NBMPHN Regional Data to Inform your Quality Improvements

Geographic diversity in chronic hepatitis B and C prevalence, management and treatment

Wentworth Healthcare
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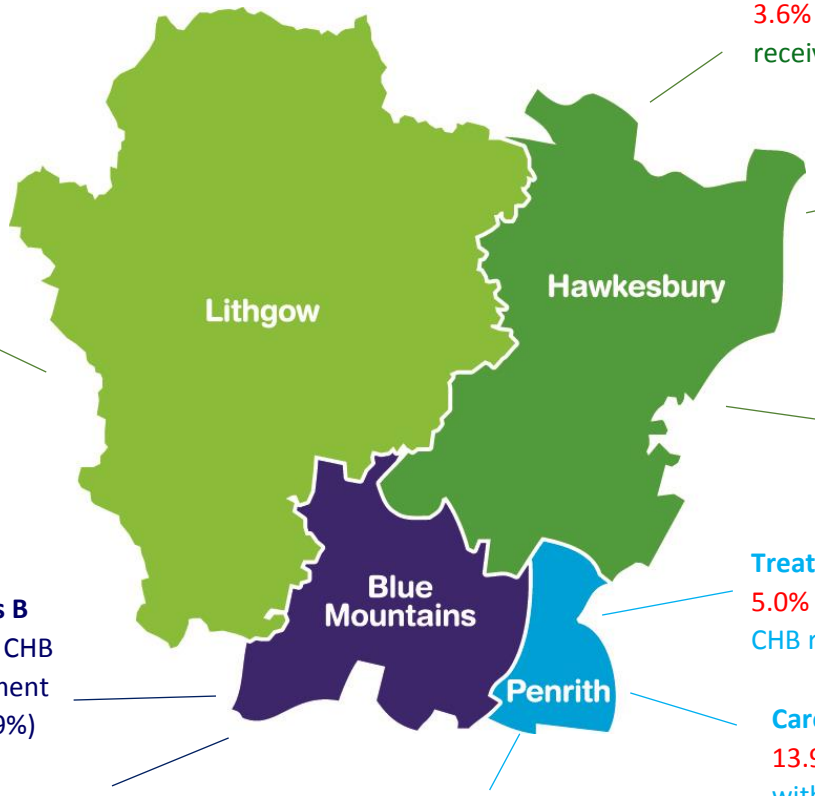
This recent World Health Organisation Collaborating Centre for Viral Hepatitis National Report 2017, contains some interesting and challenging data for primary and specialist healthcare providers in the NBMPHN region.

Treatment uptake for chronic hepatitis B (CHB): only 3.6% of persons with CHB (Richmond-Windsor) received treatment in 2017 (NSW, 11.0%)

Care uptake for chronic hepatitis B (CHB): a significantly lower proportion* of persons with CHB received treatment or monitoring in 2017 compared to the state average (NSW, 24.9%)



Care uptake for chronic hepatitis B (CHB): only 7.3% of persons with CHB (Richmond-Windsor) received treatment or monitoring in 2017 (NSW, 24.9%)

Treatment uptake for chronic hepatitis C (CHC): only 13.1% of persons with CHC (Richmond-Windsor) received treatment in 2017 (NSW, 24.9%)

Treatment uptake for chronic hepatitis B (CHB): only 5.0% (Penrith) and 8.0% (St Marys) of persons with CHB received treatment in 2017 (NSW, 11.0%)

Care uptake for chronic hepatitis B (CHB): only 7.6% of persons with CHB (Blue Mountains) received treatment or monitoring in 2017 (NSW, 24.9%)

Care uptake for chronic hepatitis B (CHB): only 13.9% (Penrith) and 19.4% (St Marys) of persons with CHB received treatment or monitoring in 2017 (NSW, 24.9%)

Treatment uptake for chronic hepatitis B (CHB): only 2.9% of persons with CHB (Blue Mountains) received treatment in 2017 (NSW, 11.0%)

Treatment uptake for chronic hepatitis C (CHC): only 16.4% (Penrith) and 18.1% (St Marys) of persons with CHC received treatment in 2017 (NSW, 24.9%)

How do patients in your practice compare to this data? How is the care of your patients affected by this information?

