



# ACCESS TO HEPATITIS C TESTING AND TREATMENT FOR PEOPLE WHO INJECT DRUGS AND PEOPLE IN PRISONS — A GLOBAL PERSPECTIVE

APRIL 2019

POLICY BRIEF



# **ACCESS TO HEPATITIS C TESTING AND TREATMENT FOR PEOPLE WHO INJECT DRUGS AND PEOPLE IN PRISONS — A GLOBAL PERSPECTIVE**

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## A. BACKGROUND

WHO estimates that 71 million people worldwide were chronically infected with hepatitis C virus (HCV) in 2017 (1). Left untreated, chronic HCV can lead to cirrhosis, hepatocellular carcinoma and death (2). Over the last 15 years, mortality related to chronic HCV infection has steadily increased to over 400 000 deaths annually (3). This contrasts with the declining number of deaths estimated from other infectious diseases such as HIV, tuberculosis and malaria (4). People who inject drugs (PWID) are disproportionately affected. Globally, 23% of new HCV infections and one in three HCV deaths are attributable to injecting drug use (3,5). HCV is also a major concern for people detained in prisons and other closed settings – available data demonstrate that one in four detainees are HCV positive (6).

Considering the unprecedented opportunities to act, the WHO *Global health sector strategy on viral hepatitis, 2016–2021* (GHSS) highlights five core areas of interventions needed to eliminate hepatitis as a public health threat by 2030 (7). among them harm reduction for PWID, and treatment with direct-acting antivirals (DAAs). Harm reduction is an evidence-based public health response for PWID – access to sterile injecting equipment through needle and syringe programmes (NSP) and to effective drug dependence treatment, such as opioid substitution therapy (OST), are critical interventions recommended by WHO.

The WHO targets for the elimination of viral hepatitis aim to diagnose 90% and treat 80% of eligible persons. An estimated 5 million people had received DAA treatment for HCV by the end of 2017 (8). and there are evidence-based simplified models of care that advance access to HCV treatment even in low-income settings (2). However, there is limited understanding regarding the progress of HCV testing and treatment for the most affected populations, such as PWID and people in prisons.

In this policy brief, we highlight the current landscape of country hepatitis policies for harm reduction and HCV testing and treatment in PWID and people in prisons. We aim to capture how governments are translating the GHSS into national plans, and provide a summary of the enablers and barriers to HCV testing and treatment in these populations.

## B. METHODOLOGY

This policy brief is based on two sources: a desk review of national and regional policies for hepatitis, and interviews with key informants and stakeholders in seven high-burden countries. The desk review was conducted between January and March 2019. We surveyed the status of existing hepatitis policy documents: draft or completed national hepatitis (strategic or action) plans and clinical management guidelines in 194 countries and territories. Detailed draft or completed national hepatitis plans, whenever accessible, were provided by the WHO Viral Hepatitis and Substance Use Working Group and the WHO regional offices. A secondary search for regional or country policy documents was performed on Google Web Search, the Health in Prisons databases (HIPED, WEPHREN) and the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). We classified national plans into those that adopted recommendations of the GHSS for PWID and people in prisons, including harm reduction, HCV testing and treatment.

Two key elements were considered for selecting countries to interview: (a) the estimated total burden of HCV in PWID and people in prisons; and (b) geographic and income-level diversity. One country from each WHO region and two from the Region of the Americas, with a significantly high number of PWID living with HCV were thereby selected – namely Brazil, China, India, the Islamic Republic of Iran, Ukraine, and the United

