

# ELIMINATING HEPATITIS C IN MYANMAR



**Burnet Institute's strategy for eliminating hepatitis C in Myanmar**



**Burnet Institute**  
Medical Research. Practical Action.



**1.4 million**  
people living with  
hepatitis C in Myanmar



**51,000**  
more people  
per year  
need to be treated  
for hepatitis C infection  
in Myanmar from  
2020 to 2030 to reach  
national strategy targets



**40,000**  
new infections  
will be prevented



**25,000**  
hepatitis C-related  
deaths will be prevented

# ELIMINATING HEPATITIS C IN MYANMAR

## THE ELIMINATION OF HEPATITIS C AS A PUBLIC HEALTH THREAT IS NOW ACHIEVABLE

Hepatitis C is a blood-borne virus that primarily affects the liver. Left untreated, it can lead to liver scarring, failure and cancer. In the past, hepatitis C could only be treated by trained specialists at tertiary hospitals.

The arrival of new hepatitis C direct-acting antiviral treatments (DAAs) with successful cure rates of more than 95 percent allows for trained general practitioners (GPs) to treat hepatitis C. So, more people with hepatitis C can access treatment and be treated in the community by a GP.

The World Health Organization (WHO) recognises hepatitis C as a public health threat and has set global targets to eliminate the disease. As part of this global effort, Myanmar has set national targets to diagnose and treat 50 percent of people living with hepatitis C by 2030.

This hepatitis C elimination target is achievable, but more work needs to be done. Currently, access to no-cost treatment in Myanmar is limited to public sector programs and some NGOs.

Burnet Institute's Eliminate Hepatitis C program is playing a leading role working with the Myanmar Ministry of Health and Sports, Myanmar Liver Foundation, Clinton Health Access Initiative and other key stakeholders to expand hepatitis C care in Myanmar.

### OUR STRATEGY

- Support and evaluate the existing public sector Hepatitis C treatment program of the National Hepatitis Control Program (NHCP)
- Implement, and assess the feasibility of, a decentralised, one-stop-shop model of care in the community
- Model the cost and cost-effectiveness of hepatitis C elimination
- Explore the role of public-private partnerships to increase access to hepatitis C treatment

### Hepatitis C in Myanmar



Myanmar has a population of 54 million



Hepatitis C prevalence:

- 2.7 percent in the general population
- 56 percent in people who inject drugs



The National Hepatitis Control Program has provided hepatitis C treatment to nearly 13,000 patients at 13 treatment facilities since mid 2017.



Hepatitis C testing and treatment are also available through the private sector and NGOs, with NGOs focusing on people with hepatitis C and HIV co-infection.



To reach national targets of diagnosing and treating 50 percent of the over 1.4 million people living with hepatitis C in Myanmar by 2030, we need to expand access to care.



National guidelines allow GPs to prescribe DAA therapy (except to patients with prior treatment failure, renal dysfunction or decompensated cirrhosis).





## Evaluation of the NHCP hepatitis C program (QuickStart)

Burnet Institute and Clinton Health Access Initiative (CHAI) evaluated the first-phase implementation of the QuickStart Program at eight hospital sites.

CHAI led the quantitative component, presenting the cascade of care for the 2,065 patients started on DAA therapy from June 2017 to March 2018. Notably, 90 percent of patients assessed for cure achieved a sustained virological response 12 weeks after treatment completion (SVR12).

Burnet Institute led the qualitative evaluation, interviewing staff and patients from the eight hospital sites and staff from two central laboratories.

The interviews showed the implementation was generally successful. There were no stock-outs. Training had prepared the staff to deliver care and patient monitoring. Patients found the staff friendly and helpful. They were grateful to be cured of hepatitis C, describing having more energy after treatment cleared the virus.

Key implementation challenges were:

- Capped weekly hepatitis C RNA testing capacity limited patient enrolments
- Crowded outpatient departments had insufficient space for consultations
- Workloads at liver units exceeded workforce capacity
- Inadequate monitoring of laboratory storage of test kits, limited quality control
- Workflow inefficiencies – patients attended multiple times for clinical consultations and phlebotomy
- Access to hepatologist often difficult if not on-site.

Many of these issues can be addressed as the program scales up with new sites and improved processes at existing sites.



## Implementation and evaluation of community-based, one-stop-shop, model of care (CT2 Study)

Burnet Institute and Myanmar Liver Foundation (MLF), in partnership with Foundation for Innovative New Diagnostics as part of the HEAD-Start project supported by Unitaid, conducted a feasibility study of one-stop-shop hepatitis C testing and treatments programs at two community-based clinics in Yangon from January 2019 until August 2020.

