

# Achievable and cost-effective elimination targets in Australia.

Reaching the WHO hepatitis C elimination targets in Australia is cost-effective and can be achieved by targeting people who inject drugs.

## THE ISSUE

The World Health Organization (WHO) has set specific hepatitis C elimination targets for 2030<sup>1</sup>:

- ▶ A 65% reduction in hepatitis C-related deaths
- ▶ An 80% reduction in new hepatitis C infections

In Australia, 50% of people who inject drugs (PWID) are estimated to be living with chronic hepatitis C<sup>2</sup>. To reach the WHO targets we will need to treat people with advanced hepatitis C-related liver disease to prevent deaths, as well as PWID to prevent ongoing transmission. However, the optimal approach to target treatments across these patient groups is unknown.

## WHAT OUR WORK FOUND

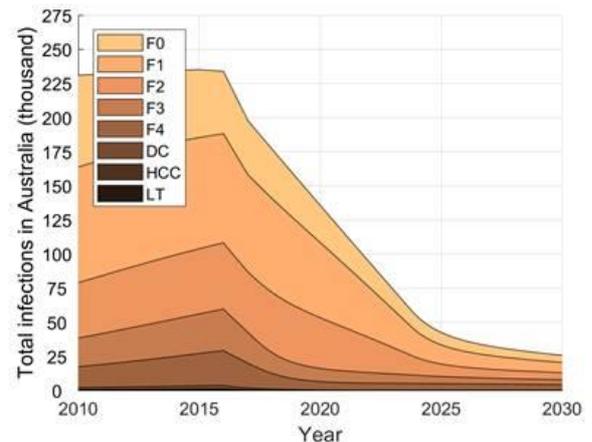
Burnet Institute modellers examined the level of hepatitis C treatment uptake required to achieve the WHO targets, considering onward transmission events prevented, possible reinfection and natural disease progression.

- ▶ Approximately 5,700 treatment courses per year are required for patients with advanced liver disease to achieve the mortality reduction target (see graph).
- ▶ Approximately 4,700 treatment courses per year are required for PWID (59/1000 PWID, or 12% treatment uptake) to achieve the incidence reduction target.
- ▶ Treating PWID also achieved the mortality reduction target due to the large number of new infections averted; however, in the short term, additional treatments are required to prevent deaths among people who already have advanced liver disease.
- ▶ Achieving the WHO mortality and incidence elimination targets is estimated to be cost-effective\* in Australia.

\*cost-effectiveness determined based on a willingness to pay 50,000 AUD per quality-adjusted life-year gained

## CONCLUSION

Achieving the WHO hepatitis C elimination targets in Australia is achievable and is likely to be cost-effective.



This graph shows projections of the burden of hepatitis C in Australia under eight scenarios. Colour shading represents different degrees of liver disease severity.

## Policy Implications

Reducing hepatitis C incidence by treating PWID should be a priority for Australia to achieve the hepatitis C elimination targets.

A hepatitis C treatment rate of at least 4,700 PWID per year (approximately 12% treatment uptake among PWID) is needed to achieve the WHO new infection target; to meet the WHO mortality target, treatment rates will need to increase even further.

For complete details and results, contact Dr Nick Scott ([nick.scott@burnet.edu.au](mailto:nick.scott@burnet.edu.au)).

Full publication: Scott N, McBryde E, Thompson A, Doyle J and Hellard M. Treatment scale-up to achieve global HCV incidence and mortality elimination targets: a cost-effectiveness model. *Gut* 2017; 66:1507–1515

## References

1. World Health Organization. *Global health sector strategy on viral hepatitis 2016–2021*
2. Iversen J and Maher L. *Australian Needle and Syringe Program National Data Report 2008–2012*. The Kirby Institute