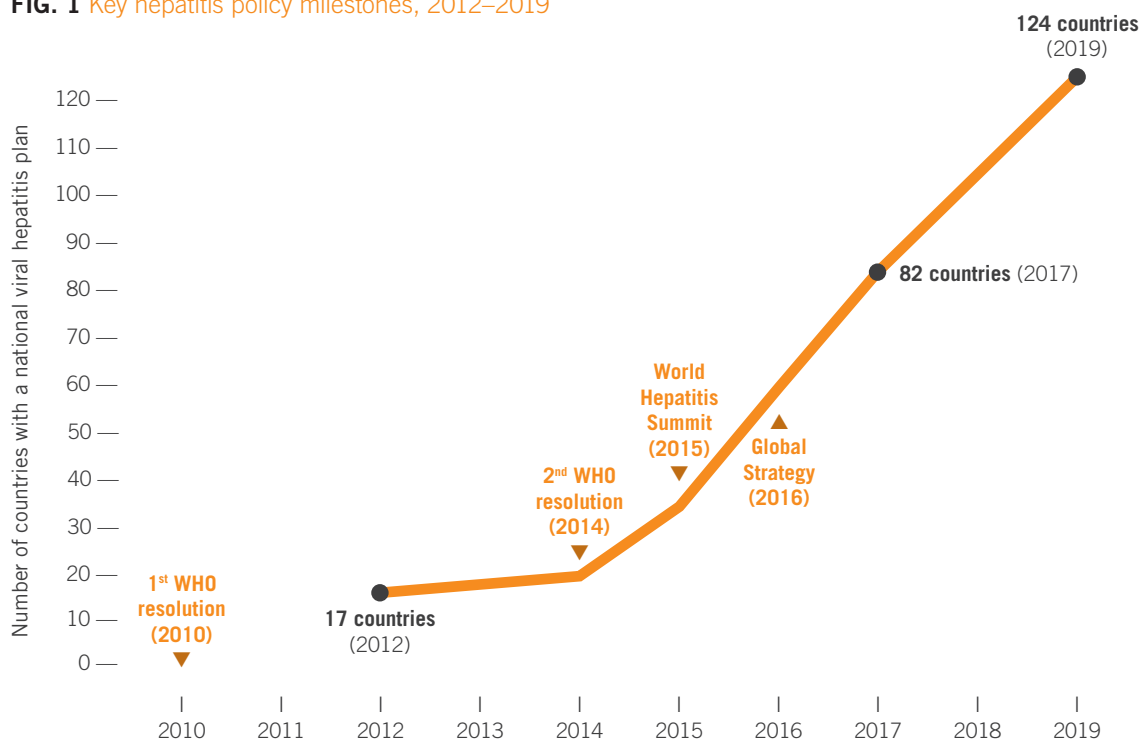
States of America (USA); for one African country information is yet to be finalized. Interviews were conducted with representatives from notable NGOs, civil society and community-based organizations in each country. These interviews centered on the main challenges faced in increasing access to HCV services among PWID and people in prison, and elements that catalyse care for HCV testing and treatment. The interviews took place in March and April 2019.

## C. KEY FINDINGS OF POLICY REVIEW

### Planning for the response has significantly increased.

Following development of the GHSS and its endorsement by Member States at the Sixty-ninth World Health Assembly in May 2016, 124 countries have developed national hepatitis plans (Fig. 1). Progress in this area has been notable in several regions. For example in 2015, only three (6%) countries in the WHO African Region (Algeria, Mauritania and Senegal) had national plans for hepatitis; currently, 14 (30%) of the 47 countries in this region have completed national hepatitis plans, and another 10 are in the process of developing such plans.

