# FIND

### HCV SELF-TESTING

Challenges and opportunities from real world implementation

Sonjelle Shilton, Hepatitis Lead FIND November 8<sup>th</sup> European testing week webinar on hepatis C self-testing





## SELF-TESTING

- It is not here to replace other testing modalities from which the majority of the population learn their status
- It is not a definitive test but rather the first step towards learning a status. All positive results must be confirmed using the national algorithm
- Currently research use only HCV self-tests, not yet available on the market

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### HCV SELF-TESTING PILOT STUDIES EVIDENCE ON UPTAKE, LINKAGE, & COST

#### Pakistan

- integrating HCVST into existing house-to-house screening campaign for a micro-elimination program among general populations in a district in Karachi
- Primary objective is increase in testing uptake
  - Secondary objective is operational feasibility and cost
- Cluster randomized control design

https://www.clinicaltrials.gov/ct2/show/NCT04971538

- Estimate to enroll 2000
  participants
- Using oral fluid tests

#### Georgia

- integrating HCVST onto existing online HIVST platform targeting PWID and MSM in Tbilisi and Batumi
- Primary objective is increase in testing uptake
  - Secondary measure is linkage to further care
- 5 arm randomized control design
- Estimate to enroll 1200
  participants
- Using oral fluid test

#### Malaysia

- integrating HCVST onto existing HIVST platform used by all key populations nation wide
- Primary objective is increase in testing uptake
  - Secondary measure is linkage to further care
- Randomized control design
- Estimate to enroll 750
  participants
- Using both blood and oral fluid tests



#### HCVST IMPACT STUDY IN MALAYSIA ORGANIZATIONS INVOLVED



**Ministry of Health Malaysia** 

Research team



Study implementation

Peer support with network of partner organizations



Sponsor



Web development Data protection

DNDi Drugs for Neglected Diseases *initiative* 

In-country supporting partner



Malaysia, as a upper middle-income country with a population of more than 32 million people, has an estimated HCV seroprevalence of 1.9%.

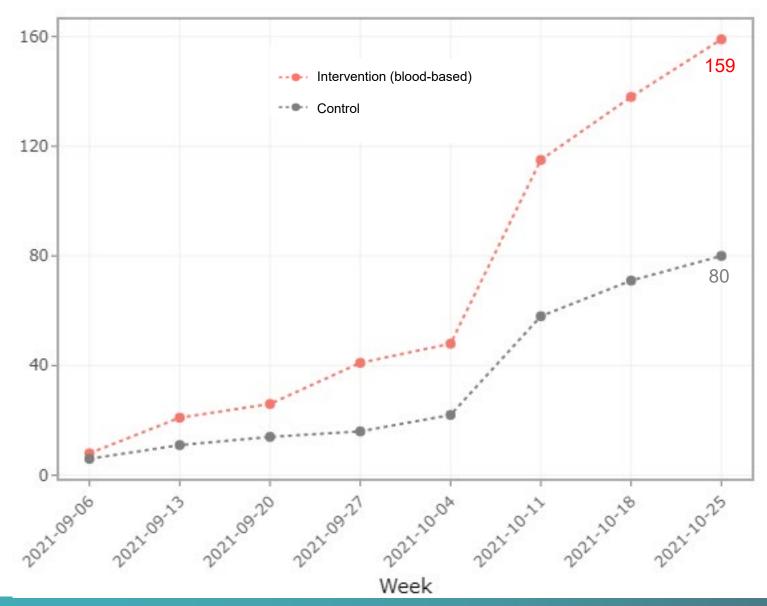
Nationwide study

### Integration with HIVST

- Leverage on existing momentum of JOM-Test platform
- University of Malaya & MAC Integrated HIV self-testing (HIVST) service delivery in Malaysia for policy and service development: JomTest online



#### PRELIMINARY RESULTS RECRUITMENT PROGRESS FROM 07 SEP - 31 OCT 2021



■ Intervention group (blood-based HCVST):

• Minimum to enrol =  $250 \frac{64\%}{100}$ 

■ Intervention group (oral fluid-based HCVST):

• Minimum to enrol = 250

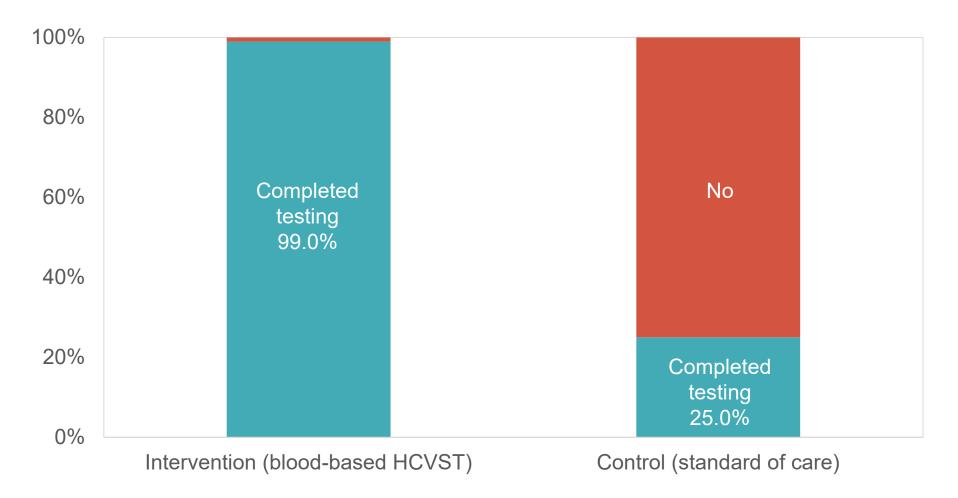
Control group (standard of case):

