

# Challenges to Hepatitis C Treatment Access in Vietnam: A Micro-Costing Study

Huyen Nguyen Anh<sup>1</sup>, Hugo C Turner<sup>2</sup>

<sup>1</sup>Oxford University Clinical Research Unit, Centre for Tropical Medicine, Ho Chi Minh, Viet Nam

<sup>2</sup>Imperial College London, London, UK

## CONCLUSION

Actions to reduce the DAAs drug cost are needed (*such as encourage local drug production*).

Actions to reduce geographic inequity in costs are needed (*such as supporting the decentralize Hepatitis C treatment*).

Actions to reduce Out-of-pocket expenditure are needed (*such as increase health insurance coverage*).

## BACKGROUND

Chronic hepatitis C virus infection remains a significant public health problem with an estimated of 58 million people globally infected. Direct-Acting Antivirals (DAAs) have revolutionized Hepatitis C treatment and can achieve high cure rates (>90%). Unfortunately, in Vietnam only 2700 people accessed to DAAs based treatment in 2020, despite an estimated prevalence of chronic Hepatitis C varying between 970,000 to 4 million people. The high cost of DAAs-based treatment is a significant barrier to accessibility and has raised questions about the fairness and affordability of drug costs.

## OBJECTIVE

Our study aims to investigate the full costs of DAAs treatment for Chronic Hepatitis C in Vietnam in order to provide suggestions to increase the coverage of DAAs treatment.

## METHOD

We performed patient-level micro-costing analysis, including direct medical costs (drug costs and services costs), direct non-medical costs (food, travel and accommodation costs) and productivity costs.

Direct non-medical costs;  
Productivity costs

Direct medical costs

**Face-to-face Interview:**  
102 Hepatitis C outpatients, at Hospital for Tropical Diseases, Ho Chi Minh City, Vietnam  
Timeline: 2020-2021



**Database from:**  
1. Hospital for Tropical Diseases, Ho Chi Minh, Vietnam  
2. Vietnam Drug Administration Department  
Timeline: 2021-2022



Figure 1: How costs data collected?

## MAIN FINDING

**Main finding 1: The DAAs drug costs in Vietnam is still high compared other countries in South-East Asia.**

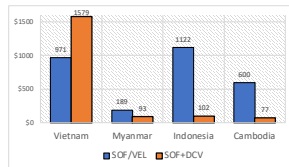


Figure 2: DAAs drug costs compared other countries in South-East Asia (US\$).

**Main finding 2: There is a large disparity in the costs incurred to access the treatment from outpatients from urban vs rural areas.** As DAA based treatment is not provided at primary healthcare facilities, outpatients from rural areas must travel to a major city.

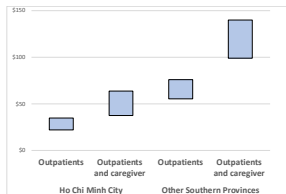
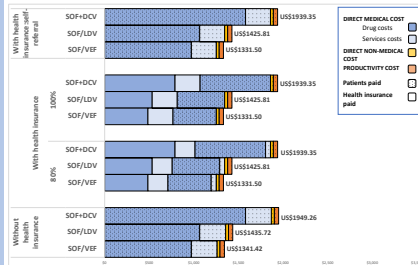


Figure 3: Outpatients and caregiver costs (including direct non-medical and productivity costs) (US\$) among rural and urban areas in Vietnam.

**Main finding 3: Although most outpatients (>98%) have Health Insurance, out-of-pocket expenditure still significant occurred.**

Out-of-pocket expenditure from outpatients can range from 47% to 100% (US\$630 to US\$1949) of the total DAAs treatment costs, equivalent from 3 to 6 months of average monthly Vietnamese salary.



**Figure 4: Total cost of Hepatitis C treatment (US\$) regarding the contribution of Health Insurance.** It was performed in three different scenarios: Outpatients don't have Health Insurance, outpatients have Health Insurance, and outpatients have Health Insurance but self-referral. For those outpatients having Health Insurance, the co-payments for DAAs drug-cost is 50%, but the co-payment for services cost can be either 80% or 100% regarding type of Health Insurance. If outpatients have Health Insurance but self-referral to directly seek care at a higher level, they will not receive any co-payment benefits.