

# Session 4: Introduction to breakout sessions on Best Practices at the National level

**Chair:**

**Prof Mojca Maticic, University Medical Centre Ljubljana, Slovenia**

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#HCVSummit

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# *Best practices at the national level*

Introduction to breakout sessions

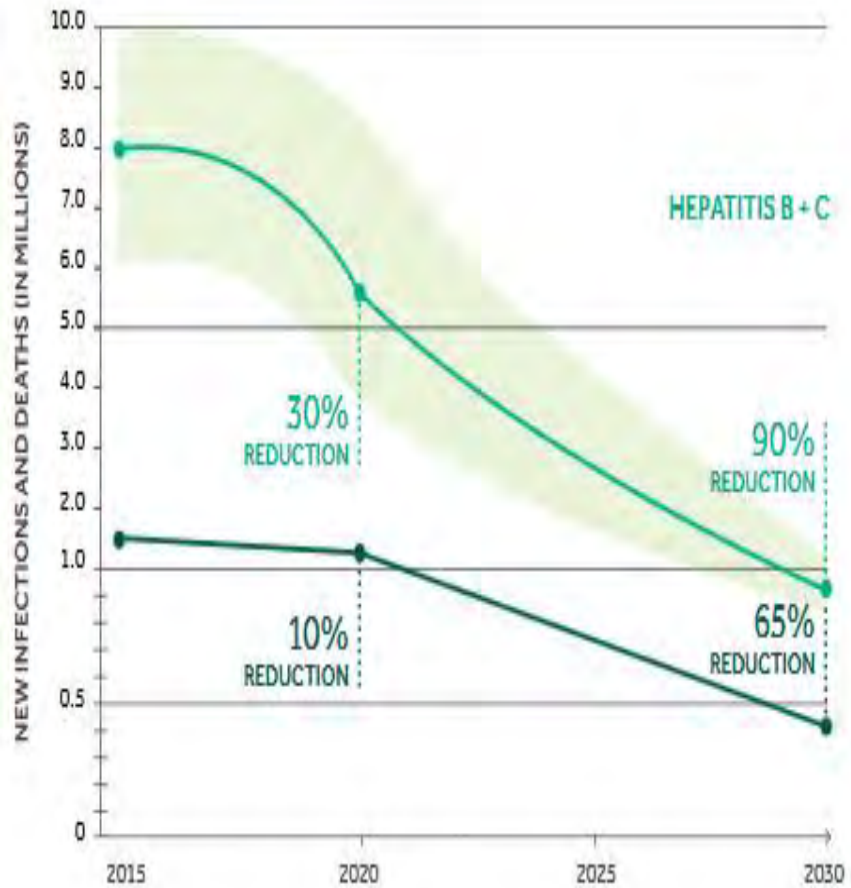
**Prof. Mojca Maticic, MD, PhD**

University Medical Centre Ljubljana  
Faculty of Medicine, University of Ljubljana  
Slovenia

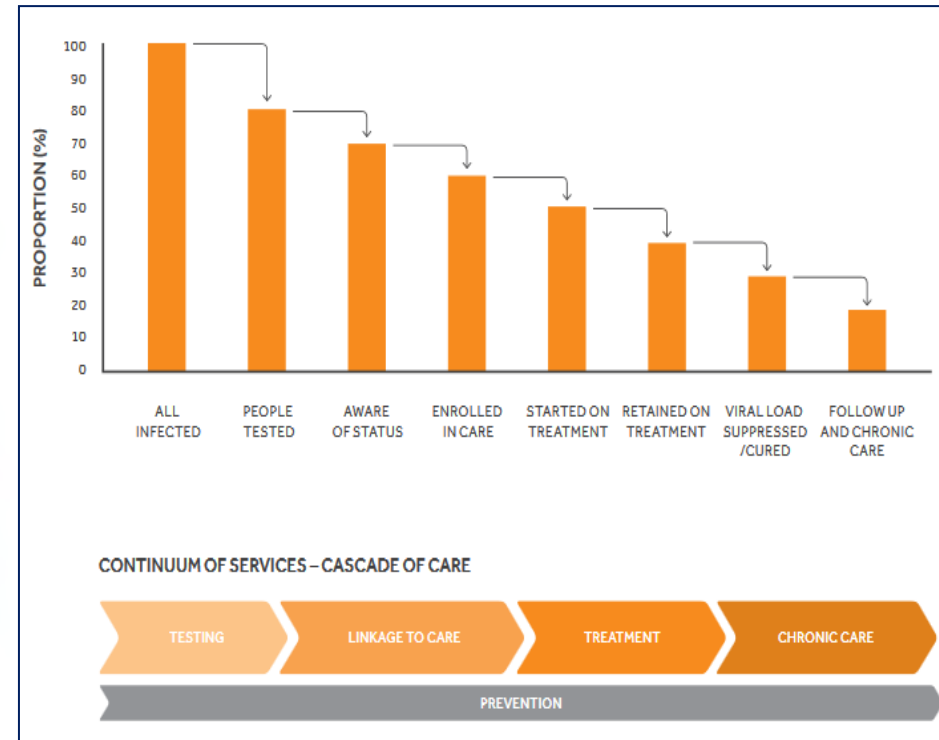
3rd EU HCV Policy Summit Digital : March 24, 2021

