

# The role of the knowledge broker in viral hepatitis

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## Background

Chronic hepatitis B (CHB) is a complex disease requiring lifelong clinical management; it has a high global prevalence (~400 million people) and strong association with the development of primary liver cancer.(2)

Adherence to the Australian Hepatitis B Testing Policy (3) is low; 38% of Australians with CHB have not been diagnosed.(4) There are multiple factors which prevent adherence to best practice guidelines including patient, physician, organisational and disease-related factors. (5-8)

A Knowledge Translation (KT) approach incorporates interventions aimed at supporting the uptake of evidence into practice. Knowledge Brokers (KB) are the human component of KT and perform roles including knowledge management, linkage agents and capacity builders.

## Project aim

The aim of this KT project was to address the gap between optimal and current CHB testing by General Practitioners (GPs) at a community health centre in Melbourne, through the implementation of a series of KT interventions by the clinician researcher (author - JR).

## Method

Seven interventions were implemented between May 15 and Oct 16:

1. Baseline audit of the number of patients with CHB.
2. Identify barriers and enablers to adherence to clinical guidelines.
3. Educational interventions: GP champions, case-based education and discussion, whole of practice education sessions (nurses, allied HPs, multicultural workers and administrators); consumer education delivered through existing engagement programs.
4. Three monthly audit and feedback cycle of hepatitis B testing behaviour (May 15, Dec 15, March 16, July 16, Oct 16, Jan 2017).
5. Monthly pre-appointment review of patient medical records assessing for CHB risk factors and providing recommendations.
6. Patient-held CHB testing reminder card distributed by reception staff to every patient attending the service in May and Sept 2016.
7. The clinician researcher was based at the project site one day a week and adopted a KB role to build organisational and individual clinician capacity.

## Results

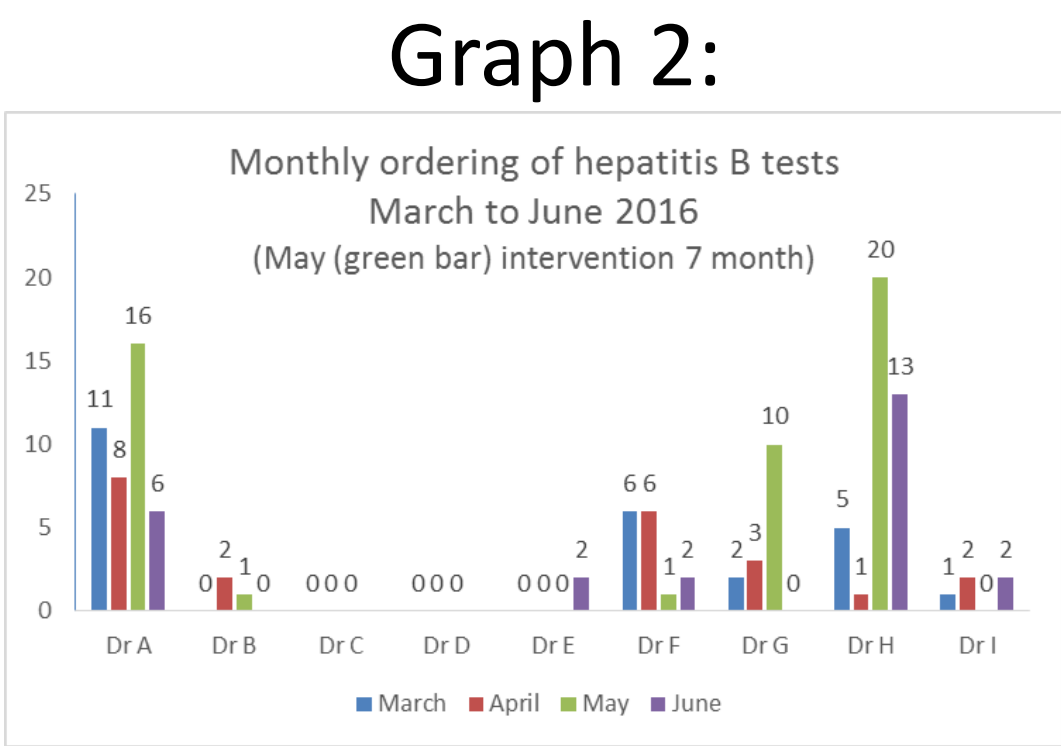
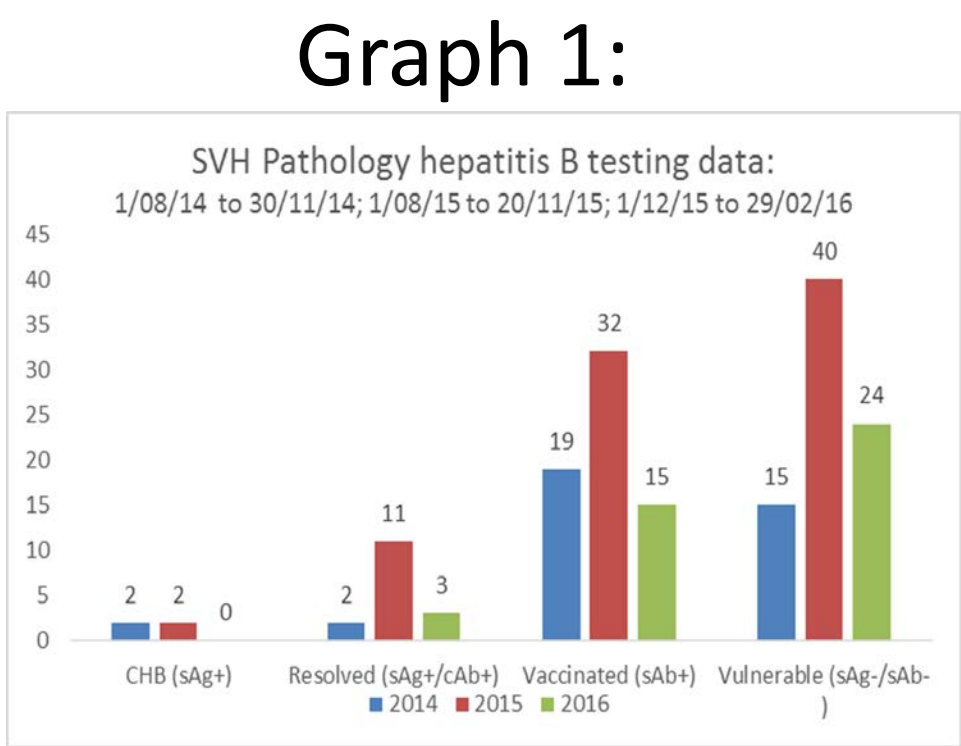
A project advisory committee was established; a memorandum of understanding between Melbourne Health and the community health centre was developed; and ethics approval was obtained in June 2015.