**FIG. 1** Key hepatitis policy milestones, 2012–2019

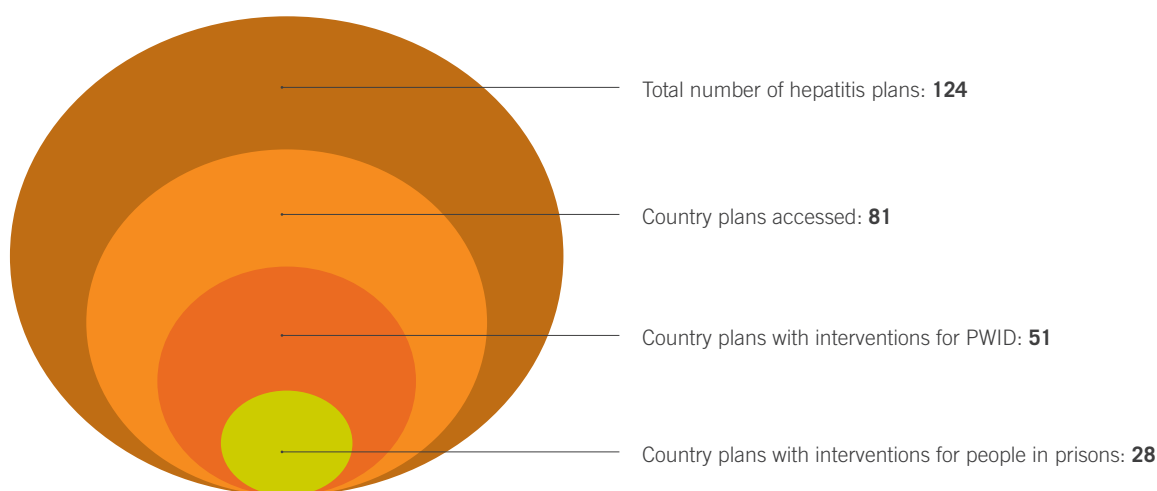


## However, planning for hepatitis testing and treatment in PWID and people in prisons remains uneven.

There are significant variations in country responses to the needs of these populations from a national planning perspective (Fig. 2). Of the 124 countries with plans, 81 plans were accessed. 51 (63%) plans included interventions for PWID. 37 (46%) of these country plans outlined necessary interventions for PWID in accordance with the GHSS. These interventions include HCV testing and treatment, and access to sterile injecting equipment and effective drug dependence treatment as part of a comprehensive package for the prevention of hepatitis and other blood-borne infections.

However, countries with such plans are still in the minority. Thirty national plans (37%) did not reference PWID as a population for interventions, while 14 plans (17%) only indicated a subset of interventions.

**FIG. 2** Number of countries with a viral hepatitis plan



Similarly, interventions outlined for people in prisons are uneven. Only 28 national plans (35%) reference HCV testing, treatment or harm reduction for prisoners, highlighting a crucial gap in planning for this population. Of the 28 plans accessed, interventions were comprehensive in 23 (28%).

Given their epidemiological context, some countries focused their plans exclusively on addressing the hepatitis B virus (HBV) epidemic. Therefore, HCV testing and treatment for PWID and people in prisons were not prioritized.

Observed limitations in eligibility for HCV testing and treatment – seen in 11 plans (14% of the 81 reviewed) – were related to restrictive drug policies, notably drug use abstinence requirements (exclusion based on drug dependence), commonly for a period of six months or longer. Another significant obstacle was eligibility based on health insurance coverage, with PWID and people in prisons unable to attain coverage in several countries.

## D. OVERCOMING ACCESS BARRIERS: EXPERIENCES OF SELECTED COUNTRIES

Country experiences suggest that a number of areas need to be addressed to ensure PWID and people in prisons can access HCV treatment. This includes ongoing stigma and discrimination against these populations, as well as the high cost of treatment, which is more pronounced in middle- and high-income countries. Table 1 provides a summary of findings from key informant interviews from selected countries, highlighting some of the challenges and other issues in expanding HCV treatment services.