# WHO strategy 2016 - 2030: Elimination of viral hepatitis as a public health threat

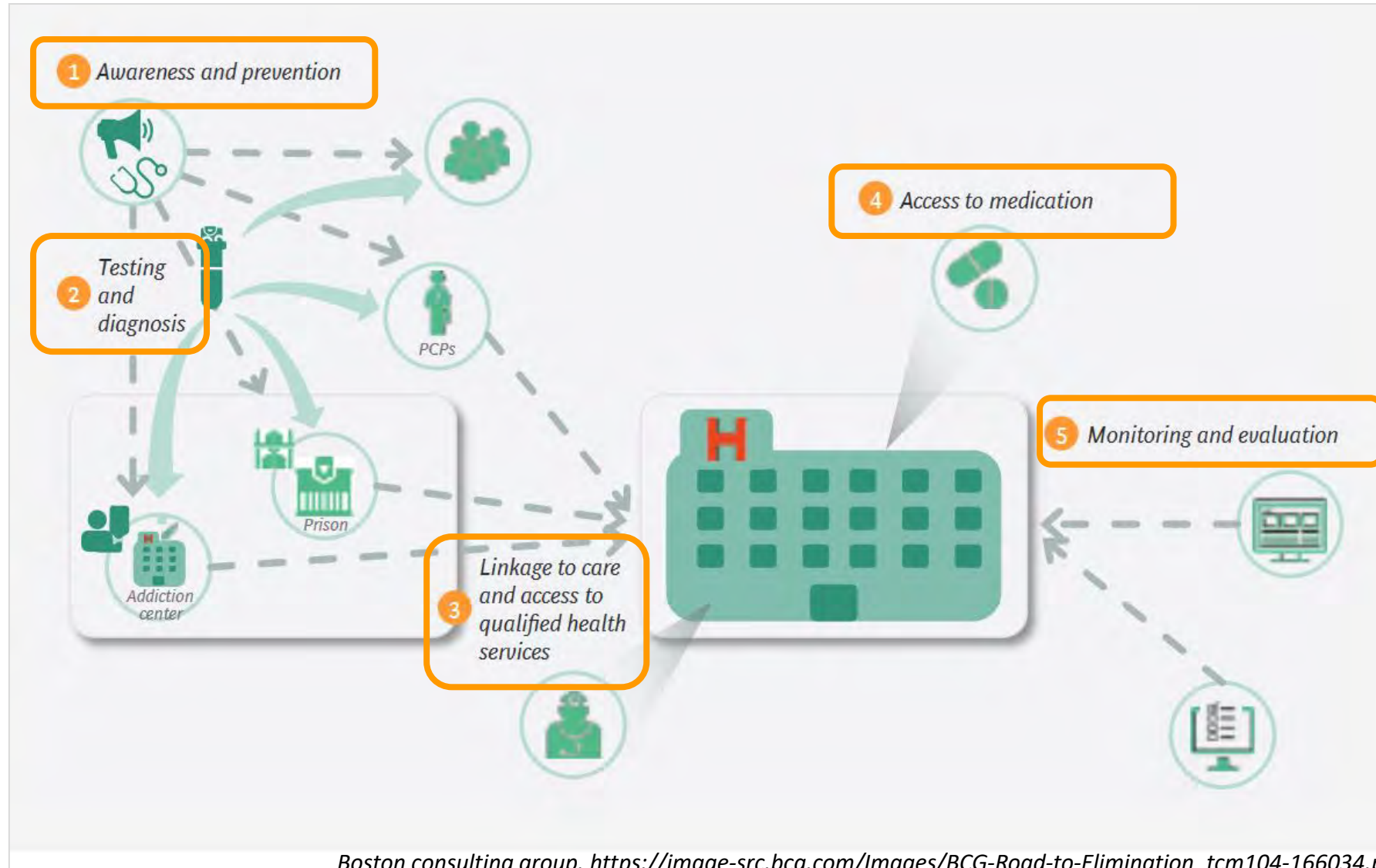
## GOALS



## TOOLS



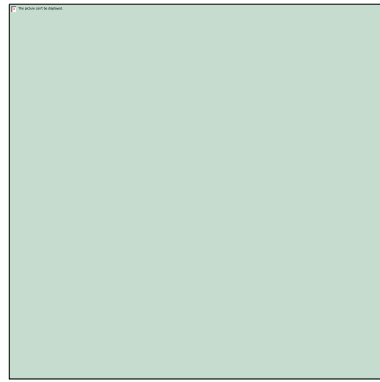
# The road to HCV elimination is complex



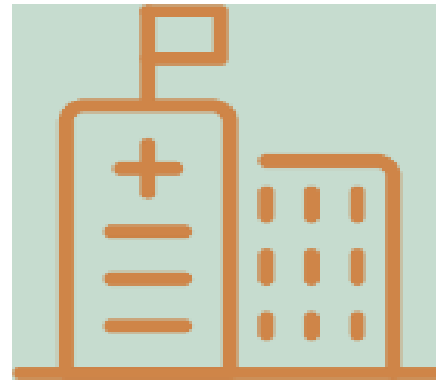
# Barriers and gaps on the way to HCV elimination



**Patient**



**Practitioner**



**System**



**Policy**

# A PATIENT centered care for HCV

## **Simplification:**

- Diagnostic and treatment algorithms – a “one-stop-shop”

