	0.61%	7.0%	17.8%
Brisbane North	0.60%	8.3%	15.[illegible]%
Nepean Blue Mountains	0.57%	8.9%	19.4%
Gold Coast	0.55%	9.1%	16.8%
Western NSW	0.52%	5.6%	14.6%
Darling Downs and West Moreton	0.51%	7.0%	15.2%
Hunter New England and Central Coast	0.42%	6.0%	12.4%
Murrumbidgee	0.42%	5.2%	12.0%
South Eastern NSW	0.42%	8.3%	19.2%
North Coast	0.38%	7.2%	15.8%
Murray	0.38%	9.2%	20.8%
Central Queensland, Wide Bay, Sunshine Coast	0.36%	7.6%	13.5%
Western Victoria	0.35%	8.9%	18.3%
Gippsland	0.33%	9.0%	17.9%
Country SA	0.32%	5.9%	10.8%
Tasmania	0.28%	9.4%	17.0%

MacLachlan J et al, Viral Hepatitis Mapping Project, 2024

Study setting: Barwon South West (BSW)

- Population 459,857
  - 8.6% born in non-English speaking countries
  - 1.4% identify as Aboriginal and Torres Strait Islander people
  - Estimated 1,609 people living with hepatitis B
  - **18.3% engaged in care, and 8.9% treatment uptake** (national average 12.7%)

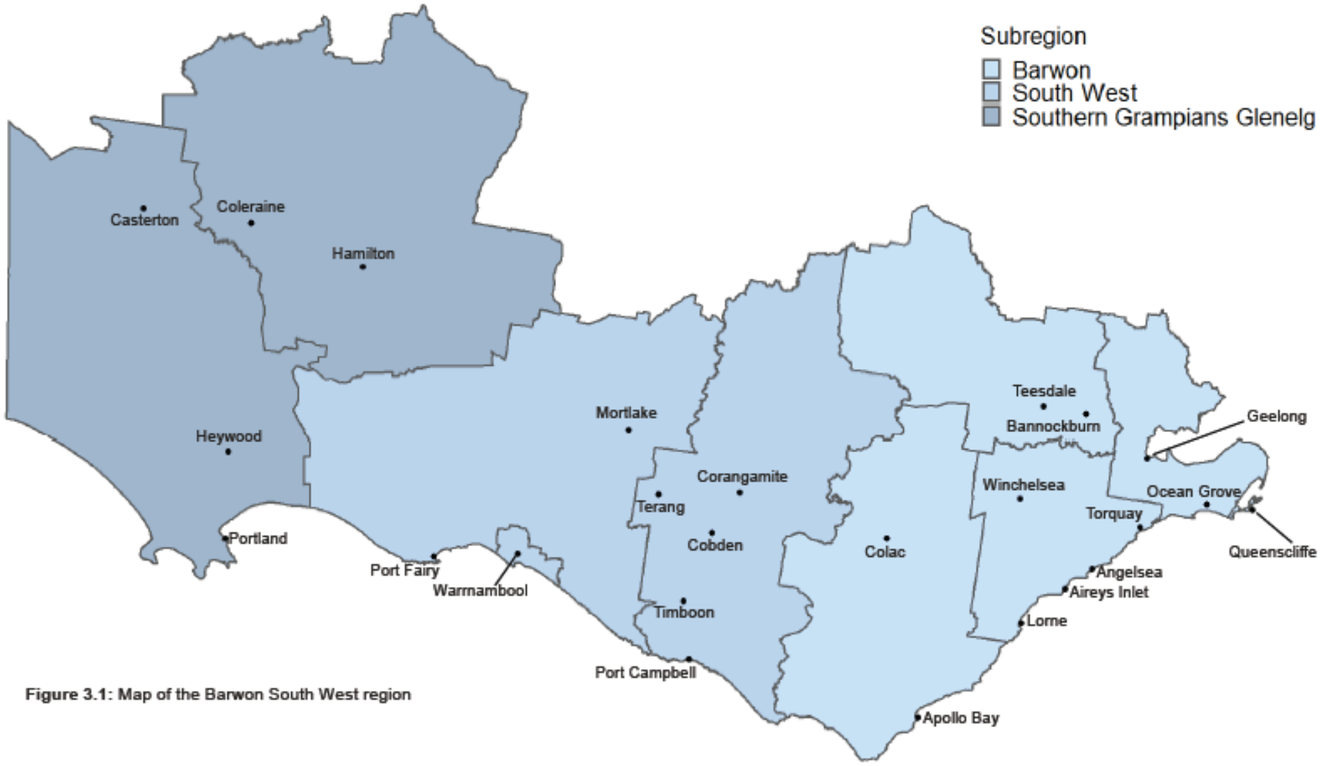
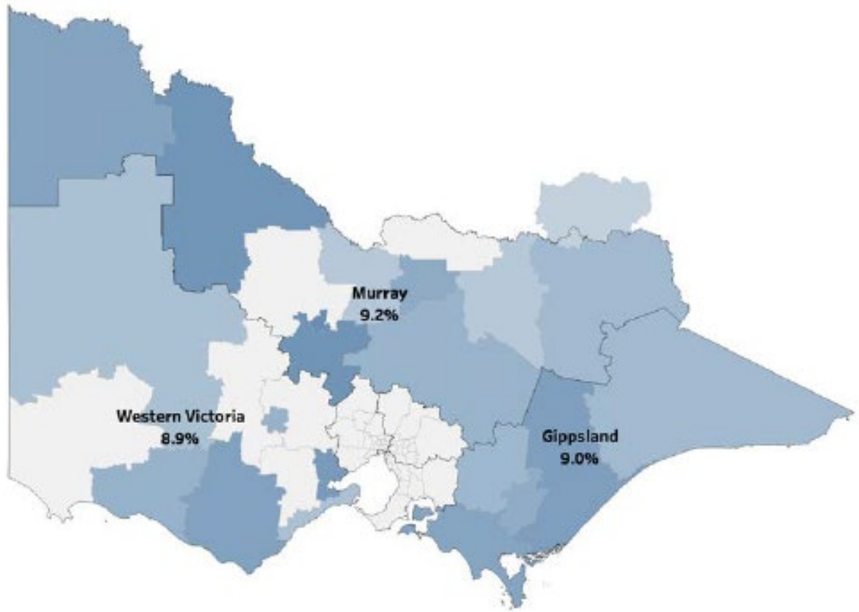