Intervention 1. Baseline audit	Intervention 2. Consultation
Audit of electronic medical records identified: <ul style="list-style-type: none"><li>- 13 patients with CHB</li><li>- 7 patients had been referred to a specialist service</li><li>- 4 patients lost to follow up</li><li>- Unable to contact 2 patients</li></ul>	<u>Patient</u> consultation: <ul style="list-style-type: none"><li>- Low number of patients with CHB accessing care at the project site</li><li>- Perceived stigma was a barrier to engagement in consultation</li></ul> <u>Health professionals</u> (3 primary care nurses & 4 GPs): <ul style="list-style-type: none"><li>- Low knowledge &amp; confidence about CHB</li><li>- Lack of correspondence with tertiary services</li></ul>

**Intervention 3:** Education was delivered between Aug and Nov 15:

- Number of patients tested for CHB during the intervention period was 94, compared to:
  - 46 patients - Aug and Nov 2014 (control)
  - 42 patients - Dec 15 and Feb 16 (post-intervention).

**Intervention 4:** Audit GP ordering of CHB diagnostic panel; allowed evaluation of the impact of the interventions.



**Intervention 5** (Graph 1): Review of records for CHB testing triggers including country of birth, family history of liver disease, injecting drug use or men who have sex with men.

Document recommendations and install ACTION pop up:

Test OR Vaccinate



**Intervention 6** (Graph 2): Patient-held CHB testing reminder card:

- May 2016: increase in CHB testing from 22 tests (April) and 25 (June) to 48 tests ordered in May 16.
- Sept 2016: no difference in number of tests ordered between July (n=20), August (n=18) and Sept (n=18)

**Intervention 7:** KB role involved: providing topic (CHB) expertise; facilitating networks within and externally; supporting the organisation to develop a viral hepatitis strategy. The KB role has not been formally evaluated.

## Conclusion

The findings of this KT study suggest that several interventions are needed to improve hepatitis B testing in at-risk patients. The increase in CHB testing post-interventions was not sustainable. In Oct 16, there were 16 patients with CHB (3 new diagnoses during the project) and 100% increase in hepatitis B vaccination between 2015 and 2016.