

CLINICAL AUDIT

LIVER FUNCTION TESTING IN PRIMARY CARE

Determining hepatitis status of at-risk people

BACKGROUND

Many New Zealand studies have demonstrated considerable variation in infection rates of hepatitis B between different demographic groups. These studies show high rates of hepatitis B exposure and chronic hepatitis B infection in Māori. Estimates of chronic hepatitis B infection range from 5.4% in Māori police and customs workers in the late 1980's to around 16% in Māori children in Eastern Bay of Plenty in the early 1980's (prior to the introduction of infant hepatitis B immunisation).

In contrast, rates of chronic hepatitis B infection among European populations have been no higher than 3% and generally less than 1%. There is limited data on chronic hepatitis B infection in Pacific and Asian people in New Zealand, but hepatitis B infection is known to be endemic in the Pacific Islands and most Asian countries.

There are an estimated 40 000 people with chronic hepatitis B infection in New Zealand. Although approximately 10–20% of people with chronic hepatitis B infection will eventually develop cirrhosis, most will be unaware of their hepatitis B status unless detected by laboratory test or presenting at a late stage with clinical manifestations of chronic liver disease or hepatocellular carcinoma.

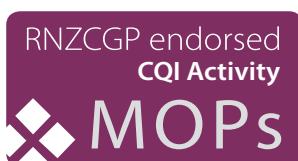
Infant hepatitis B vaccination introduced in New Zealand in the late 1980's is expected to ultimately have the greatest impact on the control of hepatitis B.

During the late 1990's, the New Zealand Hepatitis B Screening Programme was initiated, but while not all areas of New Zealand are involved some of the initiatives can be implemented in other areas. It is recommended that all people of Māori, Pacific Island or Asian ethnicity over the age of 15 years, who have not been previously immunised, are screened for hepatitis B using HBsAg.

AUDIT FOCUS

To reduce the incidence of serious liver damage in people at high risk of chronic hepatitis B infection. Māori, Pacific Island or Asian adults in this population should have their hepatitis B status assessed.

- People found to be HBsAg positive can benefit from management.
- People found to be negative to HBsAg, should have hepatitis B antibody (Anti-HBs) performed.
- Those found to be non-immune should be offered immunisation.