## **Decentralisation:**

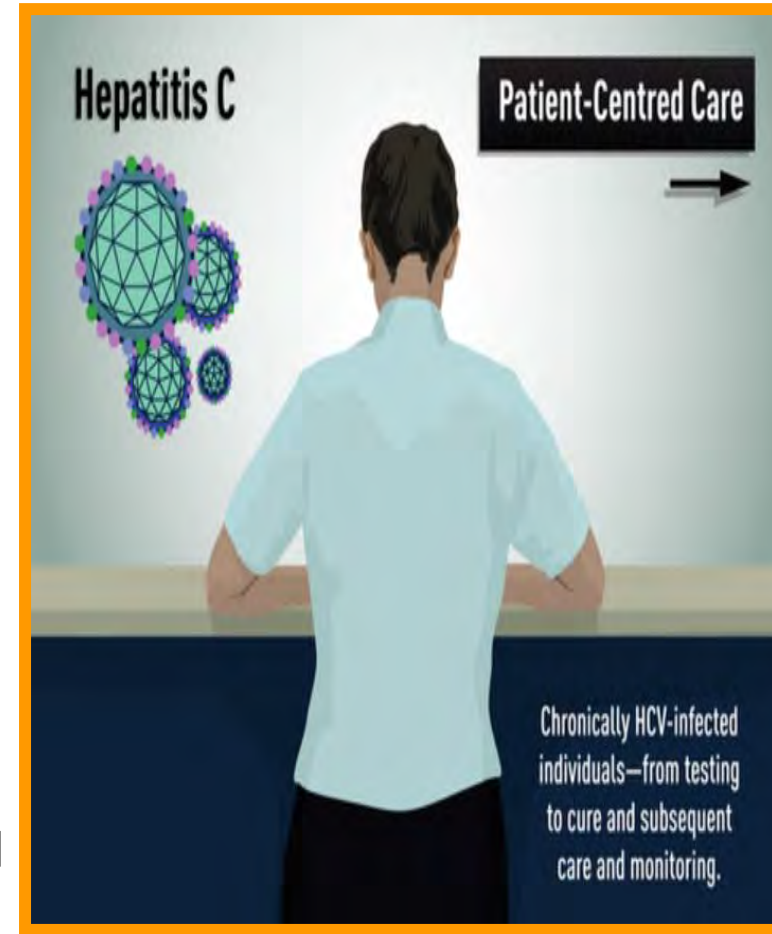
- HCV services put out of hospitals to regional and local level

