

# Missed Opportunities: A Retrospective Study of Hepatitis C Testing in Hospital Inpatients

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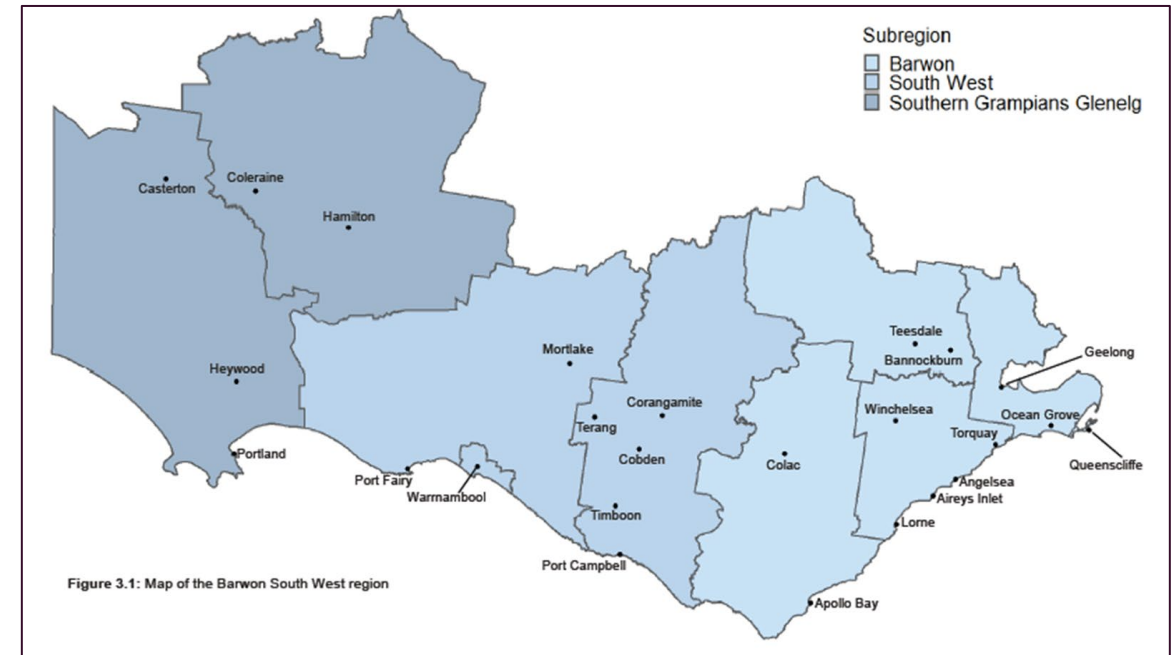
Barwon  
Health

We, Barwon Health, acknowledge the  
Traditional Owners of the land, the  
Wadawurrung people of the Kulin Nation.

We pay our respects to the Elders  
both past and present.

# Micro-elimination of Hepatitis C in Barwon South West

- Barwon South West region (BSW)
  - Part of Western Victoria Primary Health Network
  - Highest rate of treatment uptake in Australia -34.3% higher than national average<sup>1</sup>
- BSW micro-elimination strategy supporting community-based hepatitis C testing and treatment –“one stop shop”
  - Regional outreach nursing
  - Remote consultation pathways supporting GPs
  - Testing and linkage to care at an NSP
  - Enhanced notification system through the local public health unit
- **What about hospitalisation?**
- **Are patients with hepatitis C risk factors being tested and linked to care during hospital admission?**



<sup>1</sup>MacLachlan JH. Viral Hepatitis Mapping Project: Hepatitis C National Report  
Map: Barwon South West Public Health Unit. Population Health Catchment Plan 2023-2029

