The cascade of care for chronic hepatitis B in Australia, 2013-2014

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WHO Collaborating Centre for Viral Hepatitis

Doherty Institute
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Disclosure of Interest

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Why a cascade of care?

- Provide insight into gaps in health service provision and access
- Identify priorities for intervention
- Measure progress to National Strategy Targets
- Focus on entire population affected by chronic hepatitis B
- 'The series of steps a person takes from initial diagnosis through successful treatment'[1]

1. www.aids.gov

The National Strategy targets

- By 2017:
  - Proportion diagnosed 80%
  - Treatment uptake 15%
  - Immunisation coverage 95%
  - Increase priority population coverage
- Other objectives:
  - Increase access to appropriate management and care
  - Reduce burden of disease

Measurement

- No large-scale cohorts of Australians living with CHB
- Limited specific serosurveys
- Very few surveys of diagnosis, awareness of status or uptake of care

→ Routinely collected and administrative data

Data sources

PREVALENCE

- Based on known epidemiology of CHB – focused in priority populations
- Local[1,2] and international[3] seroprevalence data
- Population estimates:
  - ABS Census 2011 and subsequent projections by country of birth, Indigenous status
  - Surveys of drug use[4] and sexual behaviour[5]

1. Turnour 2011. 2. Kowdley 2011. 3. Graham 2013. 4. National Drug Strategy Household Survey. 5. Grulich 2003

Prevalence

Population group	Population size, 2011	Estimated CHB seroprevalence	Estimated population with CHB
Aboriginal and Torres Strait Islander people	548,366	3.9%	21,386
People born overseas:			
China	318,969	8.1%	25,836
People who inject drugs	314,013	4%	12,561
…	…	…	…
Australian total	21,507,719	1.02%	218,567

