

Anti-viral treatment eligibility and treatment uptake among people with chronic hepatitis B referring to clinical services in Australia: **The REACH-B Study**

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Disclosure



None to disclose.

Background

- An estimated **220,000** people were living with chronic HBV in Australia in 2023, among whom **25% were engaged in care** and **13% were receiving treatment**
- The WHO target for HBV elimination includes treating **80% of the people living with chronic HBV who are eligible for treatment by 2030.**
- Australian representative data on HBV care cascade, including proportion eligible for antiviral therapy is lacking.

Objectives

- **The Real-world Assessment of people living with Chronic Hepatitis B in Australia (*REACH-B Study*)** is an observational cohort study of people living with chronic HBV in Australia attending a national network of hepatitis clinical services. Some of the aims of the REACH-B study include:
- This analysis evaluated treatment eligibility and treatment uptake at the time of enrolment among participant enrolled until July 2025.

Methods

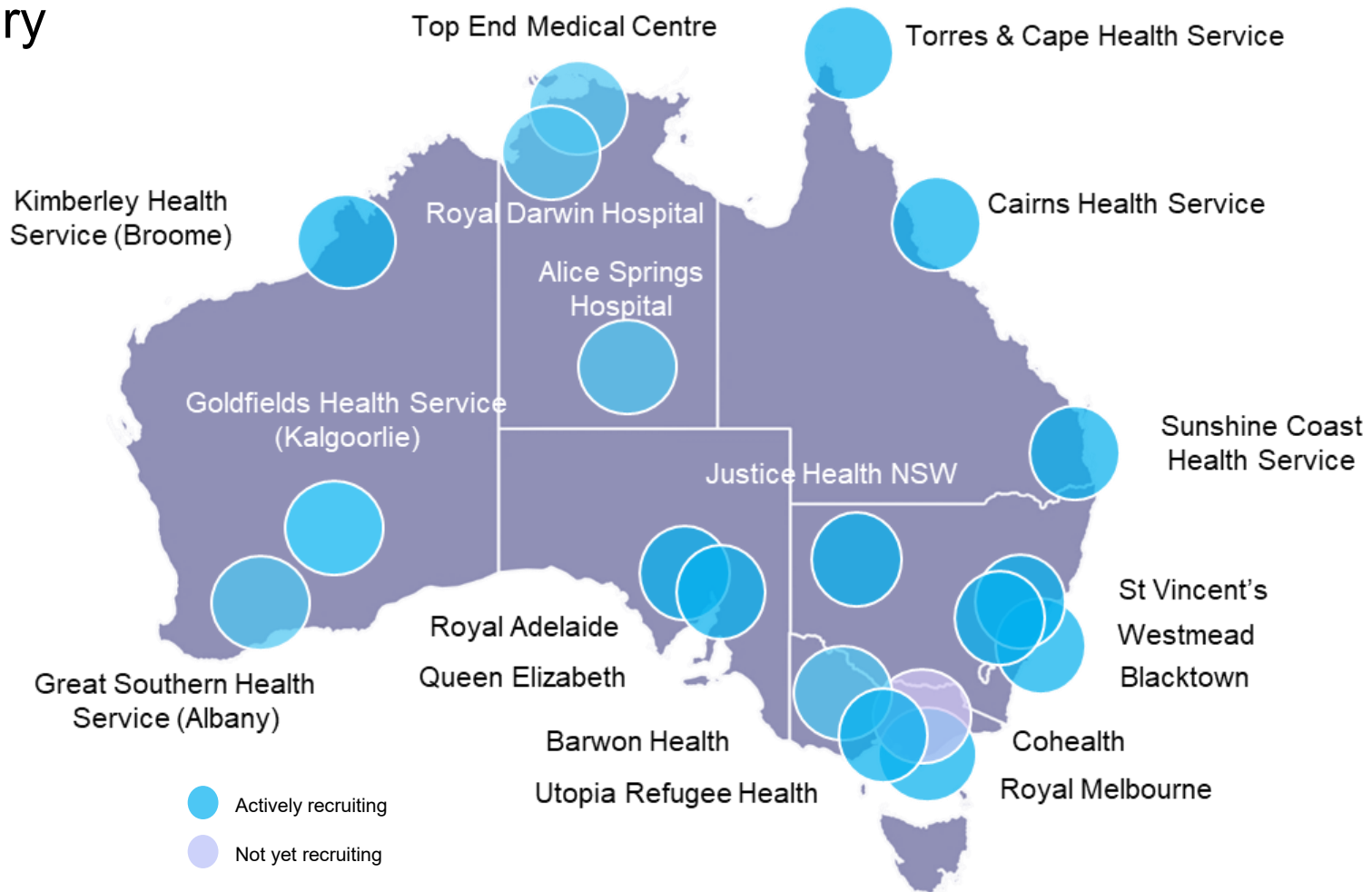
Study design: Observational cohort study