## **Task-sharing:**

- Involve GPs and nurses to manage uncomplicated HCV cases

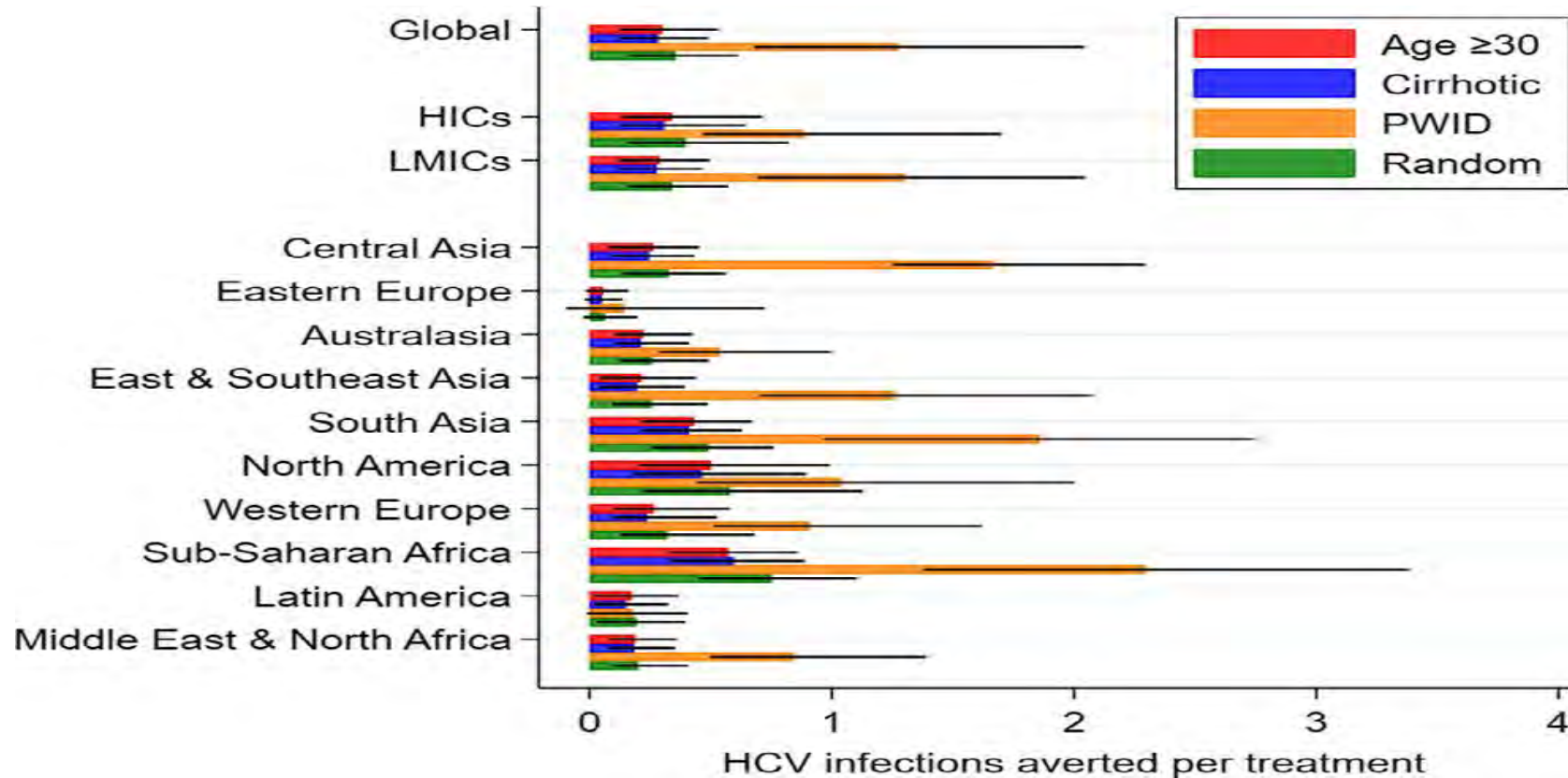
## **Integration:**

- HCV testing and treatment performed in primary care, harm-reduction services and other outreach services



## Treatment-as-prevention

# Modelling the potential prevention benefits of a **treat-all** HCV treatment strategy at global, regional and country levels



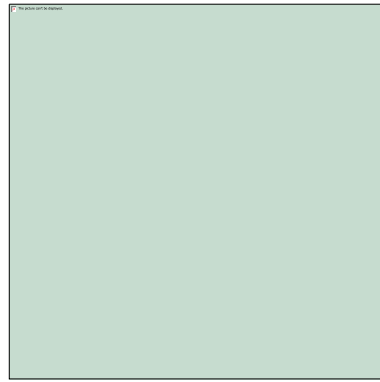
WHO's **treat-all** strategy could bring about appreciable prevention benefits, although **greater benefits** per treatment can be achieved through **targeting PWID**.

# Overcomming the barriers and gaps on the way to HCV elimination

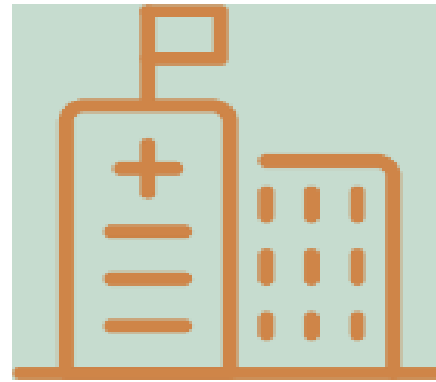
Barriers and gaps need to be **adressed** and  
**solutions** need to be found and subsequently **funded**