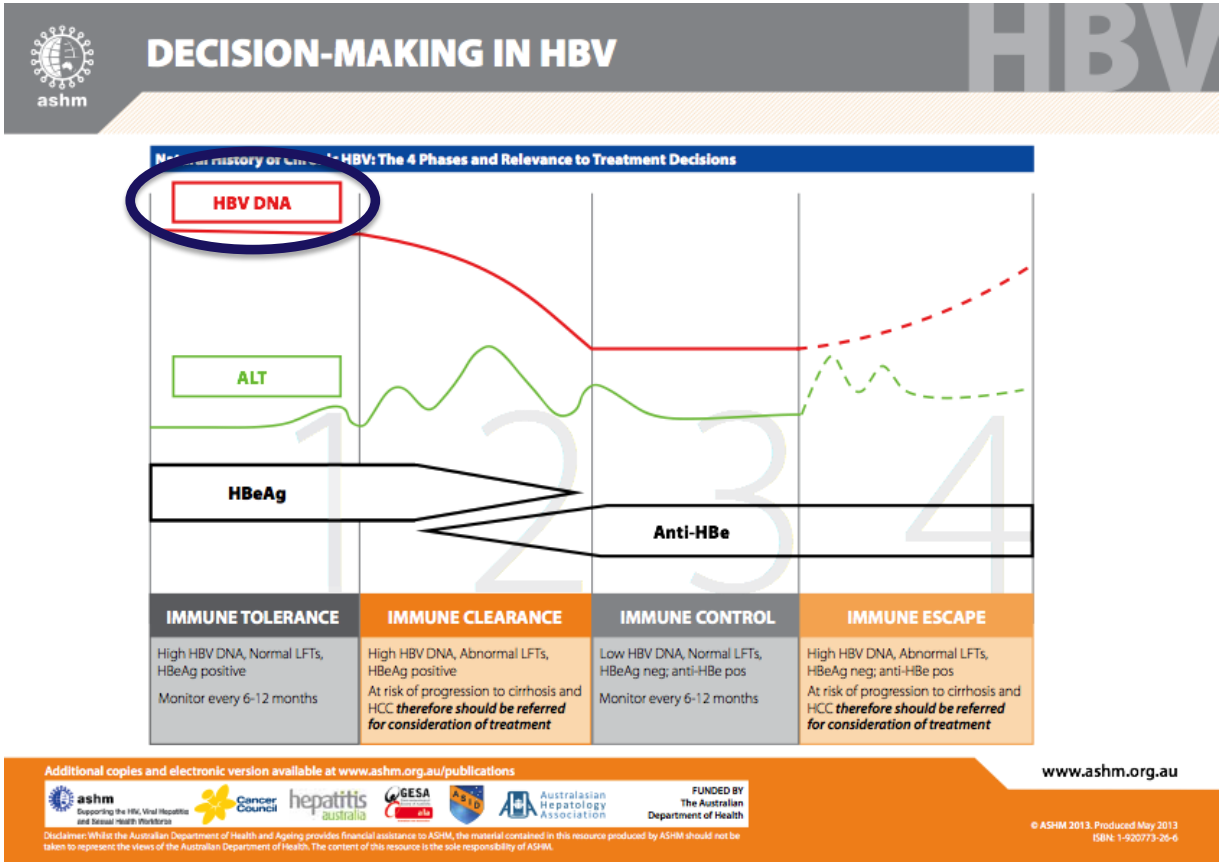
Diagnosis

- Mathematical model: estimation of the number of people who have ever lived with CHB in Australia since 1950
  - Migration, overseas seroprevalence, vaccination, births, deaths
- Number of notifications of CHB infection in Australia since 1970