Study setting: 18 primary or tertiary health services in 6 jurisdictions:

- NSW (4 sites)
- Qld (3 sites)
- SA (2 sites)
- Vic (3 sites)
- NT (3 sites)
- WA (3 sites)

Study sites:

- Hospital-based clinics, n=15 (n=5 with community outreach)
- Primary care clinics, n=2
- Justice Health clinic, n=1



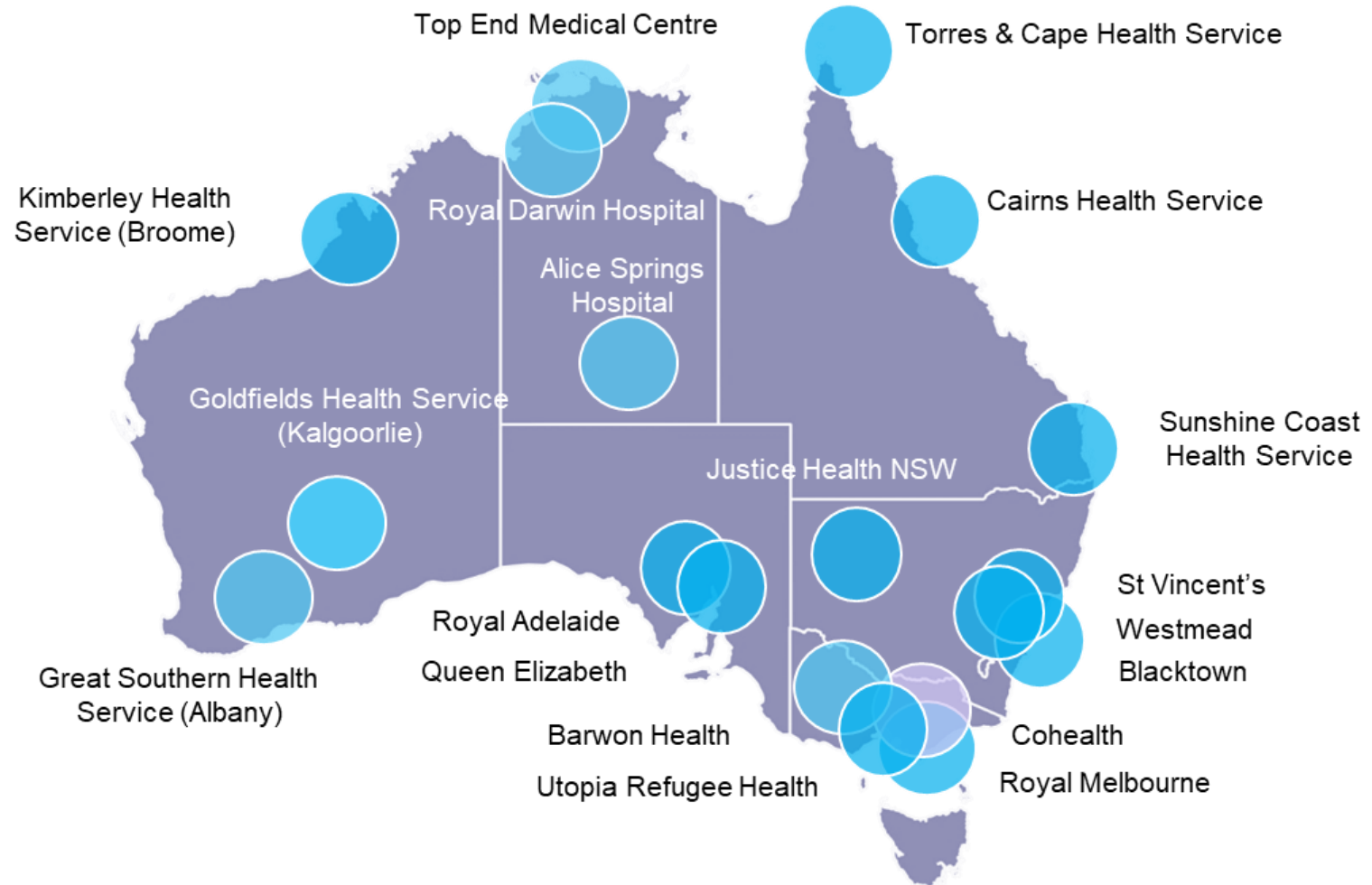
Methods

Data collection: Demographic, clinical care, treatment, and laboratory data are collected from medical records

Data are collected at:

- Enrolment; and
- Follow-up visits (at least annually)

Enrolment data was used
In this analysis