Figure 3.1: Map of the Barwon South West region



Treatment uptake, MacLachlan J et al, Viral Hepatitis Mapping Project, 2024

Study setting: Barwon South West

- Health services providing hepatitis B care 2023

- Public Liver Clinic
- Integrated Hepatitis Nurse
- HBV S100 GP
- Private Gastroenterology

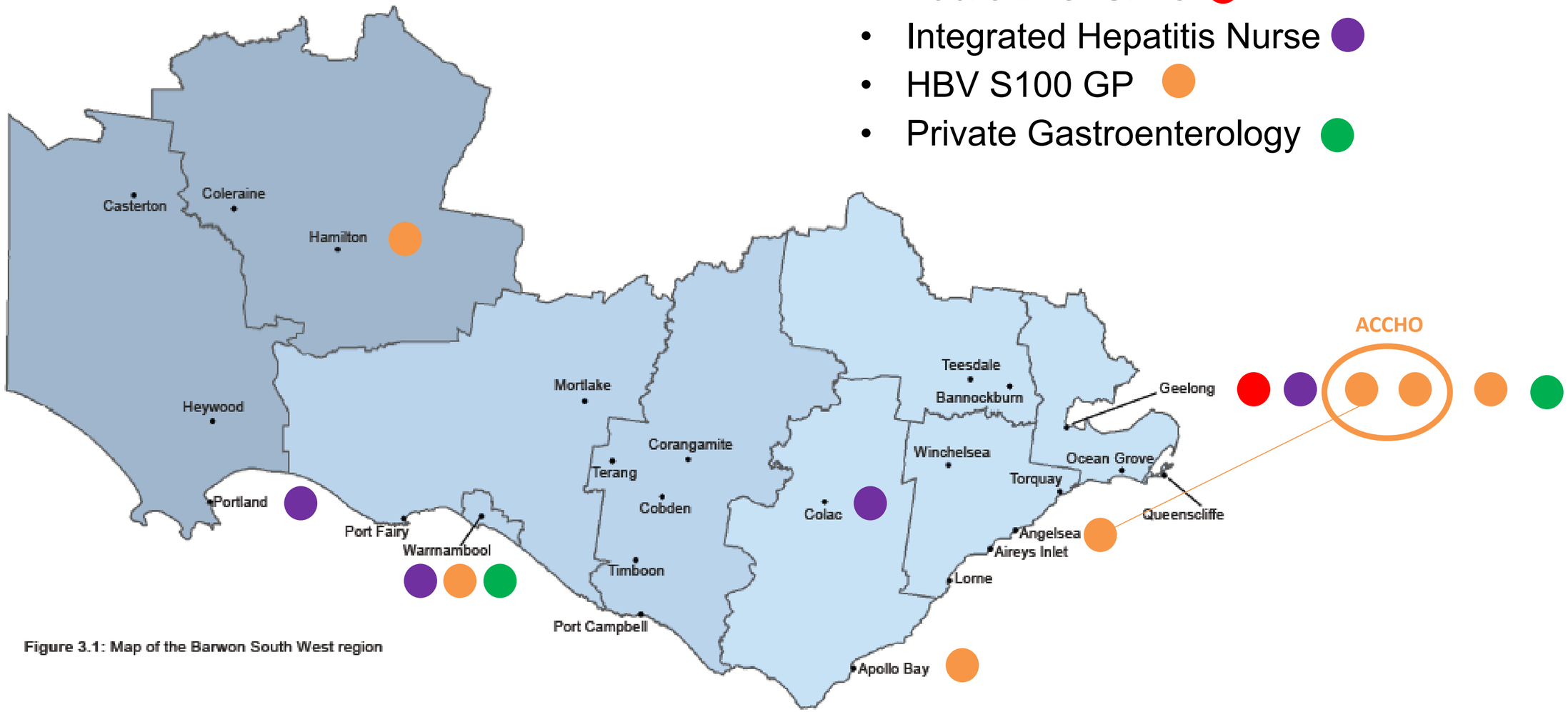


Figure 3.1: Map of the Barwon South West region

Aim

- Overarching aim to improve the BSW hepatitis B care cascade
- To examine the needs of healthcare workers in a low prevalence region and identify strategies that could improve equitable access to community-based hepatitis B care.

Method

- Semi-structured qualitative interviews were conducted with healthcare workers in the BSW region.
- Potential participants were identified by the investigators
- A semi-structured interview schedule was developed by the investigators covering the following:
    - The participants' role and involvement in hepatitis B care.
    - Their support needs in caring for patients with hepatitis B.
    - Identification of issues for future models of hepatitis B care in BSW.

- Interviews were conducted and recorded via zoom with audio transcribed, coded and thematically analysed.
- Barwon Health Research Ethics Committee approved this study (HREC/98114).

Results

- Between August and November 2023
- 20 participants were interviewed:
  - 9 General Practitioners (GPs)
    - 6 hepatitis B S100 prescribers
    - 3 non-prescribers
  - 4 nurses
    - 3 hepatology nurses
    - 1 primary care nurse
  - 3 medical specialists
  - 3 interpreters
  - 1 refugee worker

Results

- Hepatitis B was perceived a rare, complex condition by GPs, which affected their confidence to independently manage patients.

[Hepatitis B is] *not something you do on a regular basis like hypertension or diabetes or chlamydia … that you know things inside out … if someone present[s]* [with hepatitis B] *today … I probably have to look up the guideline on what protocol I need to follow* (Participant 2).

- Participants agreed that expectations on GPs to deliver a broad range of specialised health care was overwhelming.

A lot of stuff is getting pushed to GPs, like ADHD [attention deficit hyperactivity disorder], *psychiatrists are just doing one-off assessments and telling us we need to prescribe … we're being asked … to carry a lot of these specialised areas which just feels overwhelming* (Participant 4).

Results

- None of the hepatitis B S100 GPs had prescribed treatment and were not confident to do so without consulting a specialist.