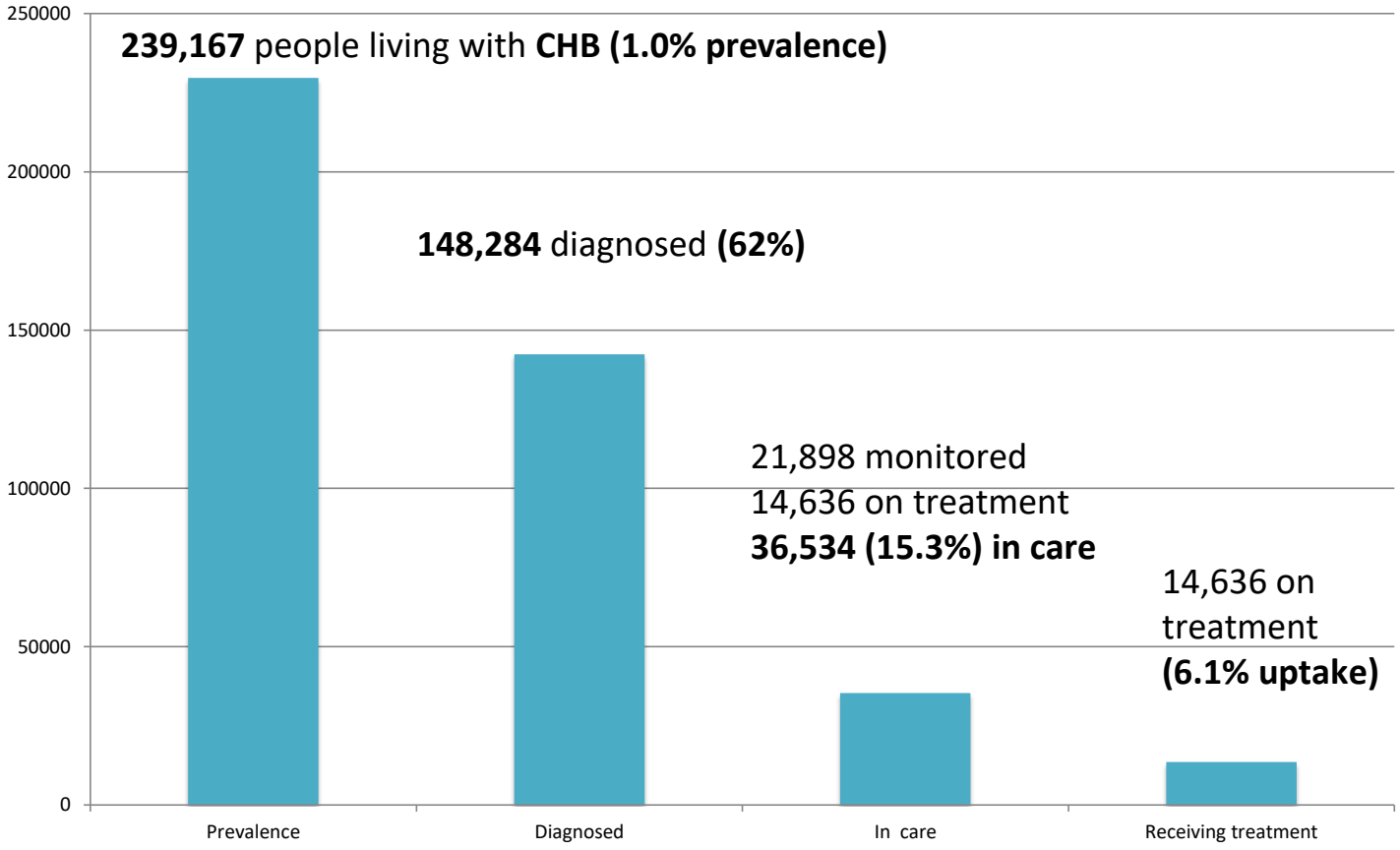
Treatment and care

- Department of Human Services records of testing and treatment provided through Medicare
  - Prescribed a treatment indicated for CHB (excludes HIV; individual patients)
  - Received a viral load test while not on treatment (item 69492)