Results: Baseline characteristics

Baseline characteristics	n=4,362
Female	1926 (44%)
Median age (IQR)	49 (40, 60)
Aboriginal or Torres Strait Islander	1211 (28%)
Region of birth	
Australia	1390 (32%)
East/South-East Asia	2093 (48%)
Africa	255 (6%)
West/Central Asia	154 (4%)
Pacific	147 (3%)
Other / Unknown	323 (7%)
Most likely mode of HBV infection	
Mother to Child / via family	2470 (57%)
Injecting drug use	126 (3%)
Sexual transmission	57 (1%)
Other	60 (1%)
Unknown	1649 (38%)

Results: Clinical characteristics

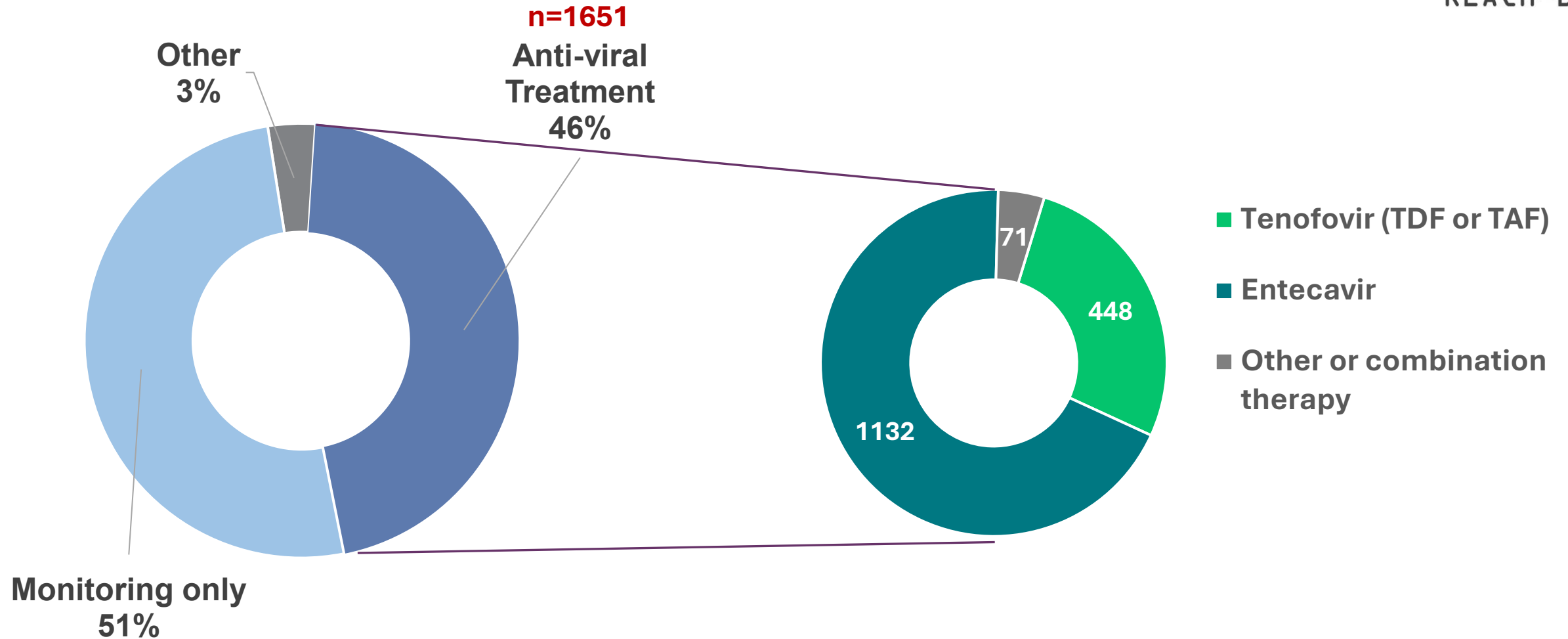
3,602 participants

had available data on:

- HBV DNA levels
- ALT levels
- HBV clinical management

Clinical characteristics	n=3,602
HBV DNA	
Undetected or <20 IU/mL	1916 (53%)
20-2,000	1102 (31%)
2,000-20,000 IU/mL	293 (8%)
>20,000 IU/mL	291 (8%)
Elevated ALT (F>19, M>30)	2103 (58%)
HBeAg positive	496 (14%)
Cirrhosis	243 (7%)
HIV co-infection	44 (1%)
HDV co-infection	
HDV Ab negative	1222 (34%)
HDV Ab and RNA positive	26 (1%)
HDV Ab positive / RNA not available	36 (1%)
HDV Ab and RNA not available	2318 (64%)

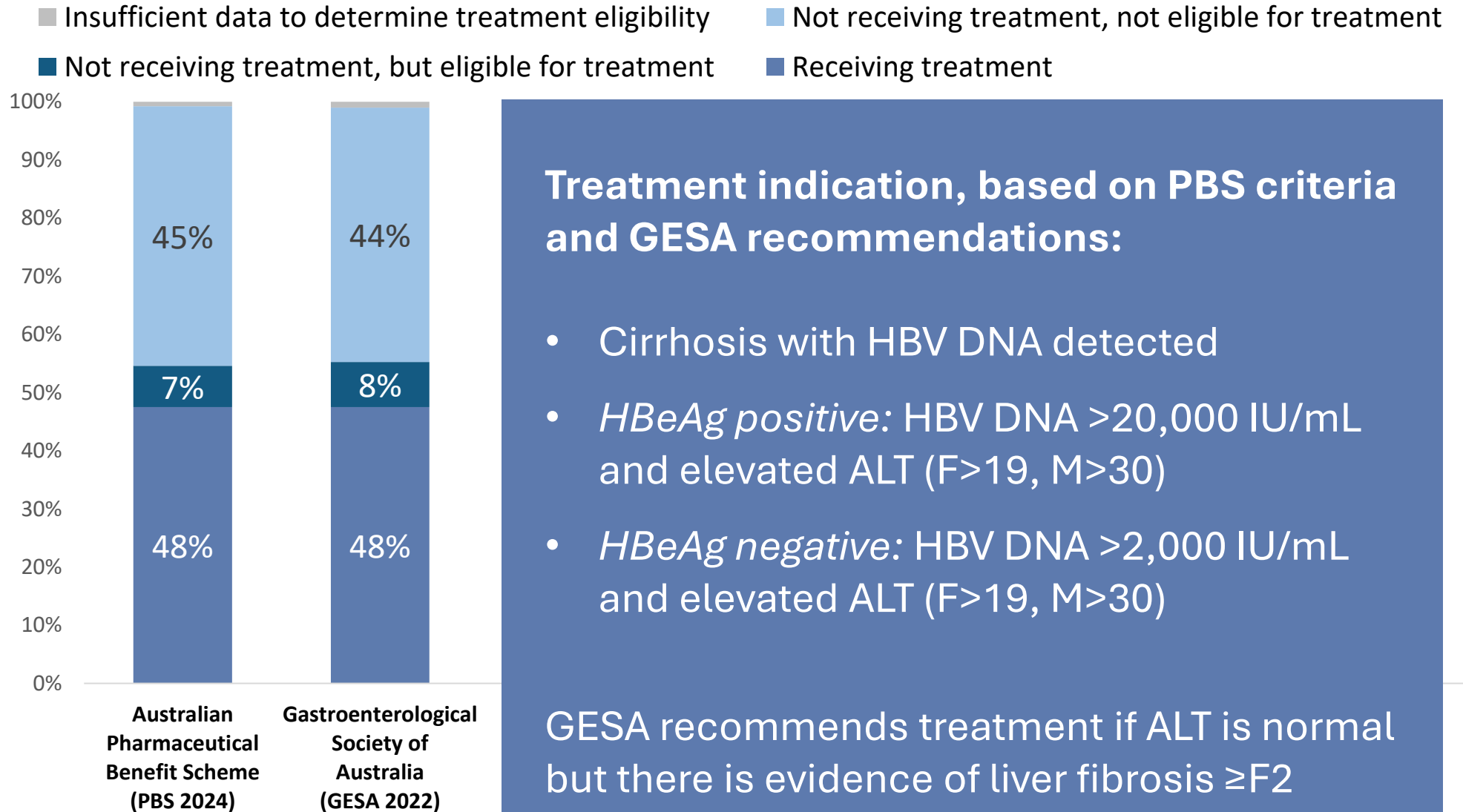
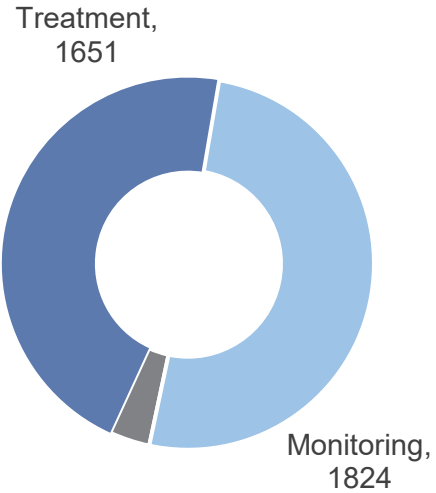
Results: Clinical management