• Minimum to enrol =  $250 \frac{32\%}{32\%}$ 



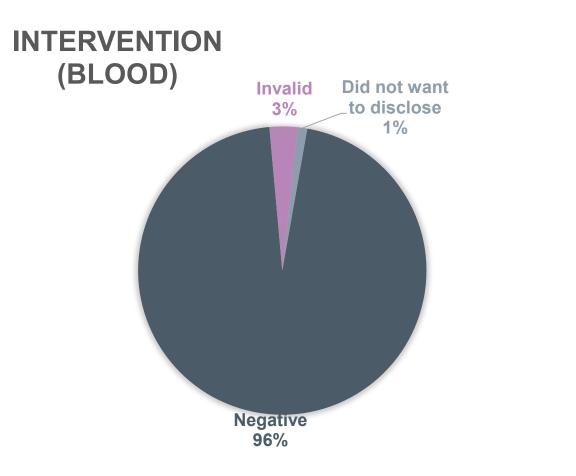
#### PRELIMINARY RESULTS IMPACT OF HCVST ON UPTAKE OF HCV ANTIBODY TESTING

Based on responses from follow-up surveys #1 & #2 (96 intervention, 28 control): *p* < 0.01

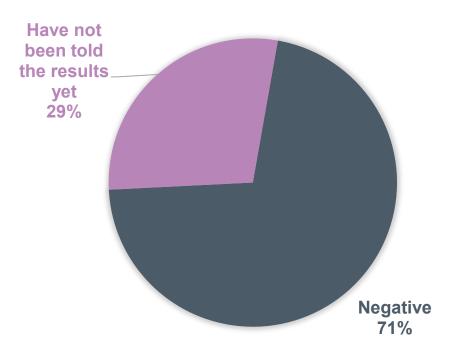




### PRELIMINARY RESULTS HCVST AND STANDARD OF CARE TESTING RESULTS



### CONTROL (STANDARD OF CARE)





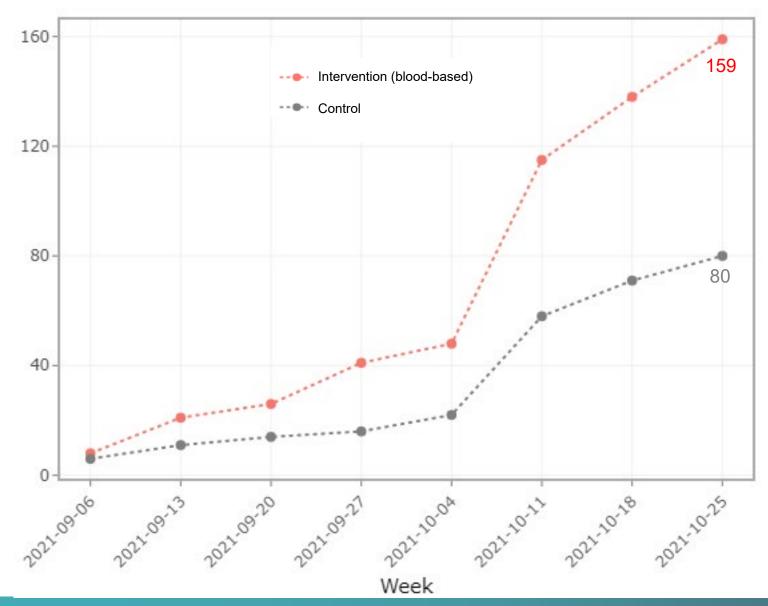
PRELIMINARY RESULTS LESSONS LEARNED

# Strong collaboration; MoH and CBOs

# Awareness generation



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PRELIMINARY RESULTS LESSONS LEARNED

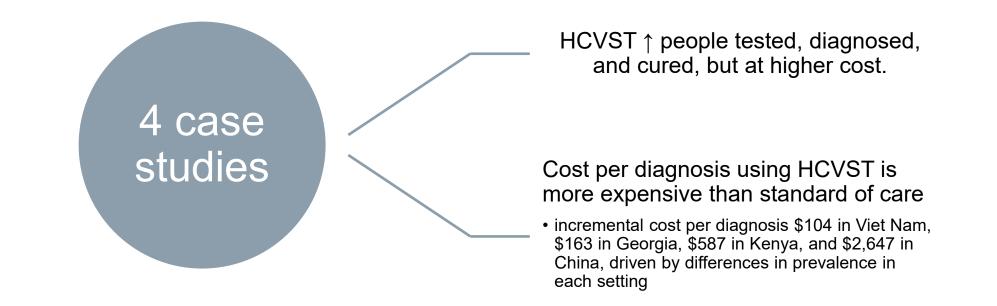
# Strong collaboration; MoH and CBOs

## Awareness generation

# Cost and cost effectiveness

### **COST EFFECTIVENESS RESULTS**





<u>Summary:</u> Cost per HCV diagnosis and cure is higher using self-testing, but more people are diagnosed. HCVST is likely to be more cost-effective in high-prevalence settings.

Walker J, et al. The Costs of Using Antibody Self-Tests to Diagnose Hepatitis C Virus Infection in Four Low and Middle-Income Country Settings, IHEA Congress 2021

### **THANK YOU!**

#### Acknowledgements:

Participants in the study MAC: Anu Karunanithy Ministry of Health Malaysia: Dato' Dr Muhammad Radzi Abu Hassan, WHO HQ: Niklas Luhmann, Cheryl Johnson, Dr Nazrila Hairizan Bt Nasir, Dr Huan-Keat Chan FIND colleagues: XiaoHui Sem, Jessica Markby, Elena Ivanova Reipold

DNDi: Han Yang Chung, WHO WPRO: Dr Po-Lin Chan, University of Bristol (Dr Josephine Walker)