Patient



Practitioner



System

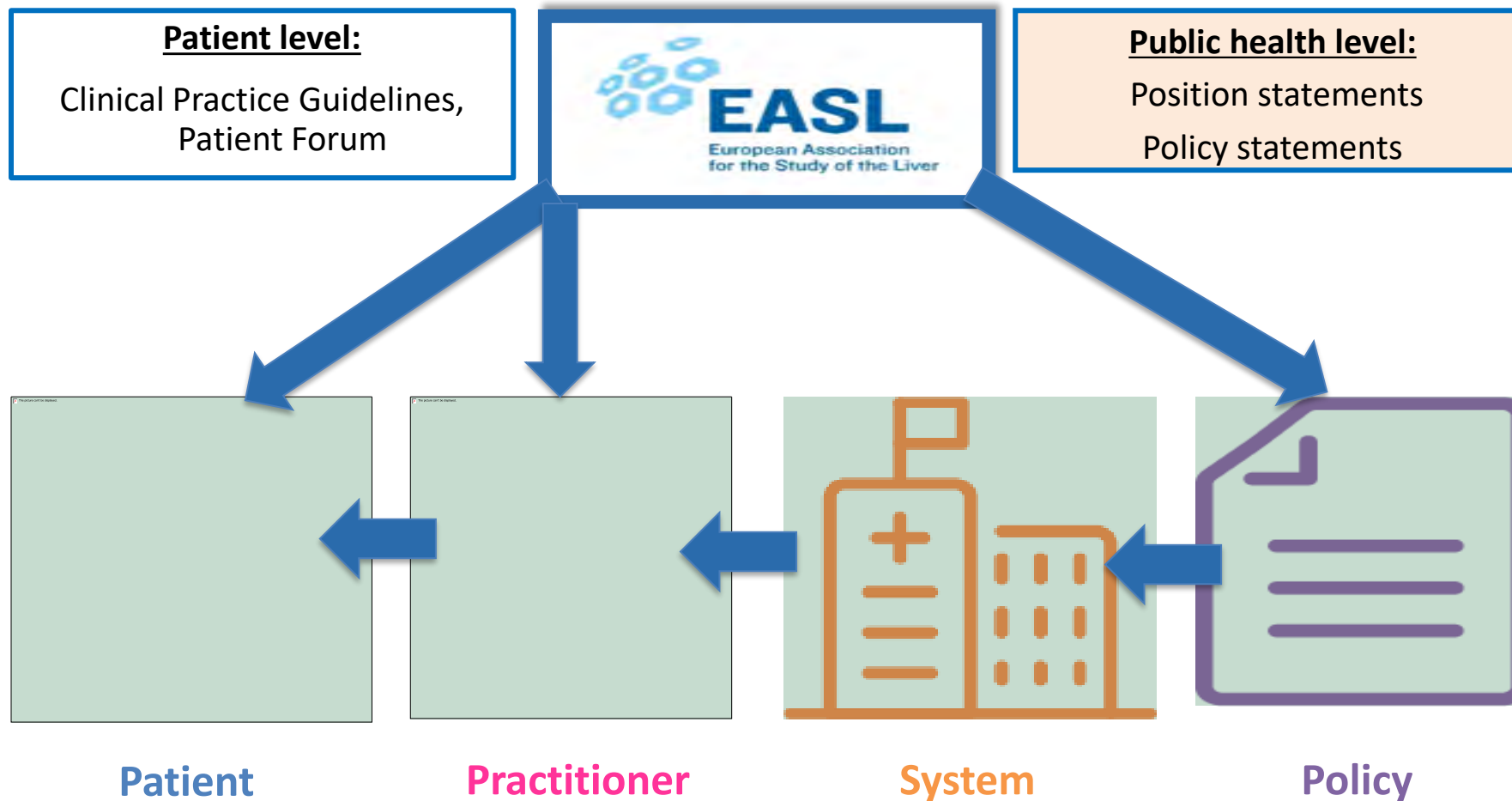


Policy

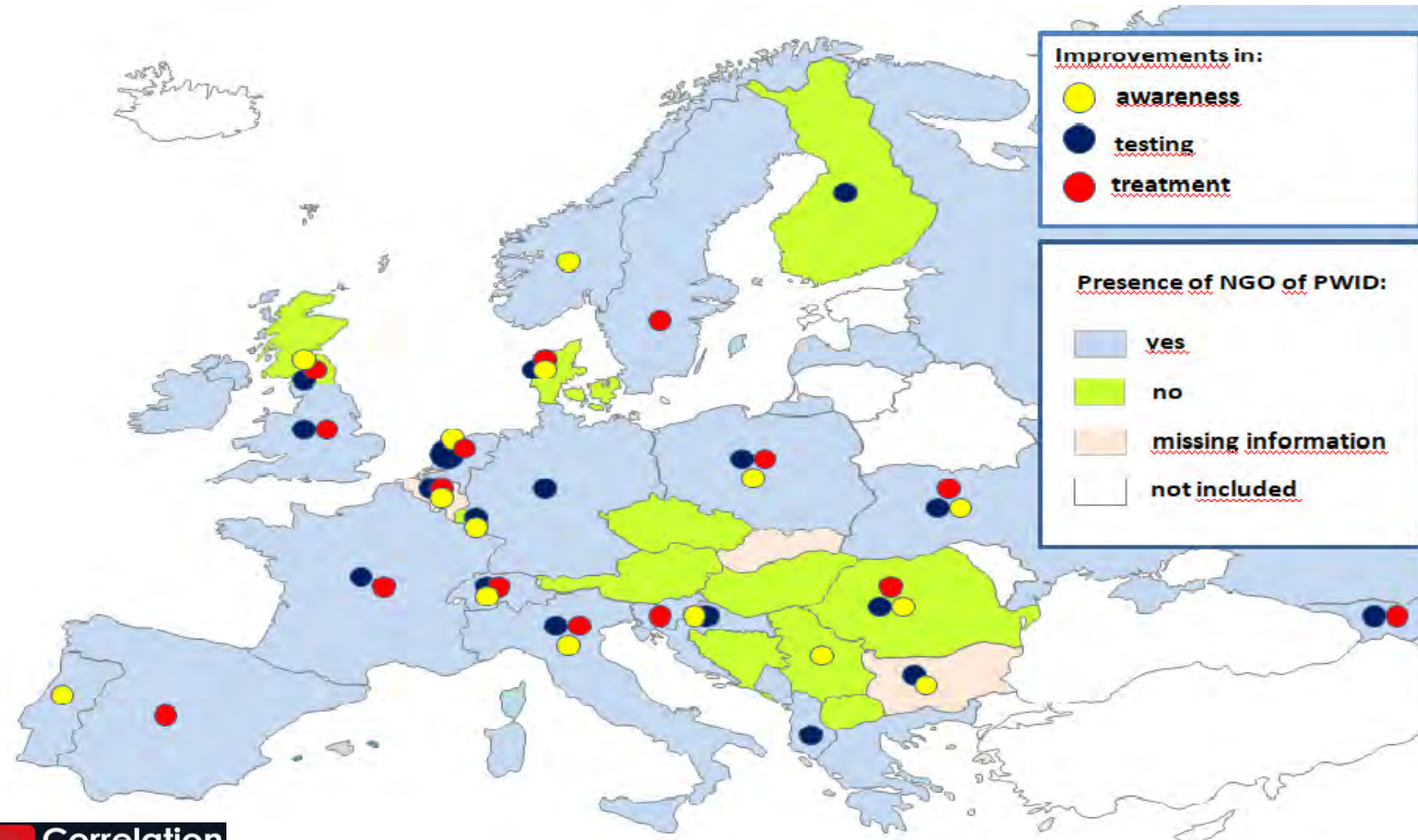
“Secure Wider EU Commitment to the elimination of HCV”