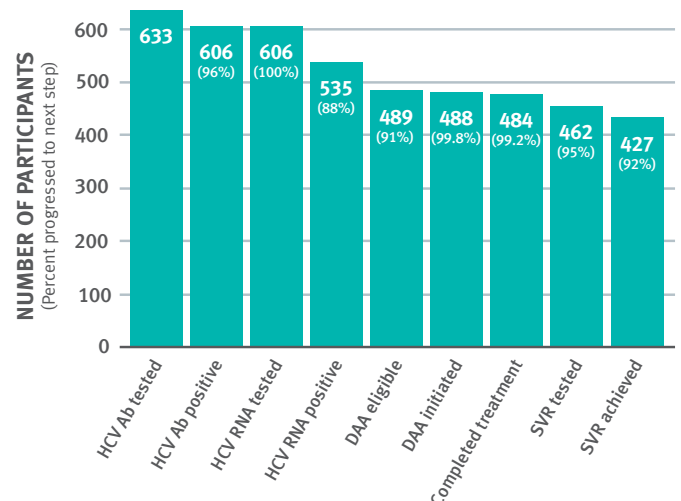
Point-of-care diagnostic tests and DAA treatments were provided on-site, and blood samples were sent to external laboratory for pre-treatment assessment investigations. Trained GPs started patients onto treatment, with referrals to specialists as required using a hub and spoke model of referral where the patient returned to study site to start treatment. Burnet's program focused on people who inject drugs, also delivering a needle and syringe program.

The model of care was highly feasible, safe, effective and acceptable to providers and patients. The care cascade achieved high retention in care and took an average of only two days from screening to prescribing treatment. Cure rates were above 90 percent.

Patient interviews highlighted the convenience of this model of care, with few appointments and short wait-times.

Patients who inject drugs and patients with cirrhosis all achieved good treatment outcomes in this program.

CASCADE OF CARE STEPS





## Modelling hepatitis C virus elimination and control policies

Modelling by Burnet found 55,000 people needed treatment each year from 2020 to 2030 to meet Myanmar's 2030 national strategy target. This would avert an estimated 25,000 HCV-related deaths and 40,000 new infections (compared to status quo scenario of treating 4,000 people annually).

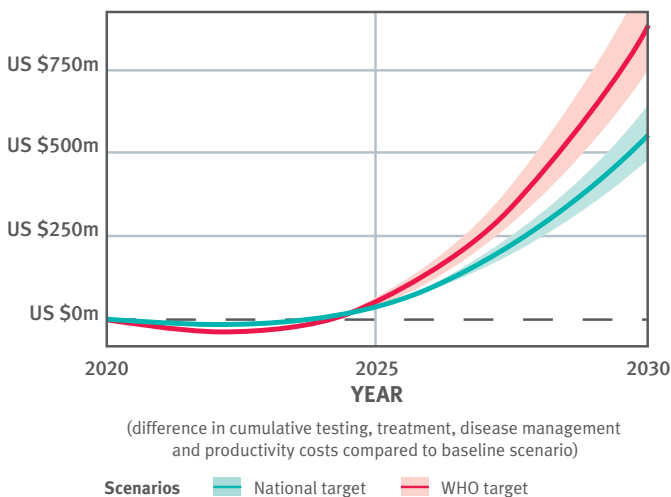
Using data from the CT2 study, meeting national targets would cost US\$189 million in testing, treatment and liver disease management, compared to the status quo scenario costing US\$100 million.

Importantly, meeting the targets would produce economic productivity gains estimated at US\$642 million, making the strategy cost-saving by 2024 and creating a net economic benefit of US\$553 million by 2030. Meeting the national targets has a cost upfront but it is estimated to be cost saving by 2024.

Our modelling found that increasing primary prevention, by improving blood safety procedures and access to sterile needles and syringes, could enhance these benefits.

Alternative means to finance hepatitis C elimination, such as public-private partnerships and tiered at-cost programs, may offer sustainable solutions to expand access to treatment globally.

NET ECONOMIC BENEFITS



## Situational assessment and public-private partnership scoping

Treating 55,000 people annually to reach national elimination targets requires a substantial expansion of health system capacity. One way to achieve this is to expand the provision of testing and treatment in the community through public-private partnerships.

Burnet Institute conducted a scoping exercise to understand the structures of health services providing hepatitis C care in Myanmar.

We are now undertaking an assessment of service providers in the public and private health sectors to identify system and treatment barriers to hepatitis C care. This includes surveys and interviews with hepatologists, GPs, laboratory personnel, NHCP program staff, representatives from NGOs and pharmacy staff.

The outcomes will inform interventions to increase hepatitis C testing and treatment in Myanmar.

The Burnet Institute will continue to use its cross-disciplinary expertise to collaborate with Myanmar Ministry of Health and Sports, Myanmar Liver Foundation and other key stakeholders, to inform and support the expansion of hepatitis C testing and treatment in Myanmar.

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## ABOUT BURNET INSTITUTE

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We are an Australian, unaligned, independent, not-for-profit organisation. Our mission is to achieve better health for vulnerable communities in Australia and internationally by accelerating the translation of research, discovery and evidence into sustainable health solutions.



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