  I am a prescriber. But because of the low prevalence I haven't initiated [anyone on hepatitis B] *treatment* (Participant 20).

- The following results describe enablers identified by participants to supporting community-based hepatitis B care

1. Access to a specialist nurse

- Nurse-led services were viewed positively because nurses had the skills and time to develop relationships with patients, which supported life-long chronic disease management.

Nurse-led clinics … they're brilliant … their knowledge of the patients, their social story, their background ... I would go to [nurse name] *and say, "Hey, I'm about to see* [patient name]*, can you tell me a little bit about what I can expect?"* (Participant 20).

1. Access to a specialist nurse

- The outreach nurse described the unique elements of a nurse-led model of care:

My job is to value add to their initial consultation … provide additional education … remind them to do their blood tests, talk about [hepatitis B and] *their families, their sexual partners, partner vaccinations, children being born. I fill in all that stuff that the physician doesn't have time to do in their 15-minute consult* (Participant 12).

- The liver clinic-based nurse described providing hepatitis B case management support:

We take a case management role where we keep the patients engaged in their health and … hepatitis B surveillance; so whether it's 6 monthly or 12 monthly [appointments] *… they have a lot of input from the nursing staff within the clinic to get to those appointments* (Participant 6).

2. Case finding

- Identifying patients with/at risk of hepatitis B through patient management software auditing was identified as a strategy to increase priority attached to hepatitis B.

There's more interest in [auditing] *because of the new CME requirements that require GPs to do auditing as part of their annual cycle* (Participant 7).

- The outreach nurse believed that supporting general practice staff to conduct patient audits, was a part of their role.

I would love to do a software audit in all practices … generate a list of patients - people born overseas, people with abnormal liver function, people with family history of liver cancer … check that they have all been screened for hep B (Participant 12).

3. Telehealth

- Seeking specialist advice via telehealth has been encouraged post-pandemic and was regularly used by participants.

It depends on how one structures it [telehealth] *and who's at the other end of the telehealth arrangement. Whether it's telehealth to an individual* [patient] *or an individual and a healthcare practitioner … I've had a range of experiences* (Participant 3).

- Use telehealth to build capacity of regional GPs and deliver hepatitis B care closer to home.

Maybe there are opportunities with … telehealth. At one end the practical team like me [GP prescriber] *and the patient who is elsewhere … including the outreach nurse and supporting our* [practice] *nurses to get involved* (Participant 20).

4. Shared care

- Shared care is a formal arrangement between a specialist and another practitioner, in this case between the liver clinic and a GP.

One lady who I referred to the [metropolitan liver clinic] *with hep B … she just required monitoring, so the physician discharged the patient to me for … monitoring because she didn't need to see them. So, I was co-managing her* (Participant 2).

- There are obvious benefits of shared care for patients, specialists and GPs.

We support the liver clinic; the patient would need fewer appointments with the liver clinic if we managed the monitoring of their disease (Participant 7).

5. Community of practice

- A community of practice was identified as a way of engaging and supporting new/existing/interested hepatitis B prescribers to retain skills and develop their confidence with several formats identified

Creating small networks on WhatsApp is really … good for deidentified case sharing. Asking the group "What would you do with this case? or how would you manage this patient?" (Participant 19).

Meet once a quarter or something and talk about the challenges of hepatitis B management (Participant 4).

- There was also interest in short-term secondments in the liver clinic

Last year I spent 3 days in the Intensive Care Unit in Geelong … to pick up those skills that we can bring back here [to general practice]*. [I'd really like to spend time] in the liver clinic ... I would apply for medical* [CME] *funding for rural doctors* (Participant 9).