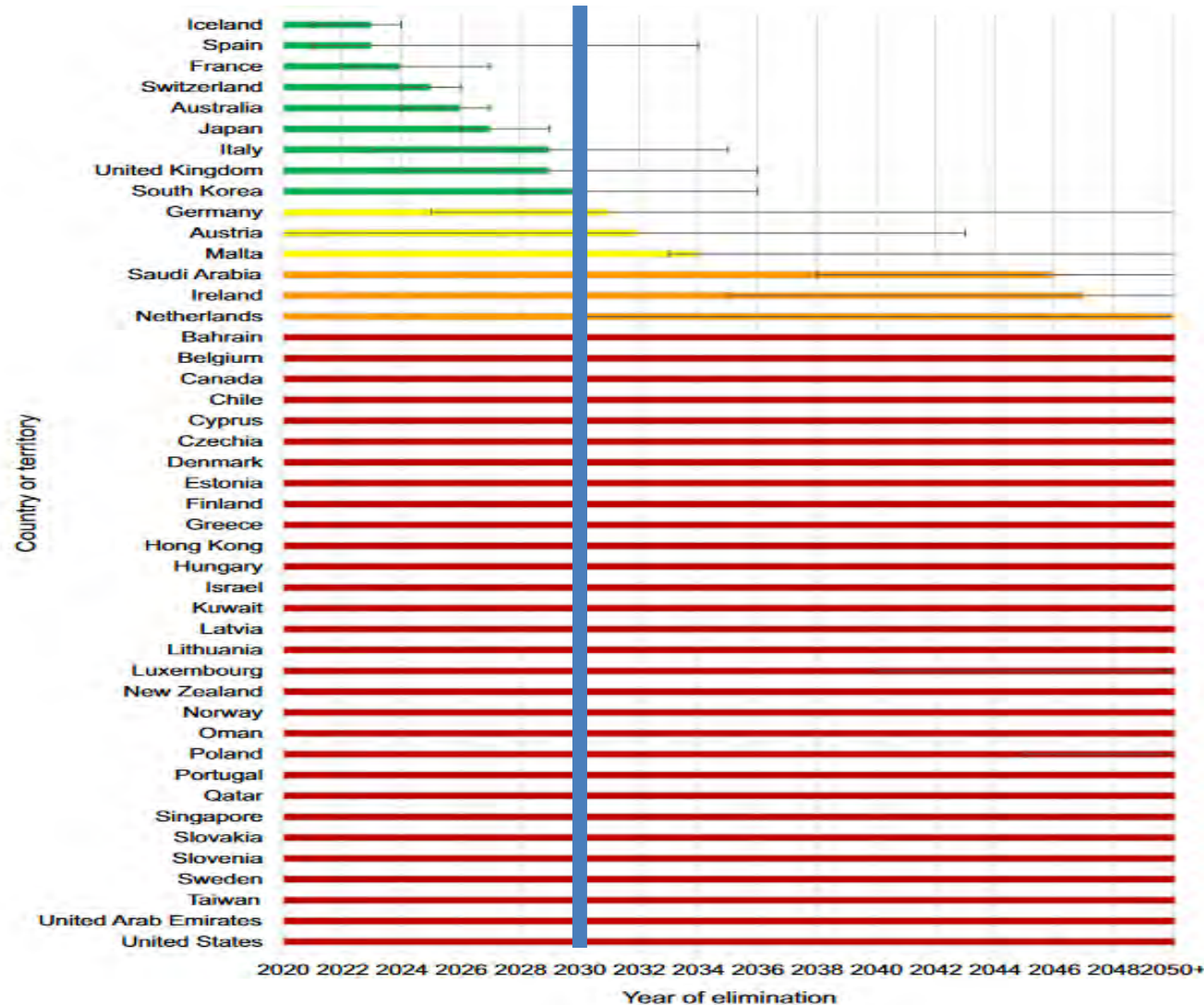
# Overcomming barriers and gaps on the way to HCV elimination



# NGOs of PWID reporting from 35 European countries: improvements in a continuum-of-care comparing the years 2018 and 2019 and