**TABLE 1** Overview of selected countries

	National plan and treatment guidelines	Government response	Civil society activities	Access highlights and main challenges
<b>Region of the Americas</b>				
<b>Brazil (UMIC)</b>	The national programme targets elimination, with treatment criteria that cover all risk groups, including PWID and people in prisons.	Negotiations by the Government with suppliers of rapid HCV test kits, diagnostic equipment, and DAAs have allowed an economic investment case to be made in favour of universal access to HCV testing and treatment in the public health sector.		Brazil aims to scale up HCV testing and treatment by ensuring access to quality medicines and diagnostics at a sustainable price.  Potential barriers include the speed at which the health sector can respond and how to promote demand for HCV services.
<b>USA (HIC)</b>	The USA has a viral hepatitis action plan, as well as policies that target PWID and people in prisons. The action plan calls for expanding access to and delivery of hepatitis prevention, care and treatment services to people in correctional settings. It also calls for testing and treatment for all people who have ever injected drugs. Implementation varies by state.		Civil society groups, such as the Treatment Action Group (TAG), are involved in facilitating treatment for PWID and people in prisons.  Although delivery of testing and treatment services varies by state, harm reduction service providers are the main points of contact for most PWID, particularly through the use of peer workers.  Individual prisons are responsible for DAA provision, resulting in wide variation in the number and price of commodities procured.	The high cost of a 12- week course of DAAs remains a barrier to accessing and scaling up HCV treatment. The price ranges from US\$ 15 000 (public sector) to US\$ 94 000.  Depending on the state treatment restrictions may be in place, including abstinence from drug and alcohol use; the requirement for active engagement in a drug treatment programme; and significant delays in acquiring payment authorization from health insurance companies, all of which result in loss to follow-up for these key groups. Removing these barriers would greatly advance care.



TABLE 1 continued

Eastern Mediterranean Region				
<b>Iran (Islamic Republic of) (UMIC)</b>	The Islamic Republic of Iran has a 3-year national hepatitis plan that proposes interventions for PWID and people in prisons. This includes reducing the incidence of HBV and HCV in PWID to less than half through harm reduction services and treatment for infected persons.	<p>The Government's response is built upon the establishment of, and ongoing support for harm reduction services.</p> <p>The Government target is to treat 18 000 patients each year from 2018 to 2030 to achieve the elimination goal. However, to do so high treatment cost for PWID will need to be addressed.</p>		<p>The existing high coverage of harm reduction services, including OST, provides an opportunity to deliver HCV prevention and testing services to PWID.</p> <p>There has been progress in the price reduction of DAAs. For those with medical insurance, full treatment can be obtained for as low US\$ 81; however, most PWID and people in prisons do not have insurance, and thus face high costs of approximately US\$ 2200.</p>
European Region				
<b>Ukraine (LMIC)</b>	Ukraine plans to approve a national strategy to contain tuberculosis, HIV and viral hepatitis. This strategy has a particular focus on PWID, ensuring access to testing and treatment, as well as harm reduction.	After the national strategy is approved, a 3-year action plan will be developed. This will focus on testing for hepatitis using rapid tests, and providing access to treatment for all patients including key groups.	<p>Nongovernmental organizations (NGOs) are advocating for a scale-up of HCV testing and treatment for PWID and prisoners, in light of the lower costs of generic DAAs. For example, the Alliance for Public Health and the All-Ukrainian Network of People Living With HIV/AIDS, with support from the Global Fund, have made possible the treatment of 1531 HIV/HCV co-infected PWID.</p> <p>Collaboration with the Ministry of Justice has also been effective. In 2018, 1000 people with HIV in prisons were tested, and 50 were treated with a 98% completion rate.</p>	<p>As a result of advocacy efforts, the price of DAAs in Ukraine has fallen steadily. Generic DAAs are now also available for use in Ukraine for less than US\$ 100 per 12-week course.</p> <p>Ongoing collaboration with NGO partners, such as the Global Fund and United Nations Development Programme (for procurements), demonstrates that HCV treatment in PWID and people in prisons can be scaled up.</p>