Geographic diversity in chronic hepatitis B and C prevalence, management and treatment

This 2017 World Health Organisation Collaborating Centre for Viral Hepatitis National Report, released in April 2019, contains some interesting and challenging data for primary and specialist healthcare providers in the Nepean Blue Mountains region about the prevalence, immunisation, treatment and monitoring of chronic hepatitis B and C.

Background

The Viral Hepatitis Mapping Project National Report 2017 assesses geographic variations across Australia in the prevalence of chronic hepatitis B and C, and the disparities which exist in access to care, including within Nepean Blue Mountains.

- Despite a relatively lower population prevalence of chronic hepatitis B (CHB) and chronic hepatitis C (CHC) among residents in the Nepean Blue Mountains region, there was **lower engagement in treatment** and **lower engagement in treatment or monitoring** among local residents with CHB and CHC compared to state and national averages.
- All "SA3" (Statistical Area 3 groupings) smaller area locations within the NBMPHN region were found to have **lower engagement in treatment** and **lower engagement in treatment or monitoring** among local residents with CHB and CHC compared to state and national averages.
- Infant Hepatitis B immunisation coverage was ***lower*** among **Aboriginal and Torres Strait Islander children** and **did not** reach the 95% target for 12-month old children in Nepean Blue Mountains PHN.
- Treatment for CHB **prescribed by general practitioners** (GPs) as a proportion of all treatment prescribed by GPs, specialist physicians and other providers was **relatively high** in the NBMPHN, compared to the National average.
- Treatment for CHC **prescribed by general practitioners** (GPs) as a proportion of all treatment prescribed was the **highest** in the NBMPHN, among all Primary Health Network regions in Australia.

Role of primary care providers in hepatitis B diagnosis, monitoring and management

The Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) recommends that it is essential for primary care providers to play an active role in the testing, diagnosis and management of people with CHB. Primary care providers can play a key role for persons with CHB in the following ways:

1. **Opportunistically testing** people from priority populations for hepatitis B (people born in overseas countries with intermediate or high HBV prevalence, in particular the Asia-Pacific region - China and Vietnam, and Aboriginal and Torres Strait Islander people).
2. Correctly **monitoring** people with CHB to assess for phase of disease and **managing** or **referring** accordingly.
3. Identifying when a patient should be referred for **consideration of treatment.**
4. **Testing and vaccinating people susceptible to infection**, especially family members (parents, siblings, children), household contacts and sexual contacts of people with hepatitis B.

Role of primary care providers in hepatitis C diagnosis, monitoring and management

On March 1st 2016, Australia introduced a PBS listing of new highly effective, well-tolerated, short duration (mostly 12 weeks) oral treatments available to all persons living with HCB aged over 18 years.

The ASHM recommends that **increasing treatment accessibility is a high priority** and that **all Australians living with chronic CHC should be now considered for direct acting antiviral (DAA) treatment.**

Primary health care providers can play a key role for persons with CHC in the following ways:

1. **Prevention and Education:** providing education about strategies for reducing the risk of transmitting the virus to others (in particular for people who inject drugs).
2. **Testing and diagnosis:** **identifying** people at risk and offering testing.
3. **Assessment and further care:** determine infection type, if resolved, if co-infection exists, assess stage of liver disease and need for lifestyle modification advice.
4. **Treatment:** **Prescribing DAA's** for persons with diagnosed or known CHC, in accordance with the *Australian recommendations for the management of hepatitis C virus infection: a consensus statement (September 2018)**. New DAA treatment can be prescribed by primary care practitioners on an S85 authority script following consultation with a gastroenterologist, hepatologist or infectious diseases physician experienced in treating CHC.
5. **Post treatment:** provision of individualised post-treatment care, including establishing risk of re-infection, education on transmission prevention, annual testing in those at higher risk of re-infection, &/or referral for those not cured or if reinfection occurs.

