

A GLOBAL INVESTMENT FRAMEWORK FOR HEPATITIS C ELIMINATION

Alisa Pedrana¹, Jessica Howell¹, Nick Scott¹, Sophia Schroeder¹, Christian Kuschel¹, David Wilson¹, Jeffrey Lazarus², Ricardo Baptista Leite³, Rifat Atun⁴, Sharon Hutchinson⁵, Margaret Hellard¹.

¹Disease Elimination Program, Public Health Discipline, Burnet Institute, Melbourne, Australia; ²University of Barcelona, Barcelona Institute for Global Health, Barcelona, Spain; ³Universidade Católica Portuguesa, Lisbon, Portugal; ⁴Harvard University, Department of Global Health and Population, Boston, United States; ⁵Glasgow Caledonian University, Glasgow, United Kingdom, on behalf of the WISH Viral Hepatitis Forum.

Background: Direct-acting antivirals (DAAs) make it possible to eliminate hepatitis C as a public health threat by 2030. However, investment in hepatitis C programs has been slow. One potential explanation is the lack of a strategic approach to investment in prevention, testing and treatment activities to achieve elimination. We proposed an investment framework to guide policymakers and funders in making investment decisions that will enable hepatitis C elimination.

Methods: Our framework utilizes a public health approach to identify national activities aimed at reducing hepatitis C transmission, morbidity, and mortality, and international activities necessary to provide an enabling environment for countries to achieve maximum effectiveness. Key enablers were highlighted including public support, community mobilization, and skilled workforces that can facilitate the rapid scale-up of national activities. We also modelled the health and economic (direct and indirect) benefits of scaling up hepatitis C elimination activities to meet the WHO global elimination targets by 2030.

Results: Our models showed that investing to achieve elimination could reduce hepatitis C incidence by 85% and hepatitis C-related mortality by 68% by 2030, preventing a cumulative 2.1 million hepatitis C-related deaths and 12 million new hepatitis C infections. This required US \$51 billion globally between 2018-2030, peaking at US \$5.7 billion in 2021 before becoming cost-saving by 2027. Overall, investing to achieve elimination produced a net US \$19 billion return by 2030. Sharing staffing costs already invested within the context of universal health coverage reduced the cumulative costs of the elimination by \$20.2 billion.

Conclusion: Investment in hepatitis C programs to achieve elimination can be both cost-effective and becomes cost-saving by 2027. An investment case can help raise the profile of HCV elimination and build political commitment to help mobilize domestic, private and international resources to support countries to implement elimination programs.

Disclosure of Interest Statement:

The authors acknowledge funding support from Qatar Foundation to support this work and to facilitate the WISH Viral Hepatitis Forum 2018. The Burnet also receives funding support from Gilead Sciences Abbvie, GSK and Merck for investigator initiated research.