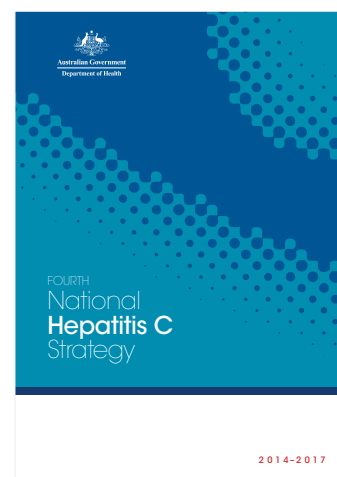
TABLE 1 continued

South-East Asia Region				
<b>India (LMIC)</b>	A national action plan to combat viral hepatitis was launched in February 2019, targeting PWID as a priority population.	<p>The state of Punjab established a HCV programme in 2017, which has become an example for the country.</p> <p>During 2019–2020, efforts will be made to screen all prisoners in 11 states for HIV, HBV and HCV, and to link those requiring treatment to care. Treatment for PWID will occur at established sites, coupled with harm reduction services implemented by the Ministry of Health. DAAs will be available free of charge.</p>	<p>NGOs such as the Community Network for Empowerment collaborate with the public health department to provide routine HCV testing for prisoners in the state of Manipur.</p> <p>People who are confirmed as chronically infected are offered free DAA treatment.</p>	<p>While there are no specific targets for the number of PWID to be tested or treated, the viral hepatitis programme has made provision for 100 000 DAA treatment courses to be made available in each of the next 3 years.</p> <p>Demonstrated cost-effectiveness, and more affordable diagnostic commodities and DAAs, provide a unique opportunity for scale-up in India and potentially equitable inclusion of PWID and people in prisons.</p>
Western Pacific Region				
<b>China (UMIC)</b>	China's draft national plan (which is yet to be completed) references PWID as a priority population for HCV testing and treatment.	DAAs are available in China, with decisions regarding the distribution made at the provincial level. At present, there are 7 provinces that have DAAs available, costing approximately US\$ 5000 per 12-week course.		<p>The success of OST services in reducing the incidence of HIV among drug users demonstrates how the continued provision of OST and other harm reduction services, including NSP, can link to HCV care.</p> <p>A key action moving forward is negotiation of lower prices for DAAs by health insurance providers and the Government. These negotiations are ongoing. This will make it feasible to prioritize HCV testing and treatment for PWID and people in prison, as part of a national public health response. Certain provinces with large rural populations have higher HCV prevalence due to unsafe blood and plasma collection in the 1990s (e.g. Henan province).</p>

DAAs: direct-acting antivirals; HBV: hepatitis B virus; HCV: hepatitis C virus; HIC: high-income country; LMIC: lower-middle-income country; OST: opioid substitution therapy; PWID: people who inject drugs; UMIC: upper-middle-income country.

## E. “POLICY AND IMPLEMENTATION OF HEPATITIS SERVICES FOR PWID AND PEOPLE IN PRISONS” – THE CASE OF AUSTRALIA

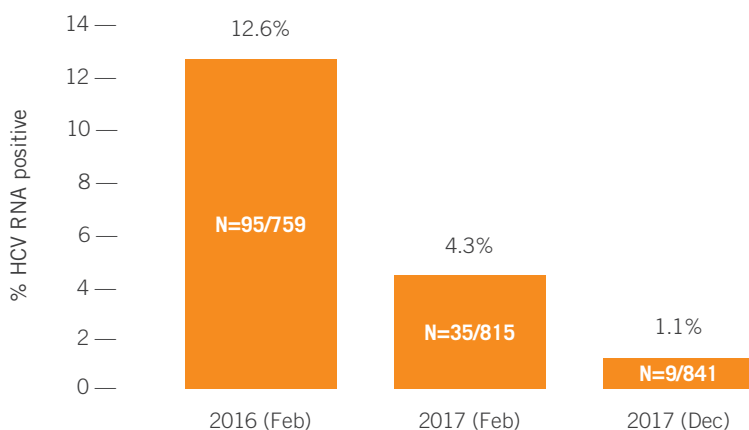
Australia aims to eliminate hepatitis by 2030. The fourth national hepatitis strategy (2014–2017)<sup>a</sup> was developed when DAAs were first being introduced for HCV treatment. It emphasized testing and treatment for PWID and people in custodial settings, and called for greater focus on an enabling policy and legal environment to address criminalization, stigma and discrimination. This promoted fair and consistent cross-sectional links between the community, the criminal justice sector and health agencies.