Results: HBV treatment indication



REACH-B



Treatment indication, based on PBS criteria and GESA recommendations:

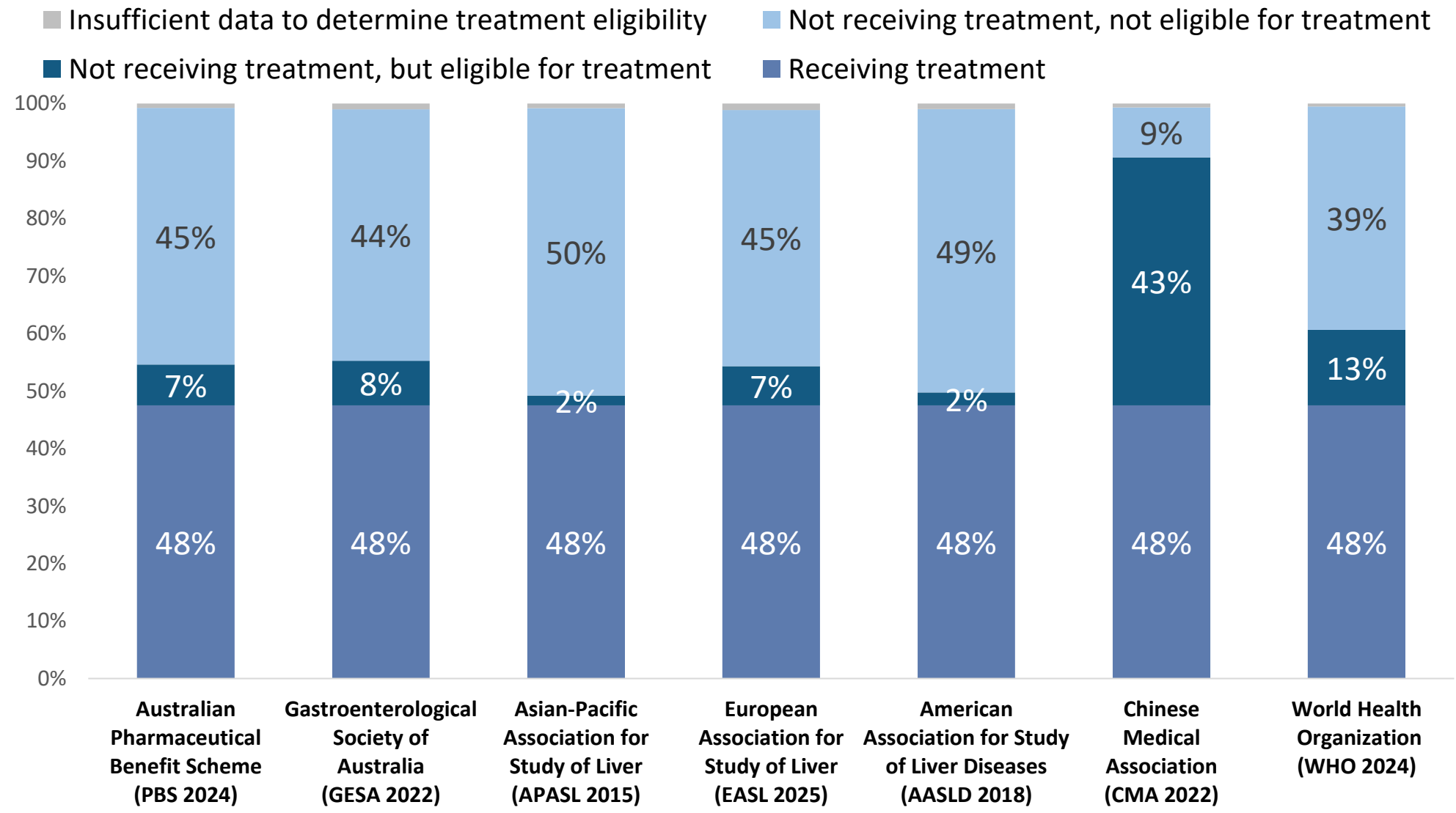
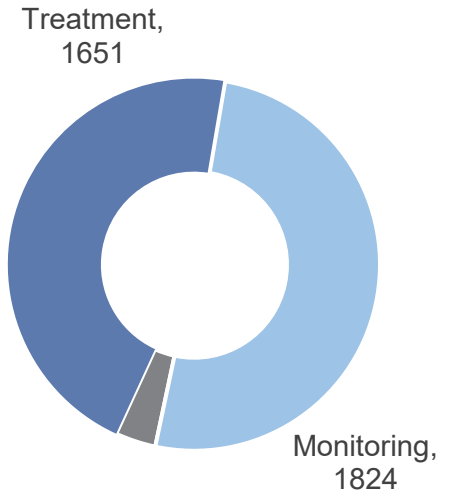
- Cirrhosis with HBV DNA detected
- *HBeAg positive*: HBV DNA >20,000 IU/mL and elevated ALT (F>19, M>30)
- *HBeAg negative*: HBV DNA >2,000 IU/mL and elevated ALT (F>19, M>30)