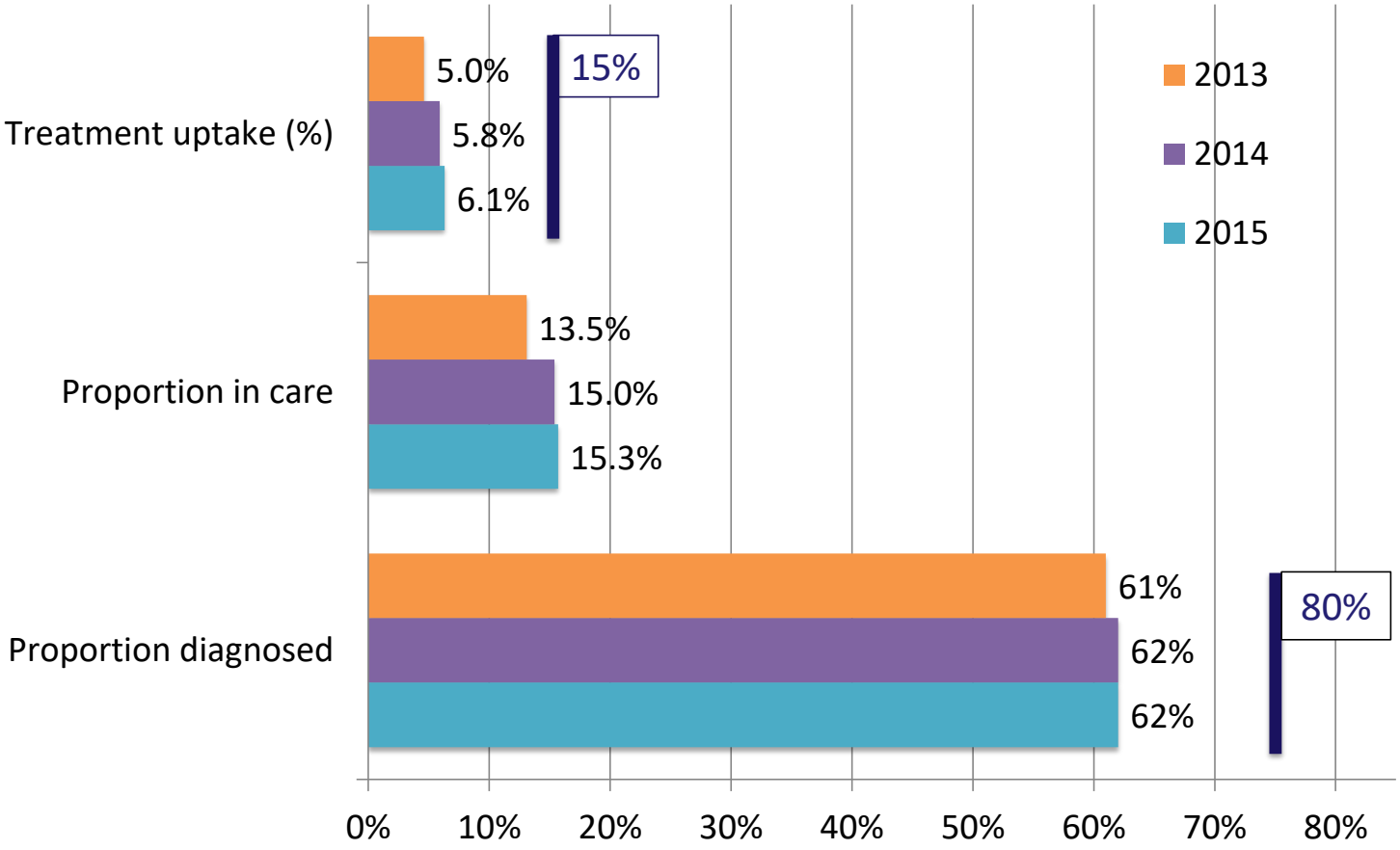
Clinical monitoring for CHB



The cascade of care for CHB, 2015

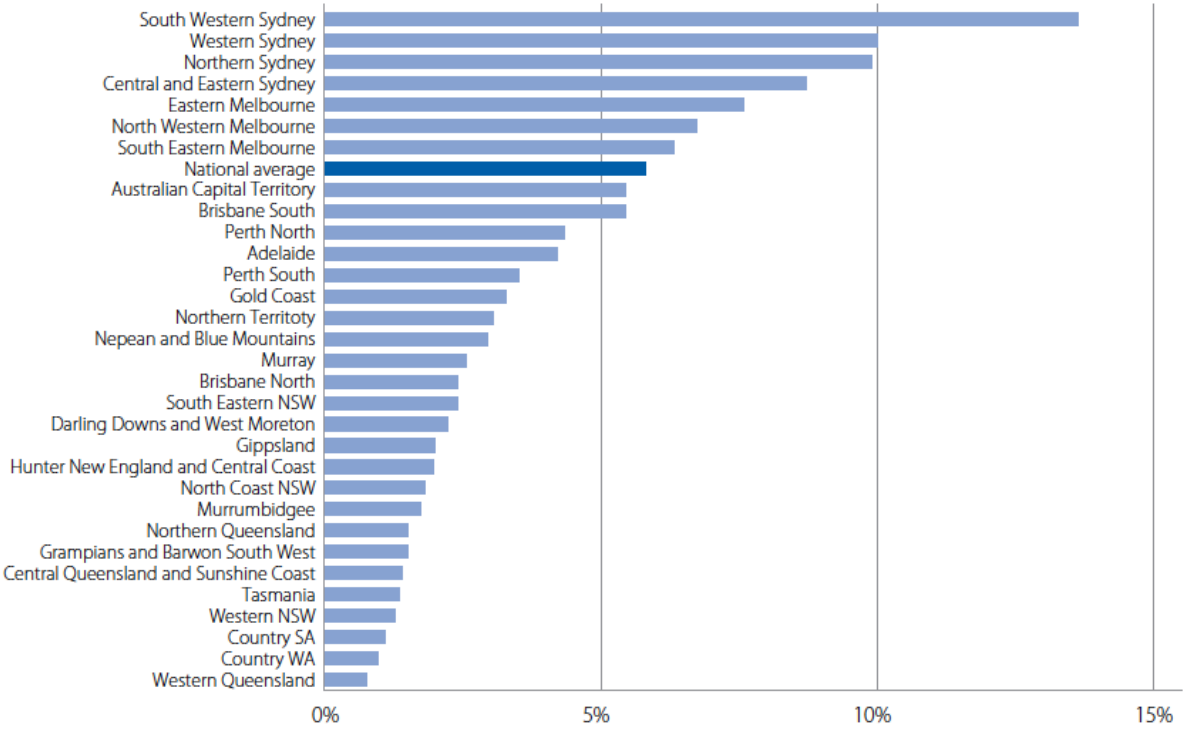


Progress, 2013-2015



Disparities in the cascade, 2014

Figure 6: Treatment uptake by Primary Health Network, 2014 - proportion of people living with CHB who received treatment



Data source: Department of Human Services Medicare statistics.

Limitations

- Cascade as a indicator of underlying barriers
  - Geographic and population-specific analyses
- Source data
  - Routinely collected, administrative
  - Medicare exclusions, missed notifications
  - Applicability of prevalence estimates
  - External validation, other studies

Summary

- The largest gap in the cascade of care is between diagnosis and engagement in ongoing care
- Treatment uptake is increasing more rapidly than other indicators
- Large gap between current levels and National Strategy targets

Further work

- Improving data sources and estimates
- Linkage of data to identify individual trajectories of care, validate assumptions
- Continuing to measure progress, impact of initiatives and policy changes

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