Key achievements of the plan include:

1. Exceeded initial treatment targets of ~17 000 – an estimated 60 000 (26%) HCV positive people initiated treatment (2014 to 2017) (9).
2. Expanded treatment access – two prisons in the state of Queensland (Fig. 3) and one in the Australian Capital Territory (ACT) reported achieving 80–90% treatment uptake among prisoners. Three prisons in New South Wales reported having eliminated HCV in the prison population (2017).

**FIG. 3** HCV burden within selected Queensland prisons (800–850 prisoners) (10)



Notably, a simplified approach to service delivery has facilitated access to care in the general community. This includes the provision of integrated hepatitis testing, treatment and harm reduction for PWID at decentralized sites (e.g. NSP sites, OST clinics and safe consumption facilities) as well as engagement with peer workers that support linkage to care, use of non-invasive clinical assessment tools, and care by non-specialists.

<sup>a</sup> Fourth National Hepatitis C Strategy 2014–2017, Commonwealth of Australia 2014.

The fifth national hepatitis strategy (2018–2022) aims to reduce the number of newly acquired HCV infections by 60%, and to increase the cumulative proportion of people initiated on DAAs to 65%. Priority populations include people who have previously injected, or currently inject, drugs; Aboriginal and Torres Strait Islander people; and people in custodial settings. Consideration will also be made for geographic locations with high prevalence or incidence of HCV.

As with the fourth national strategy, it is expected that adequate planning for these populations will inform how programmes are implemented.

## F. CONCLUSION

There are unprecedented opportunities in the global response to end HCV as a public health threat. Oral treatment regimens for 8–12 weeks are available that allow people to achieve sustained virologic response, which is effectively a cure. More evidence now demonstrates that HCV diagnosis and treatment can be provided at peripheral facilities (11). Since WHO set elimination targets in 2016, 124 countries have completed or started developing national plans for hepatitis. However, as HCV incidence and mortality are strongly related to injecting drug use and incarceration, not enough countries specifically target these populations. Of the 81 national plans and treatment guidelines reviewed, 51 pay specific attention to PWID and 28 to people in prisons, with varying intervention coverage levels.

Given the burden of injecting drug use and HCV, countries should consider developing specific plans to reach PWID and people in prisons, with high coverage of harm reduction and HCV testing and treatment interventions. The more populous countries with large HCV burden will need to focus especially on these populations if the global HCV elimination targets are to be met (12,13).

There are some good practice examples – such as Australia, Kenya, Georgia, the Islamic Republic of Iran and Portugal – that show progress towards achieving the targets, and demonstrate how to improve access to HCV testing and treatment for PWID and people in prisons. Such examples can be used to inform options for establishing or scaling up HCV testing and treatment interventions for PWID and people in prisons.

We have identified steps to improve access to services for PWID and people in prisons to reach the global targets.

- First, more countries will need to demonstrate political will to include these marginalised populations, and improve their access to testing and treatment. It is crucial that countries address structural barriers such as criminalization of behaviours and related stigma and discrimination in order to improve access to health services.
- Second, countries need to identify a range of appropriate delivery and access points for HCV screening and treatment through integration, decentralization and task-shifting. In particular, community-based harm reduction services (e.g. drop-in centres, NSP locations, drug dependence treatment, OST sites and outreach services), and prison health services should be used to diagnose HCV and provide treatment.
- Third, reducing the cost of DAAs will make effective treatment more affordable, allowing coverage of HCV treatment services to be scaled up for all key populations, including PWID and people in prisons. All efforts to support this must be continued and intensified.