Recommendations

1. GPs and practice staff are encouraged to review the **Chronic Hepatitis B** and **Hepatitis C** pathways available on the Nepean Blue Mountains HealthPathways website: https://nbm.communityhealthpathways.org
2. Each practice is encouraged to **explore its own practice data** using the **PenCS (CAT4) tool** to identify patients who may be at an **increased risk** of hepatitis B or hepatitis C, and/or patients who **may need to be tested**.
3. **Provide education, treatment and monitoring** as appropriate for persons with hepatitis B and/or hepatitis C, **in accordance with best practice guidelines***.

What does the data look like in your practice?

How to identify patients who *have not been screened* for hepatitis B or C in your practice

General Practitioners, Practice Nurses and/or other general practice staff can identify and export reports to show patients who **have not been screened** for hepatitis B or C using filters available within the Pen CS (CAT4) tool.

Steps:

1. Open the CAT4 Clinical Audit Tool on your computer, login and select 'Daily View'.
2. Click 'View Extracts' and then select the extract you wish to review (usually the most recent extract).
3. Click 'View Filters'.
4. Clinic on the 'Sexual Health' tab, then on the 'HepB' or 'HepC' sub-tabs as appropriate.
5. Double click on the Red 'Not Screened' item in the key to the right hand side of the graph. This will display a list of all the patients who have not screened for HepB or HepC (depending on tab selected) which can then be exported for further review.
6. **Note:** if you wish to apply filters to your data which are deemed relevant to your practice, this should be done at Step 3. For example, selecting 'Aboriginal and/or Torres Strait Islander' patients under the 'Ethnicity' tab, or selecting only 'Active' patients under the 'General' Tab. You must click 'Recalculate' to apply the chosen filters.

This report will provide the practice with a list of patients who have not been screened for hepatitis B or hepatitis C, and those whose last screening test occurred greater than 12-months ago.

Practices are encouraged to discuss any queries, such as requesting assistance with the CAT4 tool, with their Practice Support team officer at NBMPHN.

What does the data look like in your practice?

How to identify patients who have been ***diagnosed*** with hepatitis B or C in your practice

General Practitioners, Practice Nurses and/or other general practice staff can identify and export reports to show patients who have been **diagnosed** with hepatitis B or C using filters available within the Pen CS (CAT4) tool.

Steps:

1. Open the CAT4 Clinical Audit Tool on your computer, login and select 'CAT4' to view the full range of tools.
2. Click 'View Extracts' and then select the extract you wish to review (usually the most recent extract).
3. Click 'View Filters'.
4. Select the 'Conditions' tab, then select the 'Other' tab and then check either 'Hepatitis B' or 'Hepatitis C' in the 'Hepatitis and Liver' section.
5. Click 'Recalculate' to apply the filters chosen.
6. To see the list of patients with 'Hepatitis B' and 'Hepatitis C' click on the 'View Population' icon. This will display a list of all the patients diagnosed with either HepB or Hep C (depending on filter selections) which can then be exported for further review.
7. **Note**: if you wish to apply filters to your data which are deemed relevant to your practice, this should be done at Step3. For example, selecting only 'Active' patients under the 'General' tab. You must click 'Recalculate' to apply the chosen filters.
8. **Note**: you may wish to combine this search with the previous one, e.g. to identify patients diagnosed with hepatitis C who have not been screened for hepatitis B, or patients diagnosed with hepatitis B who have not been screened for hepatitis C.

This report will provide the practice with a list of patients who have been diagnosed with hepatitis B or C.

Practices are encouraged to discuss any queries, such as requesting assistance with the CAT4 tool, with their Practice Support team officer at NBMPHN.