GESA recommends treatment if ALT is normal but there is evidence of liver fibrosis \geq F2

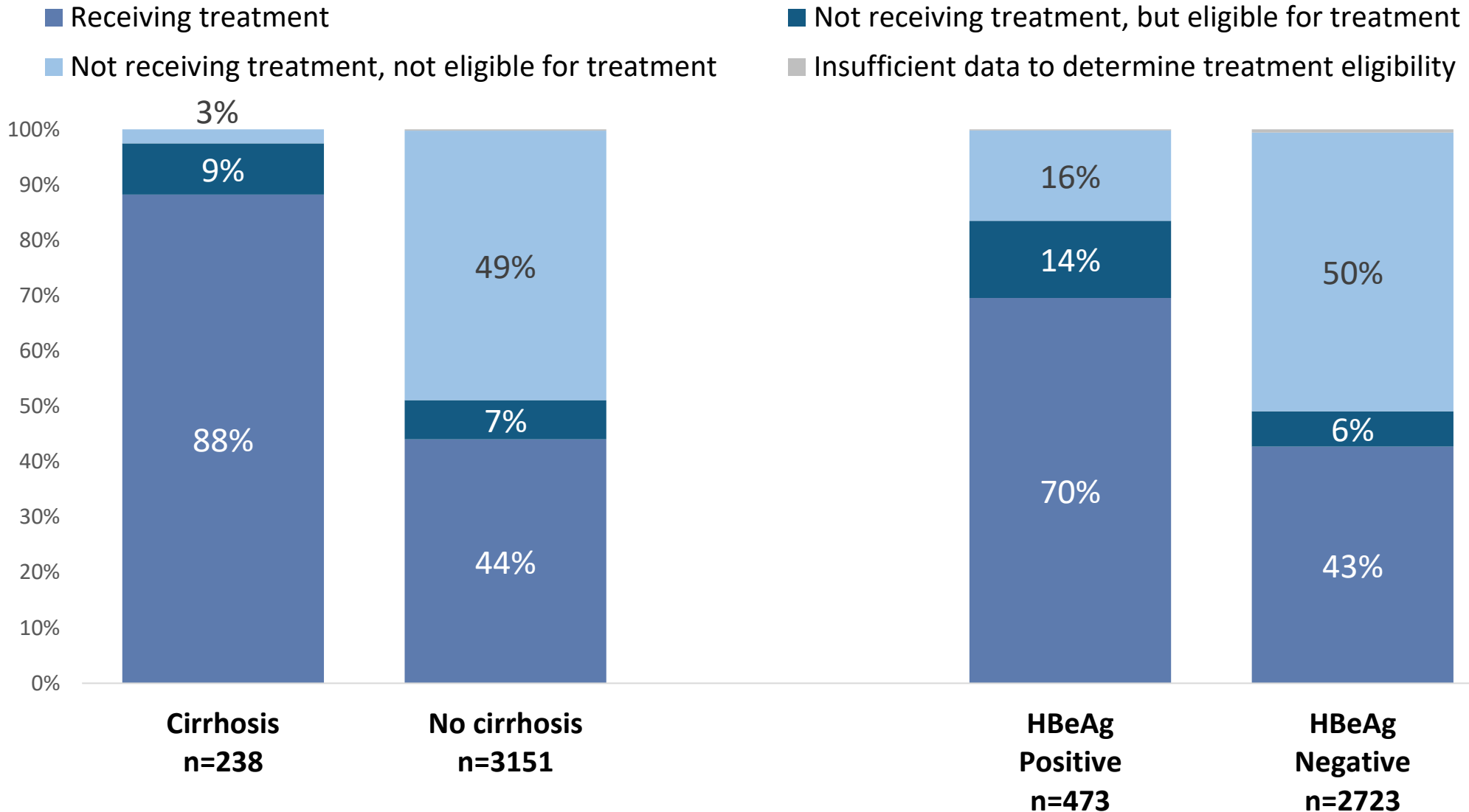
Results: HBV treatment indication



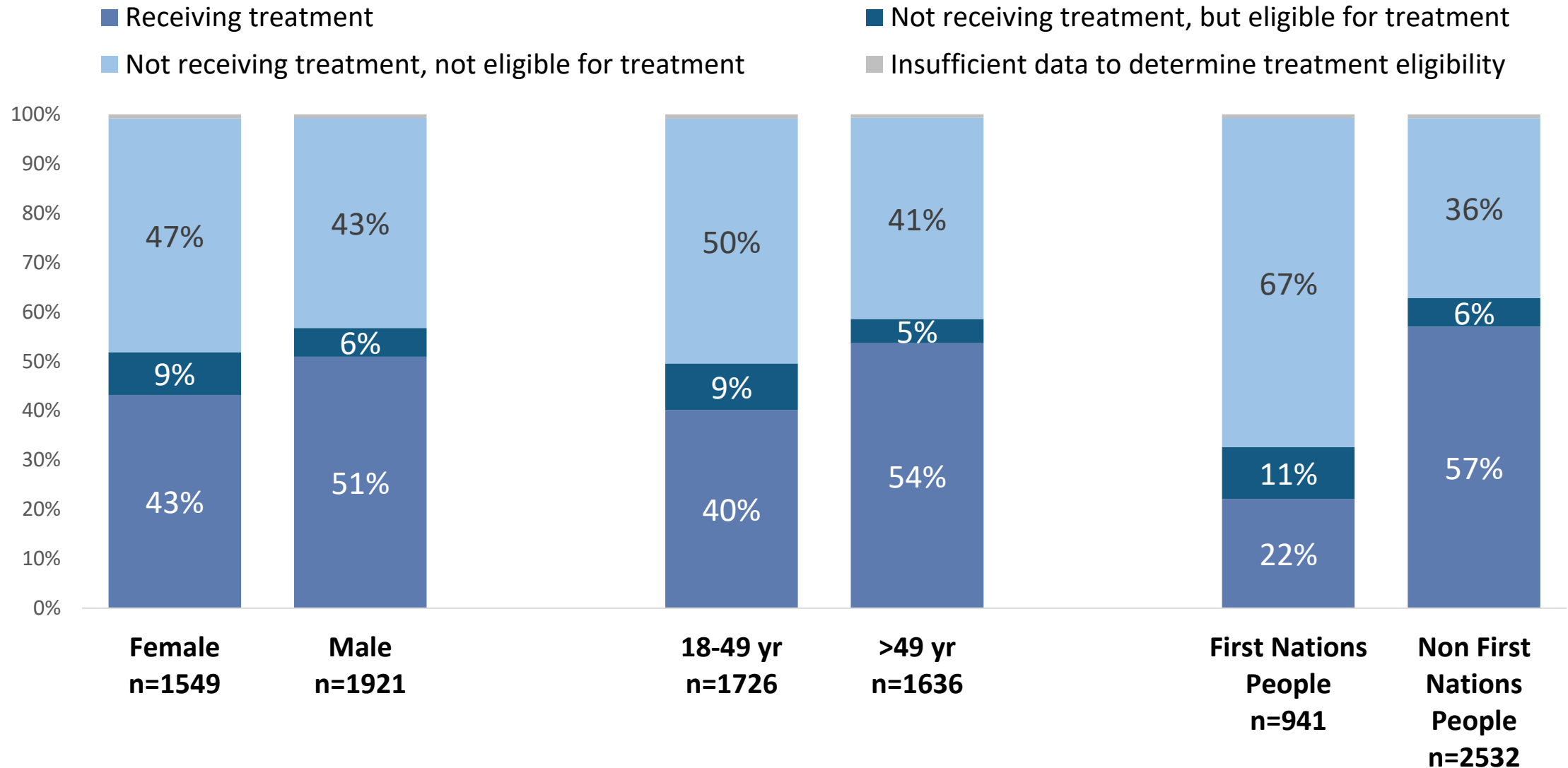
REACH-B



Results: HBV treatment indication (PBS 2024)



Results: HBV treatment indication (PBS 2024)



Results: Demographic factors associated with not receiving HBV treatment despite eligibility

	All participants with available data (n=3223)	
	OR (95%CI)	P
Sex		
Male	1.00	
Female	1.52 (1.27, 1.82)	<0.001
Age		
>60 years	1.00	
41-60 years	1.51 (1.02, 2.25)	0.041
≤40 years	2.59 (1.61, 4.16)	<0.001
First Nations identity		
No	1.00	
Yes	1.86 (0.71, 4.85)	0.205
Region of birth		
Australia	1.00	
East or South-East Asia	1.02 (0.65, 1.60)	0.936
Other regions	0.86 (0.56, 1.32)	0.490
