

Interpretation of the National Action Plan for Eliminating Hepatitis C as a Public Health Threat (2021–2030)

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Summary

Hepatitis C virus (HCV) infection is a major public health problem in China. In 2016, the World Health Organization (WHO) proposed a goal to eliminate viral hepatitis as a public health threat by 2030, and in 2018, the National Health Commission of China launched Hepatitis C Elimination Action by 2030. Hepatitis C control and prevention has made significant progress in China in recent years. To implement the “Healthy China 2030” plan and the Healthy China Initiative (2019–2030), and to contribute to the global target of eliminating viral hepatitis as a public health threat by 2030, the National Health Commission of China and eight other government departments jointly issued the *National Action Plan for Eliminating Hepatitis C as a Public Health Threat (2021–2030)* (hereinafter referred to as the “National Plan”) in 2021. The National Plan has an overarching goal and 15 specific targets that cover health education, comprehensive prevention interventions, testing and treatment, and capacity building. The National Plan introduces key tasks and strategies of “five strengthenings, one expanding, and one implementation,” i.e., strengthening health education, comprehensive prevention, referral and treatment, drug supply, and information management; expanding testing; and implementing relevant medical insurance policies. The National Plan also proposes key guaranteeing measures of “four intensifications and one mobilization,” i.e., intensification of organizational leadership, capacity building, scientific research and international cooperation, and supervision and fulfillment; mobilization of social participation. The National Plan is an important component of the Healthy China initiative, adhering to the integration of treatment and prevention and deepening the “integration of medical treatment, medical insurance, and medicine supplies.” In this review, we describe the National Plan and discuss its challenges and prospects.

BACKGROUND

Hepatitis C is a global public health problem. The World Health Organization (WHO) estimated that in 2019, approximately 58 million people were living with chronic hepatitis C virus infection and 290 thousand people died from hepatitis C worldwide (1). Hepatitis C is a major infectious disease that impacts China. The Law of the People’s Republic of China on the Prevention and Control of Infectious Diseases designates hepatitis C a Class B infectious disease (2). In recent years, approximately 200 thousand hepatitis C cases have been newly reported each year. Approximately 7.6 million people have been infected by hepatitis C virus (HCV) in China, and 4.56 million people are currently living with chronic HCV infection. Hepatitis C infection causes a large disease burden and can lead to liver cirrhosis and hepatocellular carcinoma (HCC) without timely diagnosis and treatment.

In 2016, WHO proposed a goal to eliminate viral hepatitis as a public health threat by 2030 (3). In 2018, the National Health Commission of China launched the Hepatitis C Elimination Action by 2030. The document, “*China Viral Hepatitis Prevention and Control Program (2017–2020)*” was issued in 2017, and the program has been conscientiously implemented ever since (4). Significant progress has been made in terms of publicity and education, comprehensive interventions, testing and diagnosis, standardized treatment, direct-acting antiviral agent (DAA) development and registration, national-level negotiation of DAA price, and National Reimbursement Drug List (NRDL) updates — all of which have laid a foundation for eliminating hepatitis C as a public health threat (5).

In 2021, National Health Commission, Ministry of Science and Technology, Ministry of Industry and Information Technology, Ministry of Public Security, Ministry of Civil Affairs, Ministry of Justice, Ministry of Finance, National Healthcare Security Administration, and National Medical Product

Administration jointly issued the National Action Plan for Eliminating Hepatitis C as a Public Health Threat (2021–2030) (the “National Plan”) (6), which proposed 15 targets, seven key tasks, and five guaranteeing measures.

ACTION GOAL

The overall goal of the National Plan is to fully implement the strategies and measures of hepatitis C control and prevention and contain new HCV infections, find and cure people living with chronic HCV infection, significantly reduce deaths due to hepatitis C-related liver cirrhosis and HCC, reduce the disease burden, and eliminate hepatitis C as a public health threat. The National Plan has 15 targets — for 2021, 2025, and 2030 — in the domains of publicity and education, comprehensive prevention interventions, testing and treatment, and capacity building (Table 1). The key tasks for 2021 focus on building mechanisms and systems, and consolidating the achievements of curbing HCV transmission by blood. From 2022 to 2025, the key tasks focus on containing new HCV infections, with the strategies of “testing all in need” in key populations and “treating all eligible” for persons with newly diagnosed HCV infection. From 2026 to 2030, the key tasks focus on reducing the prevalence of hepatitis C by further implementing the strategies of “testing all in need” and “treating all eligible” among all people living with chronic HCV infection.

STRATEGIES AND MEASURES

The National Plan includes seven key prevention and control tasks and strategies: “five strengthenings, one expanding, and one implementation.” The first is strengthening publicity and education, popularizing HCV knowledge and improving public awareness of HCV control and prevention. The second is to strengthen comprehensive prevention interventions among key populations, nosocomial infection control, blood safety, and epidemiological investigations. The third is to expand HCV testing and improve detection rates by implementing the strategies of “testing all in need” in medical institutions and among key populations, “testing all of those with the willingness to be tested” for the general public, and “nucleic acid testing for anyone tested positive for anti-HCV.” The fourth is to strengthen referrals and standardized treatment by establishing a designated hospital

healthcare service model for “treating all eligible” people living with chronic HCV infection with the aim to improve treatment coverage and cure rates. The fifth is to implement healthcare insurance policies and NRDL that reduce patients’ financial burden and improve the affordability of care. The sixth is to strengthen the supply and availability of HCV medicines, and promote a “DTP (Direct to Patient) pharmacy” mechanism with a sustainable drug supply that improves access to affordable treatment. The seventh is to strengthen information management and improve scientific monitoring and evaluation, including improving HCV case report quality, establishing and improving information management systems, strengthening data analyses and applications, and improving early warning mechanisms for cluster outbreaks.

