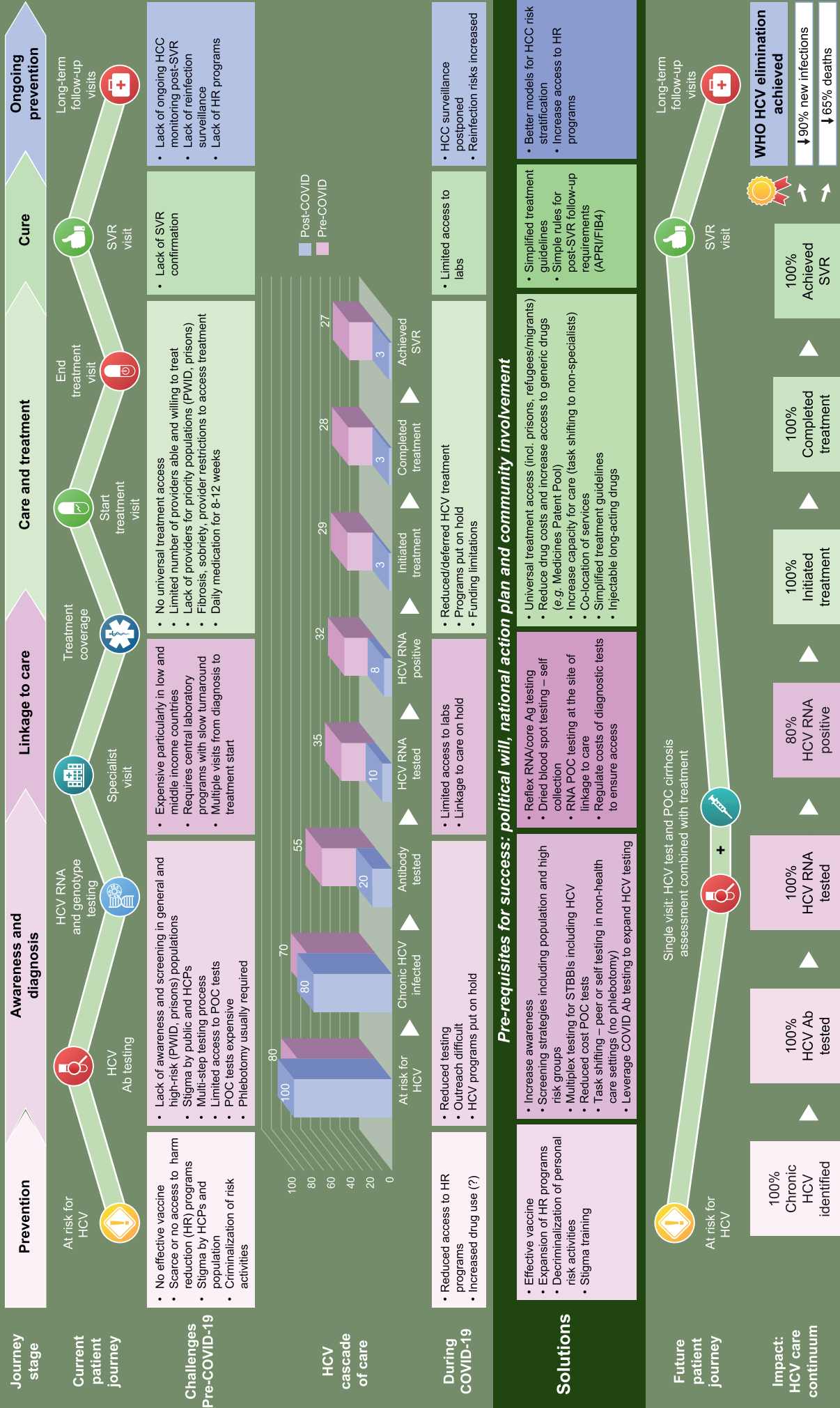


# Hepatology Snapshot: Remaining challenges in HCV elimination

Camella Capraru<sup>1</sup>, Jordan J. Feld<sup>1\*</sup>

<sup>1</sup>Viral Hepatitis Care Network (VIRCAN), Toronto Centre for Liver Disease, Toronto General Hospital, University Health Network, University of Toronto, Canada