- Fourth, there are limited health services in most prison settings. Improving the availability of services such as the systematic provision of voluntary HCV screening and treatment for all people entering prison and other correctional facilities, in addition to other relevant prevention and treatment services (e.g. NSP, condoms, OST), should be prioritized. Some countries have demonstrated that micro-elimination is feasible in prison settings, with public health benefits for the community.
- The global commitment to universal health coverage aspires to serve the vulnerable and leave no one behind. As we aim for hepatitis elimination, universal health coverage is an important platform on which to include harm reduction and HCV testing and treatment services for PWID and people in prisons. Countries are strongly encouraged to include these interventions in their national health packages.

## REFERENCES

1. Global hepatitis report 2017. Geneva: World Health Organization; 2017 (<https://apps.who.int/iris/handle/10665/255016>, accessed 25 April 2019).
2. Guidelines for the care and treatment of persons diagnosed with chronic hepatitis C infection. Geneva: World Health Organization; 2018 (<https://apps.who.int/iris/handle/10665/273174>, accessed 25 April 2019).
3. Grebely J, Bruneau J, Bruggman P, Harris M, Hickman M, Rhodes T et al. Elimination of hepatitis C virus infection among PWID: the beginning of a new era of interferon-free DAA therapy. *Int J Drug Policy*. 2017;47:26–33.
4. Global health estimates 2015: deaths by cause, age, sex, by country and by region, 2000–2015. Geneva: World Health Organization; 2016 ([https://www.who.int/healthinfo/global\\_burden\\_disease/en/](https://www.who.int/healthinfo/global_burden_disease/en/), accessed 11 February 2019).
5. Degenhardt L, Peacock A, Colledge S, Leung J, Grebely J, Vickerman P et al. Global prevalence of injecting drug use and sociodemographic characteristics and prevalence of HIV, HBV, and HCV in people who inject drugs: a multistage systematic review. *Lancet Glob Health*. 2017; 5(12):PE1192–E1207.
6. Larney S, Kopinski H, Beckwith CG, Zaller ND, Jarlais DD, Hagan H et al. Incidence and prevalence of hepatitis C in prisons and other closed settings: results of a systematic review and meta-analysis. *Hepatology*. 2013; 58(4):1215–24.
7. Global health sector strategy on viral hepatitis 2016–2021: towards ending viral hepatitis. Geneva: World Health Organization; 2016 (WHO/HIV/2016.06; <https://apps.who.int/iris/handle/10665/246177>, accessed 25 April 2019).
8. Centre for Disease Analysis. Web Annex C. Estimates of the coverage of diagnosis and treatment for hepatitis B and C virus infection, by WHO region and income group, 2015. In: Global hepatitis report 2017. Geneva: World Health Organization; 2018 (WHO/CDS/HIV/18.47). Licence: CC BY-NC-SA 3.0 IGO.
9. Dore GJ, Hajarizadeh B. Elimination of viral hepatitis C in Australia: laying the foundation. *Infect Dis Clin N Am*. 2018;32:269–79.
10. Barlett S, Fox P, Cabatingan H, Jarros A, Gorton C, Lewis R et al. Demonstration of near-elimination of hepatitis C virus among a prison population: the Lotus Glen Correctional Center Hepatitis C Treatment Project. *Clin Infect Dis*. 2018; 67(3):460–3.
11. Oru E, Kanters S, Shirali P, Easterbrook P. Decentralisation and task-shifting for hepatitis C: a systematic review and meta-analysis. CROI. (Abstract poster) March 2019.
12. Cooke GS, Andrieux-Meyer I, Applegate TL, Atun R, Burry JR, Cheinquer H et al. Accelerating the elimination of viral hepatitis: a Lancet Gastroenterology & Hepatology Commission. *Lancet Gastroenterol Hepatol*. 2019; 4(2):135–184.
13. Progress report on access to hepatitis C treatment: focus on overcoming barriers in low-and middle-income countries. Geneva: World Health Organization; 2018 (WHO/CDS/HIV/18.4; <https://apps.who.int/iris/handle/10665/260445>, accessed 25 April 2019).



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