For guaranteeing measures, the National Plan has “four intensifications and one mobilization.” The first is to intensify organization and leadership, including establishment of a national leadership group and an expert group, and clarification of the responsibilities of medical and health institutions. The second is to intensify capacity building, including laboratory and professional workforce capacity. The third is to mobilize social forces to participate in hepatitis C control and prevention. The fourth is to intensify scientific research and international cooperation. The fifth is to intensify supervision and National Plan fulfillment.

FEATURES

The National Plan is an important component of the Healthy China construction, which reflects a people-centered developmental philosophy and strengthens the “four-party responsibilities” of governments, departments, communities, and individuals. The National Plan was jointly issued by nine governmental departments, reflecting government leadership, departmental coordination, integration of treatment and prevention, and deepening of the “integration of medical treatment, medical insurance, and medicine supplies.” The National Plan references the WHO targets of the Global Health Sector Strategy on Viral Hepatitis and interim guidance for country validation of hepatitis elimination (7). The National Plan’s overall goal, phased targets, and phased strategies and measures are in accordance with China’s current situation and the Healthy China construction planning.

TABLE 1. Targets of the National Action Plan for Eliminating Hepatitis C as a Public Health Threat (2021–2030) by Year.

Target	2021	2025	2030
1. Establishment of a working mechanism for hepatitis C elimination	√	√	√
2. Designation of at least one hospital per county qualified for HCV antiviral treatment	√	√	√
3. Percent of general hospitals of level-2 or above, infectious disease hospitals, and centers for disease control and prevention (CDCs) that can conduct anti-HCV testing	100%	100%	100%
4. Percent of general hospitals of level-2 or above, infectious disease hospitals, and CDCs that can conduct HCV RNA testing	100%	100%	100%
5. Percent of clinical blood tested for HCV RNA at the national level	100%	100%	100%
6. Percent of safe injections at medical institutions	100%	100%	100%
7. Percent of injection drug users (IDUs) covered by interventions	>80%	>80%	>80%
8. Establishment of a national hepatitis C control and prevention information system	√	√	√
9. Percent increase of hepatitis C knowledge in the general public compared with a 2020 baseline	–	10%	20%
10. Percent of newly reported anti-HCV positive cases tested for HCV RNA	–	>90%	>95%
11. Percent of newly reported chronic hepatitis C patients who receive antiviral therapy	–	>80%	>80%
12. Percent of all reported chronic hepatitis C patients who receive antiviral therapy	–	–	>80%
13. Clinical cure rate of chronic hepatitis C patients who receive antiviral therapy	–	>95%	>95%
14. Percent of healthcare professionals that received HCV-related training	–	>90%	100%
15. Percent of healthcare professionals who have received HCV-related training and are rated as qualified	–	>95%	>95%

Note: “–” represents not applicable.

CHALLENGE AND PROSPECTS

China faces several challenges to the elimination of hepatitis C as a public health threat by 2030. First, the number of patients with chronic hepatitis C in China is relatively large and the risk of HCV transmission still exists, leading to the potential of a huge burden of hepatitis C-related liver cirrhosis and HCC. Second, the “integration of medical treatment, medical insurance, and medicine supplies” is not enough, and mechanisms for integrating hospitals and centers for CDCs are not yet smooth. The “testing all in need” and “treating all eligible” strategies are not yet fully implemented, and the accessibility and affordability of medicine are inadequate. There are large gaps between targets and current progress, such as for testing and treatment coverage (8). Third, department attention, input, and effective measures are insufficient in some regions. The number and capacity of relevant health workers need to be increased and strengthened urgently.

It is critically important to fully promote and implement the national hepatitis C elimination action plan. First, more financial resources are needed to be invested and laboratory and professional workforce capacity are needed to be strengthened. Second, comprehensive strategies and measures should be implemented that can reduce both incidence and

prevalence, including accelerating the HCV elimination working mechanism, establishing a designated medical service model, integrating resources, strengthening publicity and education, popularizing hepatitis C knowledge, strengthening comprehensive intervention, expanding testing, improving the detection rate of HCV, strengthening referral and standardized treatment, and increasing antiviral treatment coverage and cure rate of people living with HCV. Third, hepatitis C elimination should be integrated with Human Immunodeficiency Virus (HIV) control and prevention since they share the similar route of transmission. Comprehensive interventions should be strengthened among injecting drug users and other key populations vulnerable to HIV and sexually transmitted infections (STIs), including methadone maintenance treatment (MMT), needle exchange, and condom use promotion. Anti-HCV testing should be expanded among drug users receiving MMT, people seeking HIV voluntary counseling and testing service, people living with HIV and their spouse or sexual partners, and other key populations vulnerable to HIV and STIs. Fourth, it is vital to implement appropriate medical insurance policies that increase outpatient reimbursement, improving accessibility and affordability of diagnosis and treatment. Fifth, greater investment in research and development for hepatitis C elimination is needed.

China's hepatitis C elimination model must fit its actual situation.

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