Summary of Viral Hepatitis Mapping in Australia: geographic diversity in chronic hepatitis B and C prevalence, treatment and monitoring relevant to NBMPHN (based on 2016-2017 data)

Hepatitis B Prevalence and Treatment – NBMPHN vs. NSW state and National comparisons

- Relatively ***lower prevalence*** of CHB among residents in Nepean Blue Mountains (0.62%) compared to NSW State (1.04%) and National averages (0.95%) in 2017.
- ***Lower treatment uptake*** among NBMPHN residents with CHB (5.4%) compared to the National average (8.3%) in 2017. This was *significantly lower* than the Third National Hepatitis B Strategy target being 20% by 2022.
- There was also a ***lower engagement in care*** (either treatment or monitoring) among NBMPHN residents with CHB (13.4%) compared to the National average (20.2%). This was *significantly lower* than the National Strategy target being 50% by 2022.
- **Prescribing by general practitioners** (GPs) was ***relatively high*** in the NBMPHN region, with 23% of CHB treatment prescriptions provided by GPs compared to specialist physicians or other providers (Australia, 10.5%).
- In 2017, ***less than half*** (34.0%) of people living with CHB in NSW had a *viral load monitoring test* in the past four years. This is despite Australian guidelines recommending that all people living with CHB should receive a viral load test at least annually.
- Nationally, minimal increases were seen between 2016 and 2017 in treatment uptake (from 7.8% to 8.3%) and in care uptake (from 19.6% to 20.2%).

Variations in hepatitis B treatment and care - within NBMPHN

- NBM SA3 locations demonstrated a ***lower CHB treatment uptake*** than the State average (11.0%): Blue Mountains (2.9%), Richmond-Windsor (3.6%), Penrith (5.0%) and St Marys (8.0%).
- All NBM SA3 locations demonstrated a ***lower CHB care uptake*** (either treatment or monitoring) than the State average (24.9%): Richmond-Windsor (7.3%), Blue Mountains (7.6%), Penrith (13.9%) and St Marys (19.4%).

Hepatitis B Immunisation

- Hepatitis B infant immunisation coverage among 12-month-old children in Nepean Blue Mountains PHN (95.0%) was ***slightly higher*** than the National average (94.7%) and reached the 95% National Strategy target for vaccination coverage of 95% by 2022.
- Infant Hepatitis B immunisation coverage was ***lower*** among **Aboriginal and Torres Strait Islander children** and **did not** reach the 95% target for 12-month old children in Nepean Blue Mountains PHN.

Hepatitis C Prevalence and Treatment – NBMPHN vs. NSW state and National comparisons

- Slightly ***lower prevalence*** of CHC among residents in Nepean Blue Mountains (0.96%) compared to the NSW State (1.04%), but ***slightly higher*** prevalence compared to the National average (0.94%) in 2016.
- ***Lower treatment uptake*** among NBMPHN residents with CHC (17.7%) compared to the National average (23.6%) in 2017. This was *significantly lower* than the Fifth National Hepatitis C Strategy target being 65% of people living with CHC having initiated treatment by 2022.
- Hepatitis C treatment numbers ***declined*** between 2016 and 2017 nationally (from 14.0% to 9.0% in NSW) and in almost all Australian PHN regions, *including* in NBMPHN.
- The proportion of treatment **prescribed by GPs** was ***highest*** in the NBMPHN region (44.9%) compared to all other PHNs in Australia (24.5%).

Variations in CHC treatment - within NBMPHN

- NBM SA3 locations with a ***lower CHC treatment uptake*** than the State average (22.9%): Richmond-Windsor (13.1%), Penrith (16.4%) and St Marys (18.1%).

Liver Cancer

- None of the SA2 statistical areas within NBMPHN were estimated to have a liver cancer rate above the overall national incidence rate.
- ***Higher proportion*** of lifestyle factors related to liver cancer in Nepean Blue Mountains compared to the National average, including obesity in adults (31.2% vs. 29.5%), smoking in adults (18.6% vs. 16.8%) and alcohol consumption > 2 drinks per day (19.4 vs. 17.3%).

References

1. Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM), 2019. Viral Hepatitis Mapping Project: National Report 2017 [Online]. Available at: https://ashm.org.au/products/product/Viral-Hepatitis-Mapping-Project-2017
2. Gastroenterological Society of Australia, Hepatitis C Virus Infection Consensus Statement Working Group, 2018. Australian recommendations for the management of hepatitis C virus infection: a consensus statement (September 2018) [Online]. Available at: https://www.asid.net.au/documents/item/1208
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4. Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM), 2016. Primary care providers and hepatitis C [Online]. Available at: https://www.ashm.org.au/products/product/978-1-920773-42-7