

Modelling the Health and Economic Impacts of Falling Short of the 2030 Hepatitis B and Hepatitis C Elimination Targets

Authors:

Shrestha A¹, Clynes L¹, Pizzie A¹, Didlick J¹, Deltetto I², Peacock A^{2,3,4}

¹ Hepatitis Australia

² HTANALYSTS

³ The George Institute for Global Health

⁴ University of New South Wales

Background:

Australia has committed to eliminating hepatitis B (HBV) and hepatitis C (HCV) by 2030.

Hepatitis Australia modelled the consequences of not meeting the 2030 elimination targets. The analysis combines modelling with lived experience insights to capture impacts for people, the health system, and government expenditure.

Methods:

The modelling compares two scenarios:

1. A benchmark scenario where targets are met in 2030.
2. A shortfall scenario based on current trajectory, where some targets are missed.

Predicted progress against targets drew on surveillance and monitoring data, and relevant research. Non-overlapping population groups were used to avoid double counting.

Resulting analysis presents a national view, disaggregated by jurisdiction and priority populations. Key health and broader social outcomes e.g., liver cancer, transplants, mortality, and broader impacts on quality of life, productivity and healthcare use, support a focussed assessment of liver health impacts.

Results:

Preliminary findings suggest:

- Australia is on track to achieve some elimination targets.
- Further effort and investment are needed to achieve many others.
- Elimination remains achievable and cost-effective.

- Returns on investment of \$7.2 and \$17.1 respectively per \$1 spent on HBV and HCV elimination programs indicate considerable savings if elimination targets are met.
- The costs of inaction are significant.

Conclusion:

Recommendations to ensure elimination targets are reached, and impacts of not achieving targets are avoided, include:

1. Full and timely implementation of the National Strategies, including funding for community-led responses.
2. Local, community-led interventions (meeting the needs of priority populations, removing barriers to care) and achieving equity thresholds as integral to target achievement.
3. Linked-up programs for more early diagnosis and earlier management of liver disease.

Meeting elimination targets could avoid an estimated \$2.9 billion in impacts in 2030, with similar costs recurring each year until elimination is achieved.

Disclosure of Interest Statement:

The project is supported by Gilead Sciences and GSK. Modelling was undertaken for Hepatitis Australia by Health Technology Analysts Pty Ltd. Hepatitis Australia receives funding from the Australian Government, through the Australian Centre for Disease Control, and grants and sponsorships from industry partners.