

Treating hepatitis C saves lives and is cost-effective.

Treating people who inject drugs for hepatitis C with new therapies is cost-effective and could prevent liver-related deaths.

THE ISSUE

Hepatitis C is a chronic infection that can lead to long-term consequences such as liver cirrhosis, liver cancer and death. The World Health Organization (WHO) has set specific hepatitis C elimination targets for 2030¹:

- ▶ a 65% reduction in hepatitis C-related deaths
- ▶ an 80% reduction in new hepatitis C infections.

People who inject drugs (PWID) are the group at greatest risk of infection. Direct-acting antiviral treatments (DAAs) for hepatitis C have a high cure rate, regardless of liver disease stage or concurrent drug use. It is unclear whether treating PWID is cost-effective given the potential for reinfection following treatment.

WHAT OUR WORK FOUND

A modelling study examined the cost-effectiveness of DAA treatments for PWID. The model considered a scenario in which treatments were given only to PWID with advanced liver disease (to prevent immediate deaths), as well as a scenario in which treatments were given to all PWID regardless of disease stage. The major outcomes were:

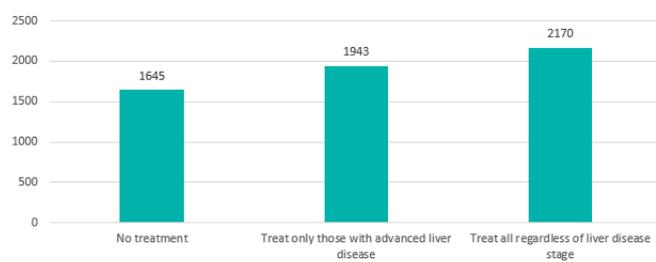
- ▶ Compared to no treatment, treating PWID with advanced liver disease led to an 82% reduction in liver-related deaths and was estimated to be cost-effective* (AU\$5,078 [AU\$2,847–5,295] per quality-adjusted life year gained).
- ▶ Compared to treating PWID with advanced liver disease, treating all PWID regardless of liver disease stage led to an equal reduction in deaths and greater overall improvement in quality of life (see graph).
- ▶ Treating all PWID was estimated to be cost-effective compared to treatment of advanced disease only (AU\$17,090 [AU\$2,847–63,282] per quality-adjusted life year gained).

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

CONCLUSION

Modelling shows that treating hepatitis C in PWID is cost effective and reduces liver-related mortality amongst this population.

Estimated number of quality adjusted life years per 100 infected people who inject drugs



Policy Implications

- ▶ Australia is one of the few countries that has facilitated universal access to all people living with hepatitis C. Treating people who inject drugs with hepatitis C could prevent a significant number of deaths and prevent new infections.
- ▶ Treating PWID is expected to be cost effective regardless of liver disease stage, especially as treatment costs are reduced.
- ▶ Early treatment of PWID is associated with the greatest improvement in quality of life.

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References

1. World Health Organization. *Global health sector strategy on viral hepatitis 2016-2021*