Discussion

- **Community of practice** including:
  - Nurse-led mobile phone-based messaging group to enable communication about clinical scenarios
  - Shared care
  - Virtual meetings or short tutorials involving case presentations
  - Time in the liver clinic to build knowledge and relationships
- Integrated Hepatitis Nurse pivotal model

Outreach nurses critical for delivery of HIV care to women in western Victoria

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Handling Editor:
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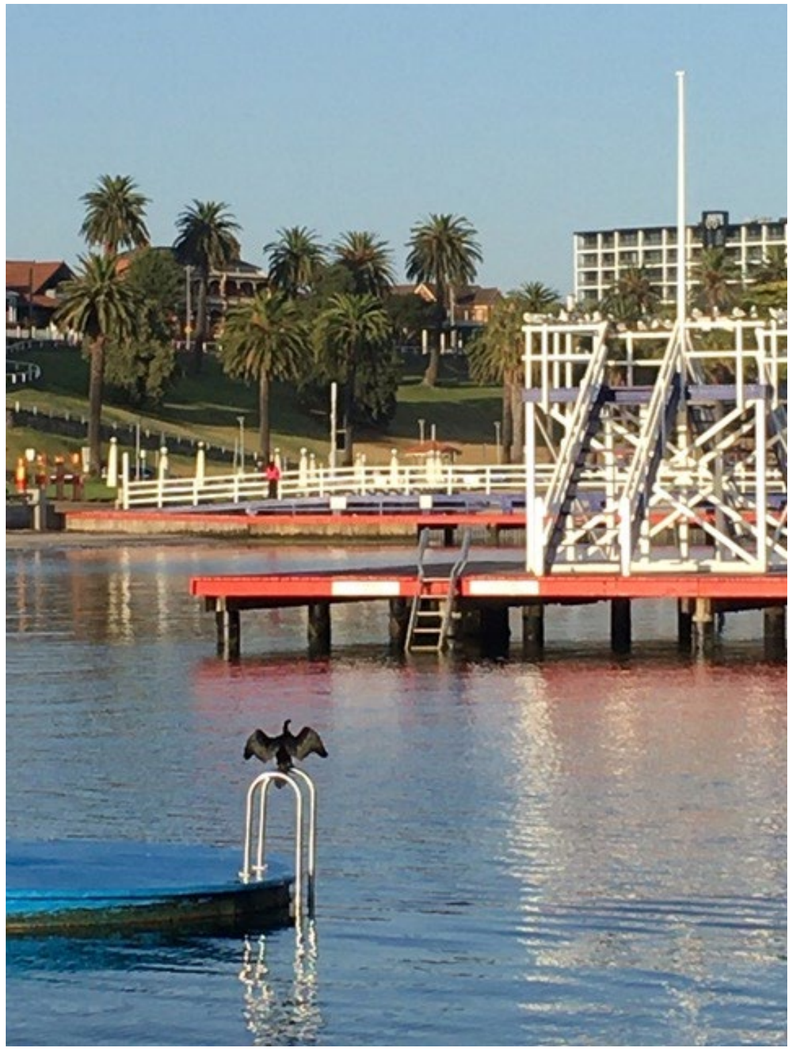
ABSTRACT

Women living with HIV in regional Victoria face barriers accessing care. We evaluated the care cascade and outreach nurse support required for women attending our service between 2005 and 2020. A total of 33 women attended; 97% (32/33) were on antiretroviral therapy; 67% (22/33) retained in care, 27% (9/33) transferred and 6% (2/33) lost to follow up. Of women retained in care, 95% (21/22) were on antiretroviral therapy and 91% (20/22) had virological suppression. A total of 91% (30/33) required outreach nurse care (median care episodes 100/woman; IQR 44–179) – most frequently (87%; 26/30) liaising with pharmacies and prescribers. Outreach nurses are critical in achieving UNAIDS targets for women in western Victoria.

Keywords: capacity building, case management, healthcare disparities, health services, living with HIV, pregnancy, rural health, women.

Conclusion

- We propose that **low prevalence regions have unique challenges** compared to higher prevalence settings.
  - Healthcare workers need to be knowledgeable about hepatitis B, but exposure is lower, skill maintenance is harder.
- The prevalence of hepatitis B may need to be considered in the design and implementation of decentralised models of care
- Barwon South West seeking more funding to support implementation of a hepatitis B nurse-led community of practice



Eastern Beach, Geelong

Acknowledgments

- The authors wish to acknowledge:
  - The participants of this study for generously sharing their insights and passion
  - Dr Ric Milner, general practitioner, for his contribution to the planning of this study, and his care for people living with blood borne viruses until his death in 2023