\*Corresponding author. Address: Toronto Centre for Liver Disease, Toronto General Hospital, University Health Network, 200 Elizabeth Street, 9EB 240, Toronto, ON, M5G 2C4, Tel.: 416 340 4584, fax: 416 340 5133. E-mail address: Jordan.feld@uhn.ca



Keywords: HCV elimination, Cascade of care, Barriers

Received 14 September 2020; received in revised form 22 November 2020; accepted 30 November 2020.

# Hepatology Snapshot

The remarkable advances in HCV therapeutics have raised the prospect of elimination of HCV as a public health threat. However, many remaining barriers must be overcome to achieve this ambitious goal. The emergence of the global COVID-19 pandemic has unfortunately created additional challenges that will likely slow global progress towards elimination.

Before even considering those with HCV infection, a major focus needs to be on prevention. Without the near-term prospect of an HCV vaccine, reducing incidence requires a major focus on harm reduction for people who inject drugs (opiate agonist therapy, needle syringe programs, supervised injection sites) as well as avoidance of iatrogenic infection. Emerging data support treatment as prevention as an additional tool to decrease new infections but this requires active case-finding and early treatment in hard-to-reach populations.

A high proportion of those living with HCV remain unaware of their infection. Increased awareness and targeted screening strategies based on local epidemiology are critical to increase diagnosis rates. Acceptance of screening requires destigmatization of HCV among the public and in health care settings. Simplification of the diagnostic approach is also required. The standard paradigm of antibody testing followed by HCV RNA testing risks losing people before diagnostic confirmation or treatment initiation. The cost of HCV RNA testing surpasses the cost of a full course of therapy in many low- and middle-income countries, adding a major additional barrier. Increased use of point-of-care antibody testing followed by reflex HCV RNA, ideally delivered by peer workers without the need for phlebotomy at sites where treatment can be immediately initiated, would greatly reduce loss to follow-up and drop-offs in the cascade of care.

Even after diagnosis, significant drop-offs before treatment initiation are a consistent finding globally. Patient and provider restrictions on access, as well as the cost of therapy, continue to be major barriers. Use of pangenotypic regimens following very simplified guidelines allow for task-shifting to reduce the need for specialists and increase treatment capacity. Increased access to high quality generic medications is critical in low-income settings. Ideally low barrier treatment with minimal or no monitoring can be co-located with other services. Development of long-acting injectables as has been done for HIV could be

transformative, allowing for immediate treatment (and cure) at the time of diagnosis.

After cure, those with advanced liver disease require ongoing surveillance for hepatocellular carcinoma. Improved tools for risk stratification could greatly enhance the efficiency of surveillance. Those at risk of reinfection require continued access to harm reduction services, bringing the cascade full circle back to prevention. Development of a vaccine is likely required for true global eradication.

The COVID-19 pandemic has exaggerated challenges at every step in the cascade of care from reduced access to harm reduction services to delayed treatment initiation.

Strategies to improve retention across the continuum of care exist. However, implementation of good practices requires coordinated efforts specific to the local epidemic. Countries/regions on track for elimination have clear action plans developed with strong community engagement, leading to critical political buy-in. Hopefully, the major public health challenge we currently face will not hamper our efforts to achieve the major public health triumph of eliminating HCV by 2030.

## Financial support

This work was supported by the Viral Hepatitis Care Network (VIRCAN).

## Conflict of interest

JJF reports research support and/or honoraria for scientific consulting unrelated to this work from: Abbvie, Alexion, Arbutus, Eiger, Enanta, Gilead, GlaxoSmithKlein, Janssen, Roche, Wako/Fujifilm.

Please refer to the accompanying ICMJE disclosure forms for further details.

## Authors' contributions

Study concept and design: CC, JJF. Drafting of the manuscript: CC, JJF.

## Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jhep.2020.11.051>.