# Countries on track to reach the WHO elimination targets by 2030 and beyond



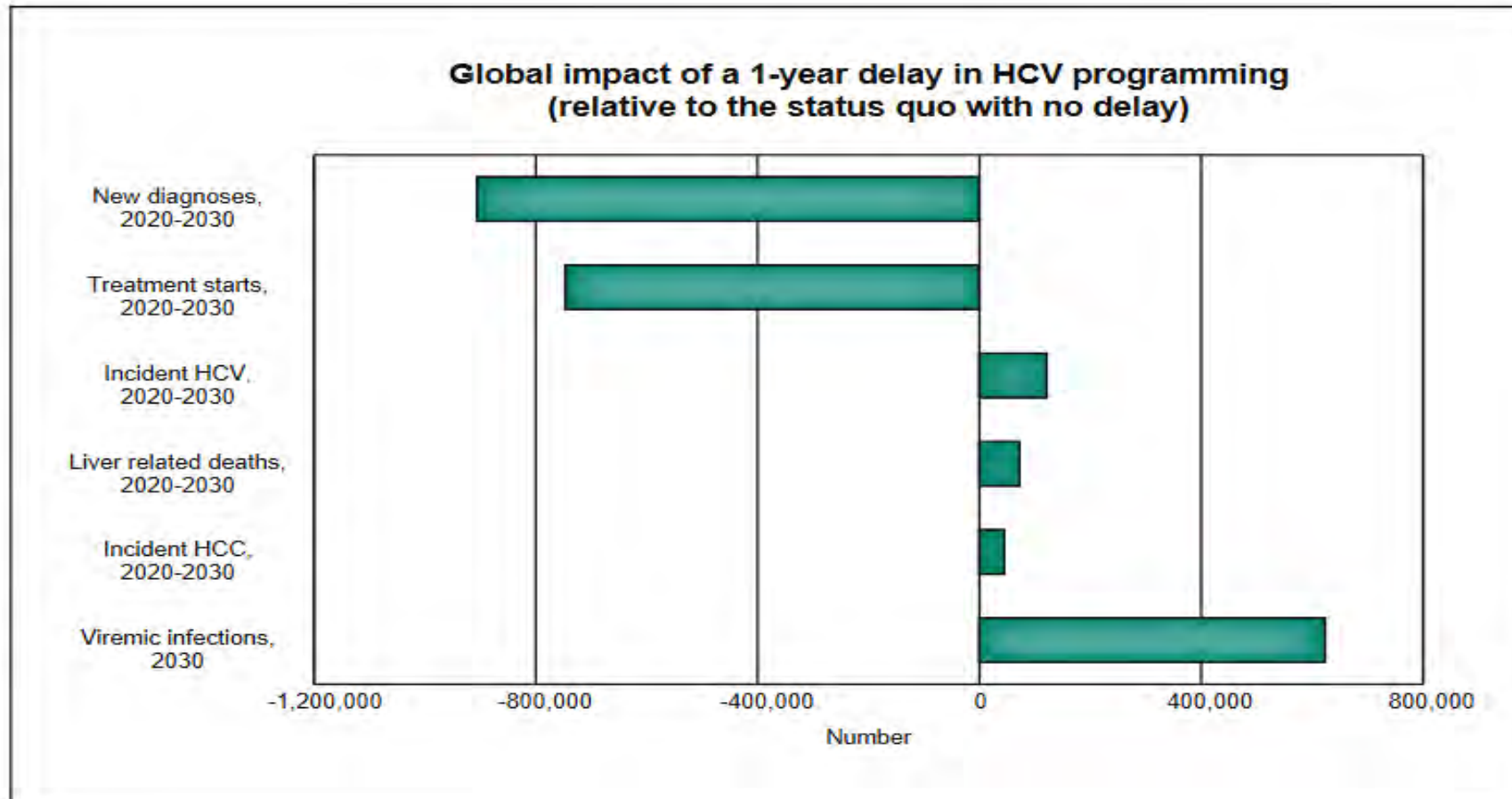
**80%**  
of high-income  
countries are  
**not on track** to  
meet the WHO  
elimination targets

and

**67%**  
of high-income  
countries are  
**off-track** by  
at least 20 years

# COVID-19

## Impact on global HCV elimination efforts



**Immediate action to improve HCV screening and treatment is needed to make the WHO's elimination targets attainable by 2030.**

## *Best practices at the national level*

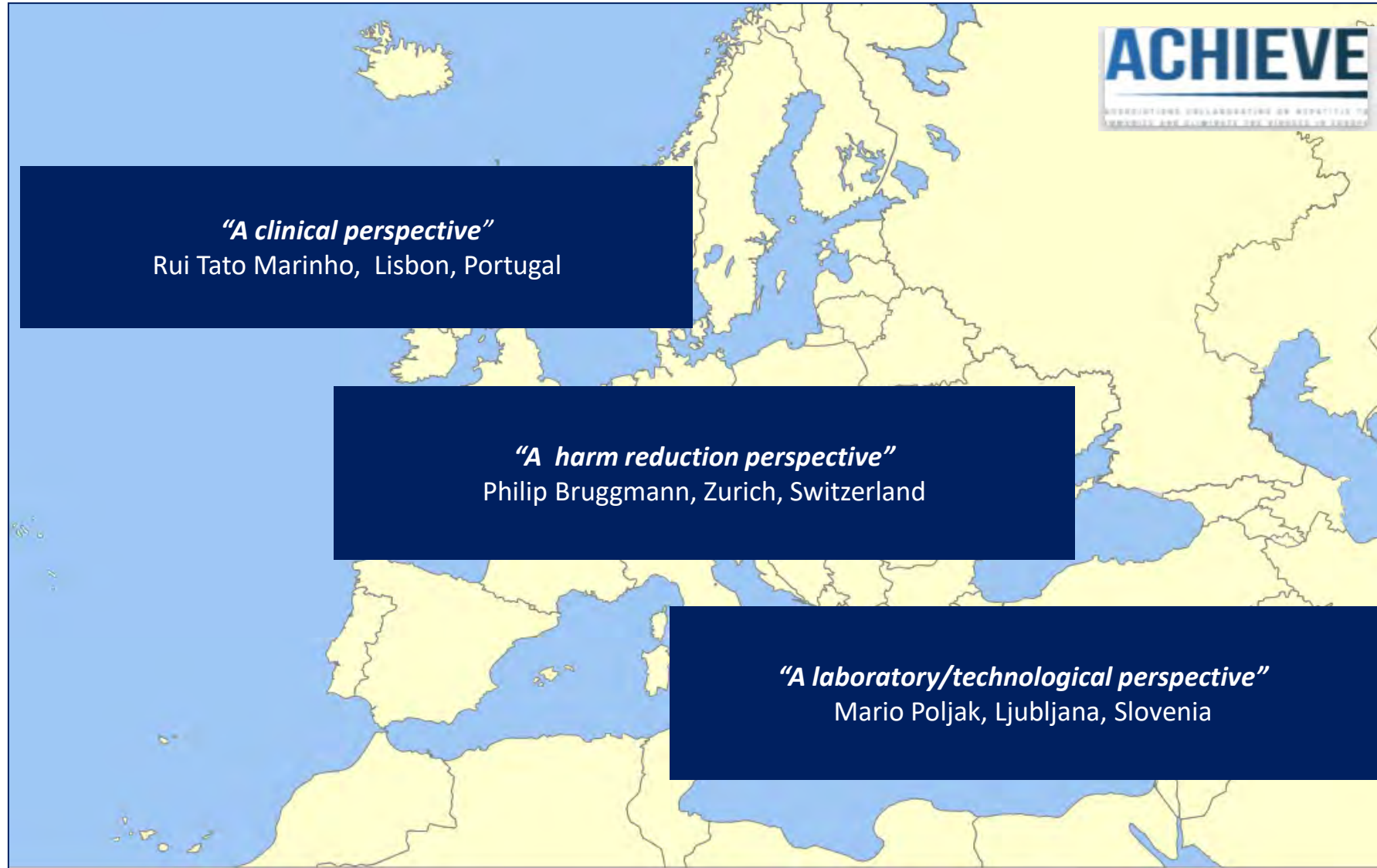
A: Lessons to be learned from COVID-19 for the elimination of HCV (ACHIEVE)

