### 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

**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

### 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$).](image)

**Main finding 2:** These is a large disparity in the costs incurred to access the treatment from outpatients from urban vs rural areas. As DAAs 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.](image)

**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.](image)

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.

### 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).