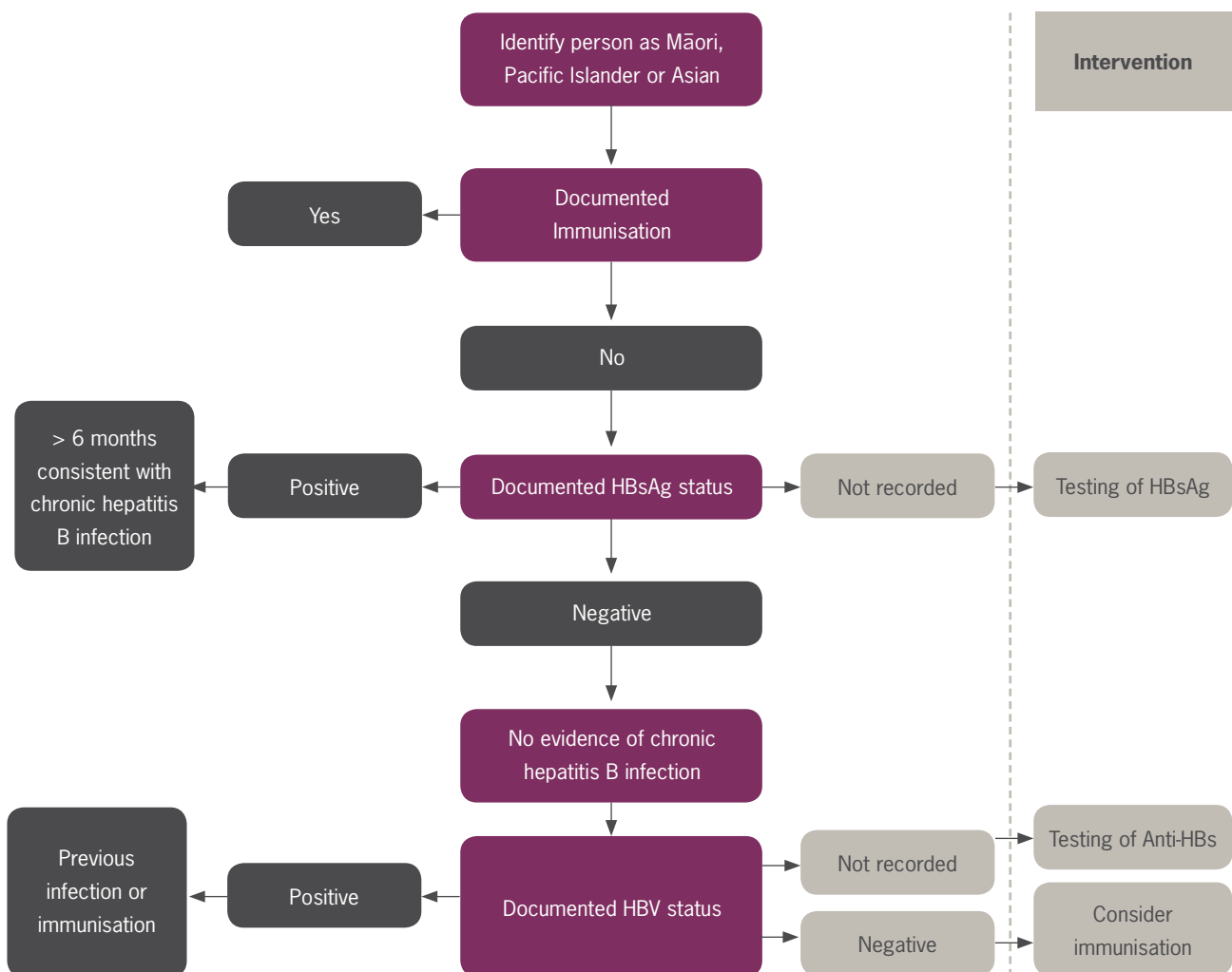
Eligible people

Māori, Pacific Island, or Asian people over the age of 15 years.

Audit criteria

This audit is based on having the necessary information recorded in the clinical records of eligible people to manage their risk of chronic hepatitis B. The audit pathway is represented at Figure 1.

Figure 1: Audit pathway



References

Robinson T, Bullen C, Humphries W, et al. The New Zealand Hepatitis B Screening Programme: screening coverage and prevalence of chronic hepatitis B infection. *NZ Med J* 2005;118;1345.

bpac^{nz}. Liver Function Testing in primary care. 2007. Available from www.bpac.org.nz.

Appendix One: Data Sheet – cycle one

	Is there documented evidence of previous immunisation?	Results of HBsAg recorded?	Results of anti-HBs recorded?	Needs additional intervention
Patient number	YES/NO	pos/neg/not recorded	pos/neg/not recorded	See audit pathway
1				
2				
3				
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25				
26				
27				
28				
29				
30				
Total				
Percent requiring additional intervention				

IDENTIFYING OPPORTUNITIES FOR CQI

Examination of data

1. Set a target percentage of patients who have full details recorded in the patient notes and do not need additional intervention for managing their risk of chronic hepatitis B. **Target percentage** =%
2. What is the percentage demonstrated in the first cycle? **Reported percentage** =%
3. What is the gap between target and reported percentages? **Gap percentage** =%

Check

- If the sample group demonstrates a large gap you might consider repeating the audit on all eligible people in the practice.
- What is causing this gap?
- What are the barriers to closing the gap?

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Make an action plan

- What interventions can be used to overcome these barriers?
- What realistic goals for improvement can be set?

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Monitoring

Review the action plan at regular intervals with the practice team

- Is the process working?
- Are the goals for improvement being achieved?
- Are the goals still appropriate?

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Claiming CQI credits

To claim MOPS credits indicate completion of the audit on your annual credit summary or electronically through 'MOPS online'. Retain a copy of this completed audit as evidence of participation.

Further audit related material

The RNZCGP MOPS handbook outlines the MOPS audit requirements. Bpac resources on Liver Function Testing and a range of clinical audit packs are available from www.bpac.org.nz

Clinical Audit: Liver function testing in primary care

Data Sheet – cycle _____

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Total				
Percent requiring additional intervention				