



Improving the health of people who inject drugs
through research that generates new evidence and
informs public health policy and practice

People who inject drugs can be successfully treated for hepatitis C and treatment can reduce hepatitis C transmission, incidence and prevalence

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Key messages:

- Hepatitis C is a curable infection: with the development of non-interferon-based all-oral therapies, treatment success is now over 90%.
- People who inject drugs can be successfully treated for hepatitis C with new therapies which have minimal side effects and only require 8–12 weeks of treatment for non-complex patients.
- Treating people who inject drugs directly benefits those individuals, and mathematical modelling shows it also reduces hepatitis C transmission, prevalence and incidence in the community.
- Multiple direct acting antiviral treatments (DAAs) have been approved by the TGA and are on the PBS
- All people infected with chronic hepatitis C in Australia are eligible to receive DDAs on the PBS
- Policymakers need to begin preparations to ensure health services are located and structured so that people who inject drugs can easily access these new treatments.

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What is the issue?

The advent of highly effective non-interferon-based treatments (sometimes referred to as direct-acting antivirals, or DAAs), with 90% cure rates, improved tolerability and a comparably short duration of therapy (up to 12 weeks)[1-3], has totally changed the hepatitis C landscape. Since the first regimen of hepatitis C DAA treatments were listed on the PBS in March 2016, an estimated 26, 360 individuals had initiated treatment as of July 2016 [4], and it is estimated that by end of 2016 >30,000 Australians will be cured of their hepatitis C.

By curing people of their hepatitis C, not only can we prevent many hepatitis C-related deaths, but it is possible to substantially reduce hepatitis C prevalence and incidence by treating those most at-risk of transmitting hepatitis C. There is also growing evidence that there are other benefits to curing people's hepatitis C, apart from stopping the progression of their liver disease, including increased energy levels, reduced "brain fog", and reductions in stigma and anxiety experienced.

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Preventing hepatitis C transmission through *treatment as prevention* will require a scale-up of hepatitis C treatment among people who inject drugs (PWID), the highest-risk group for infection and transmission of hepatitis C in Australia [5].

Throughout the 1990s PWID were restricted from accessing antiviral treatment for hepatitis C, despite no evidence base for this constraint [6]. Even with the removal of these restrictions, few PWID are currently being treated for hepatitis C [7-9].

Since March 1st 2016, we have seen a rapid uptake of hepatitis C DAA treatments across Australia, however the proportion of PWID who have been reached by this initial increase in coverage is still unknown [4], it is thought to only be a small proportion of people who currently inject drugs. The explanation for poor treatment uptake is multifactorial and includes factors such as the significant side effects of previous treatment options, PWID having difficulties accessing specialist care provided from tertiary hospitals, stigma from health service providers and historically, medical professionals' hesitations to prescribe due to concerns about treatment compliance and reinfection [10-13].

However, several studies and reviews of hepatitis C treatment for PWID found that they can successfully complete treatment, even in the interferon era. Variation in treatment outcomes between groups with and without injecting histories is small; compliance is high and reinfection risk is low [14, 15].

Unfortunately, even with this evidence and the advent of simple non-interferon-based treatments, many PWID are not currently accessing hepatitis C treatments. Continued efforts are required to ensure that hepatitis C treatments are accessible to PWID.

Why treat people who inject drugs?

First and foremost, treating hepatitis C benefits the individuals receiving treatment by reducing their risk of developing chronic liver disease, cirrhosis and hepatocellu-

lar carcinoma, and improving their quality of life [10].

Treating PWID also has a broader public health benefit. Recent mathematical modelling provides strong evidence that treating sufficient numbers of people who currently inject drugs could reduce disease transmission and lower the overall prevalence and incidence of hepatitis C among PWID, leading to virtual elimination of hepatitis C among the general community [16-18]. In particular, modelling has estimated that treating approximately 4700 PWID infected with hepatitis C each year would be enough to achieve an 80% reduction in hepatitis C incidence in Australia by 2030, meeting the global targets as outlined below [4].

What are the current guidelines and targets for hepatitis C?

With the introduction of these new DAA treatments, elimination of hepatitis C as a public health threat is now a possibility.

The World Health Organization (WHO) released the Global Health Sector Strategy on Viral Hepatitis 2016-2021 earlier this year which outlines the global targets towards achieving elimination of viral hepatitis as a public health threat by 2030. For hepatitis C, this involves an 80% decline in new cases of hepatitis C and 65% reduction in deaths associated with hepatitis C. To achieve this, the targets include ensuring 90% of people living with hepatitis C should be diagnosed with hepatitis C and 80% of eligible persons with hepatitis C should be treated [19].

The Gastroenterological Society of Australia released the Australian recommendations for the management of hepatitis C virus infection: a consensus statement 2016. This document outlines the recommendations for screening, diagnosis, treatment and monitoring. Of particular importance for PWID are the recommended models of care which would work towards improving access to care among PWID, as described below [20].

What steps can be taken to address the issue?

Interventions aimed at increasing access for PWID to hepatitis C treatment in community clinics will benefit individual PWID and reduce hepatitis C prevalence. To do this successfully, funding is required to:

- Support the location of trained hepatitis C nurses in primary care services attended by a high proportion of PWID
- Increase access to community-based FibroScan (or equivalent non-invasive measures of hepatic fibrosis) so that PWID can have a full assessment of their hepatitis C-related disease in a community setting
- Increase the number of primary care clinicians - general practitioners (GPs) - who prescribe hepatitis C treatment or who are willing to provide shared care for a patient starting hepatitis C therapy

There is evidence that GPs' knowledge about hepatitis C diagnosis and management in the primary care setting in Australia is poor [21]. Therefore, with the advent of interferon-free treatment, it is vital that we:

- Increase GPs' knowledge and training about hepatitis C so we increase the capacity of primary care clinics to appropriately manage PWID
- Develop models of care that support GPs to become involved in hepatitis C through shared care with tertiary/quaternary hospitals.

Many PWID have limited knowledge about hepatitis C in general and the new interferon-free treatments in particular [22]. Therefore, we need to increase the knowledge of PWID about the new hepatitis C treatments and what is involved in the management of hepatitis C more broadly.

Resources

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