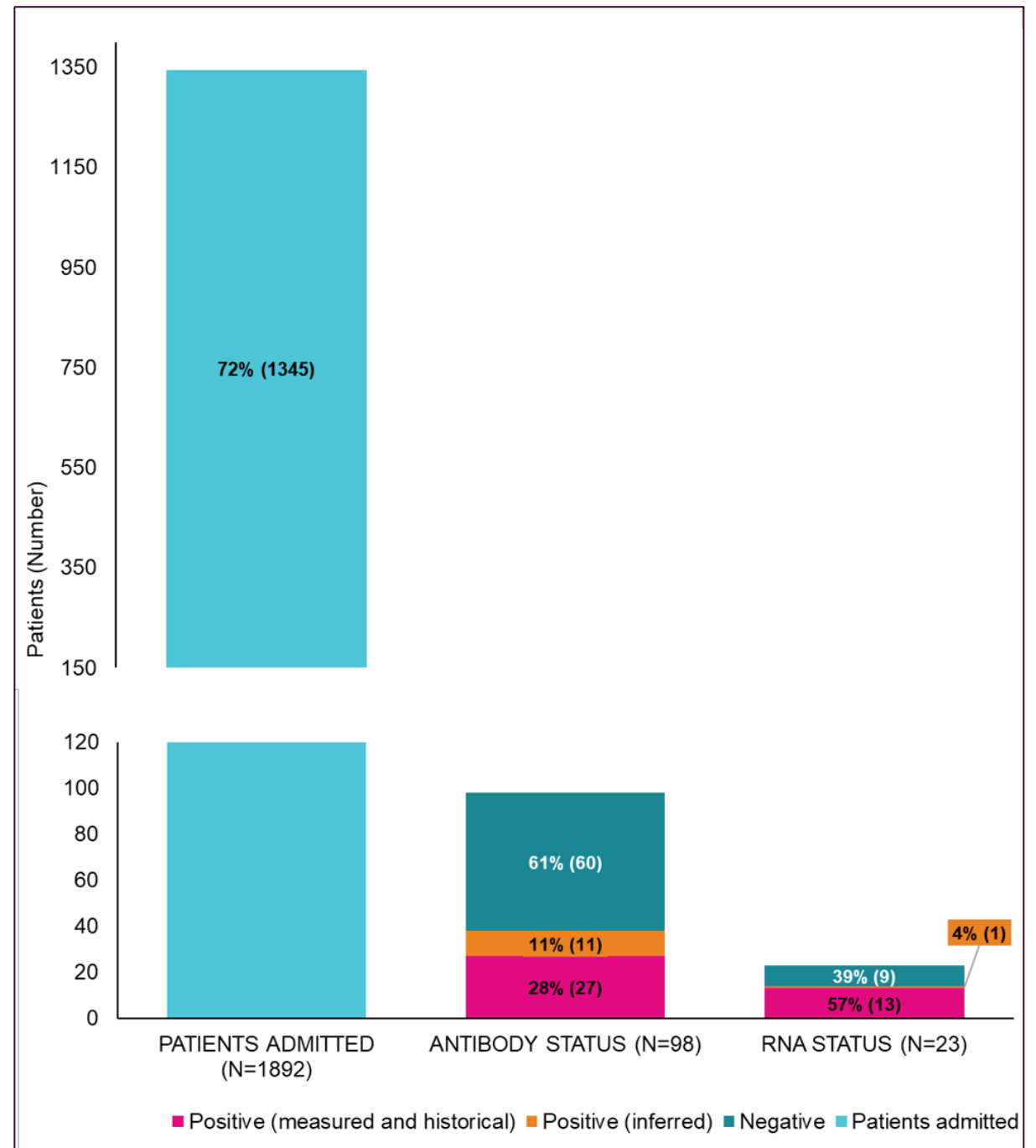
# Methods & Results

- Retrospective cohort study
- November 2018 - November 2021
- All patients admitted to University Hospital Geelong (UHG) and emergency department attendees at risk of hepatitis C defined as documentation in medical record of:
  - History of injecting drug use (IDU)
  - History of hepatitis C
- Data sources
  - Hospital admissions
  - Pathology
  - Hospital pharmacy
  - Outpatients liver clinic
- 79,923 adults attended UHG
- A total of 1892 (2.3%) had at least one relevant episode
  - 628 (33.2%) had an episode with hepatitis C separation coding
  - 1345 (71.1%) had an episode with IDU-related separation coding

Variable	Hep C coded (n=628)	IDU-coded (n=1345)
Mean episodes/patient	1.9	1.2
Median length of stay (range)	4.6 days (1-124)	2.58 days (1-88)
Mean age (range)	49 (18-81)	40 years (18-96)
Proportion female sex	36.3%	54%
Proportion Aboriginal and Torres Strait Islander	8.5%	4.4%

# Cascades of care and missed opportunities

- Of 1345 patients with an IDU-related episode
  - 98 (7.3%) had an antibody test
    - 38 (38.8%) positive
  - 23 (60.5%) had an RNA test
    - 14 (60.9%) RNA detected



# Cascades of care and missed opportunities

- Missed opportunities for hepatitis C care for 92.3% (1242/1345)
  - Emergency department had the highest number of IDU-related episodes
  - ED presentations had the lowest odds for hepatitis C care (aOR 0.13, a95% CI 0.06-0.25)
- Predictors of hepatitis C antibody testing
  - Mental health admission (aOR 2.12, a95% CI 1.24-3.63)
  - Identifying as Aboriginal or Torres Strait Islander (aOR 1.73, a95% CI 1.09-2.84)
  - Male sex (OR 1.59 95% CI 1.17-2.16)
- Predictors of hepatitis C RNA testing
  - OB-GYN admission (aOR 4.38, a95% I 1.55-12.37)

# The hospital: a one stop shop?

- More than 2% of inpatients had an admissions associated with IDU or hepatitis C - most are not being tested or linked to care
- Focus on departments with a higher prevalence i.e. emergency departments
- Success providing hepatitis C care in a 'one stop shop' in the community –same approach in hospital?
  - Commencing treatment whilst admitted (OPPORTUNITI-C<sup>1</sup>)
  - Nurses and peer workers for health system navigation and harm reduction education
  - Support prescribing by psychiatrists to link mental health patients to treatment<sup>2</sup>
  - Collaborative care models that coordinate hep C treatment and care post pregnancy to link OB-GYN patients to care<sup>3</sup>

1. Midgard, H.; Malme, K.B. Opportunistic treatment of hepatitis C infection among hospitalized people who inject drugs (OPPORTUNI-C): A stepped wedge cluster randomized trial. *Clin. Infect. Dis.* 2024, 78, 582–590.

2. Roder, C.; Nguyen, P. Psychiatrists can treat hepatitis C. *J. Viral Hepat.* 2021, 28, 1763–1764.

3. Roder, C.; Chand, S. Pregnancy—a key moment for engaging women with hepatitis B in care. *Aust. N. Z. J. Public Health* 2021, 45, 299–300.