Not available	0.88 (0.21, 3.73)	0.864

Results: Demographic factors associated with not receiving HBV treatment despite eligibility

	All participants with available data (n=3223)		Only participants who were monitored without treatment (n=1763)	
	OR (95%CI)	P	OR (95%CI)	P
Sex				
Male	1.00		1.00	
Female	1.52 (1.27, 1.82)	<0.001	1.24 (1.04, 1.48)	0.016
Age				
>60 years	1.00		1.00	
41-60 years	1.51 (1.02, 2.25)	0.041	1.29 (0.89, 1.87)	0.172
≤40 years	2.59 (1.61, 4.16)	<0.001	2.06 (1.36, 3.13)	0.001
First Nations identity				
No	1.00		1.00	
Yes	1.86 (0.71, 4.85)	0.205	1.06 (0.39, 2.87)	0.909
Region of birth				
Australia	1.00		1.00	
East or South-East Asia	1.02 (0.65, 1.60)	0.936	1.21 (0.63, 2.32)	0.571
Other regions	0.86 (0.56, 1.32)	0.490	0.70 (0.44, 1.13)	0.146
Not available	0.88 (0.21, 3.73)	0.864	0.97 (0.20, 4.69)	0.967

Conclusion

- Among REACH-B participants, most individuals meeting PBS treatment criteria receive treatment. It should be highlighted that participants are individuals already engaged with care and not representative of all people with HBV in Australia.
- Given the higher risk of liver fibrosis progression and HCC among people with cirrhosis and those HBeAg positive, greater focus is needed to ensure these populations receive appropriate care.
- Lower treatment among women and younger individuals may partly reflect the lower threshold for elevated ALT in women (F:19, M:30 IU/ml), or limitations of PBS criteria for more nuanced treatment decision-making in younger people where elevated ALT may be attributed to non-HBV factors.

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