B: National elimination plans:  
UK, Italy, Israel, Spain

C: Best practice case studies:  
Ireland, Greece, Portugal, Montenegro

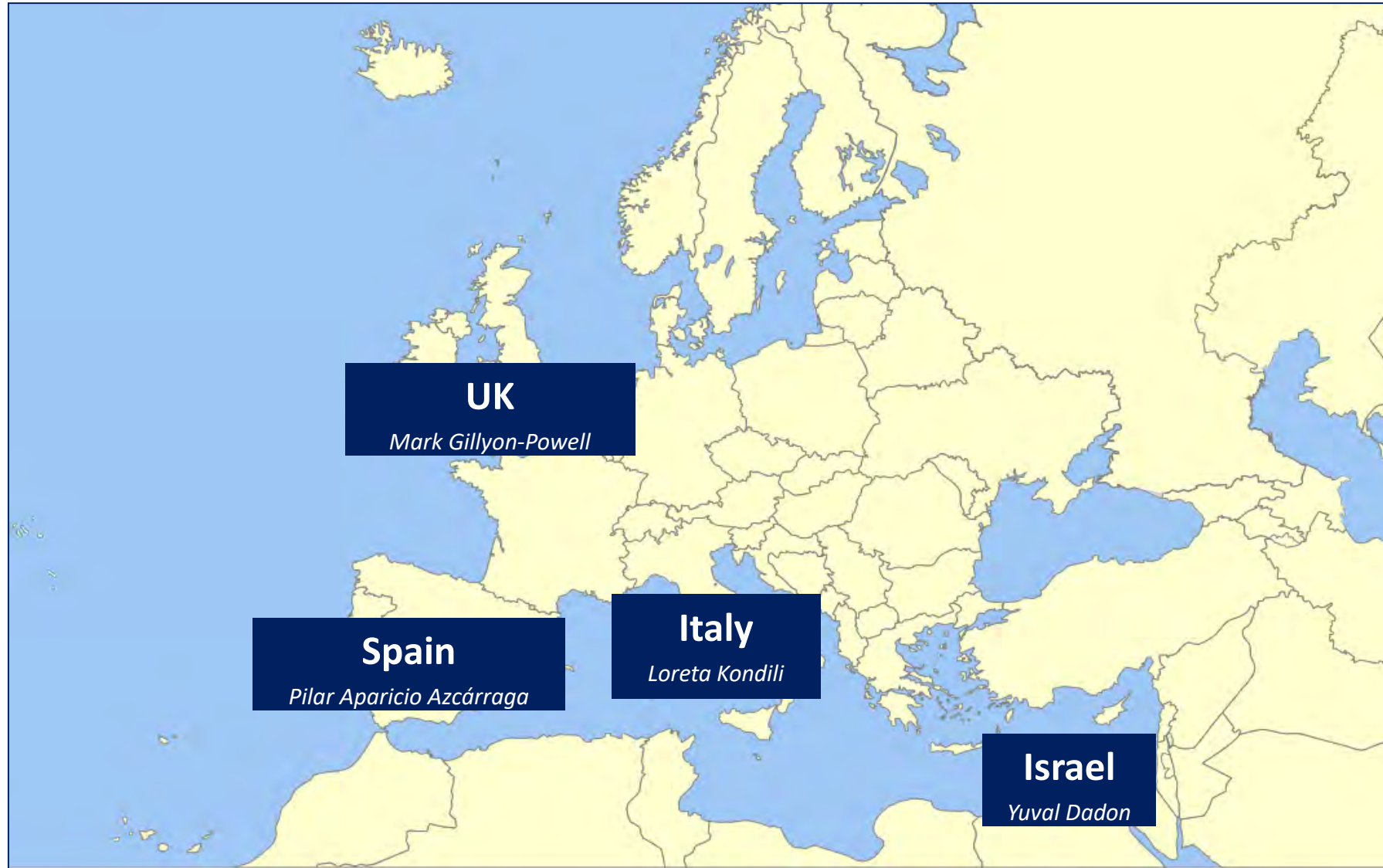
D: Best practice case studies:  
Spain, Italy, Romania, Egypt

# Lessons to be learnt from COVID-19 for elimination of HCV

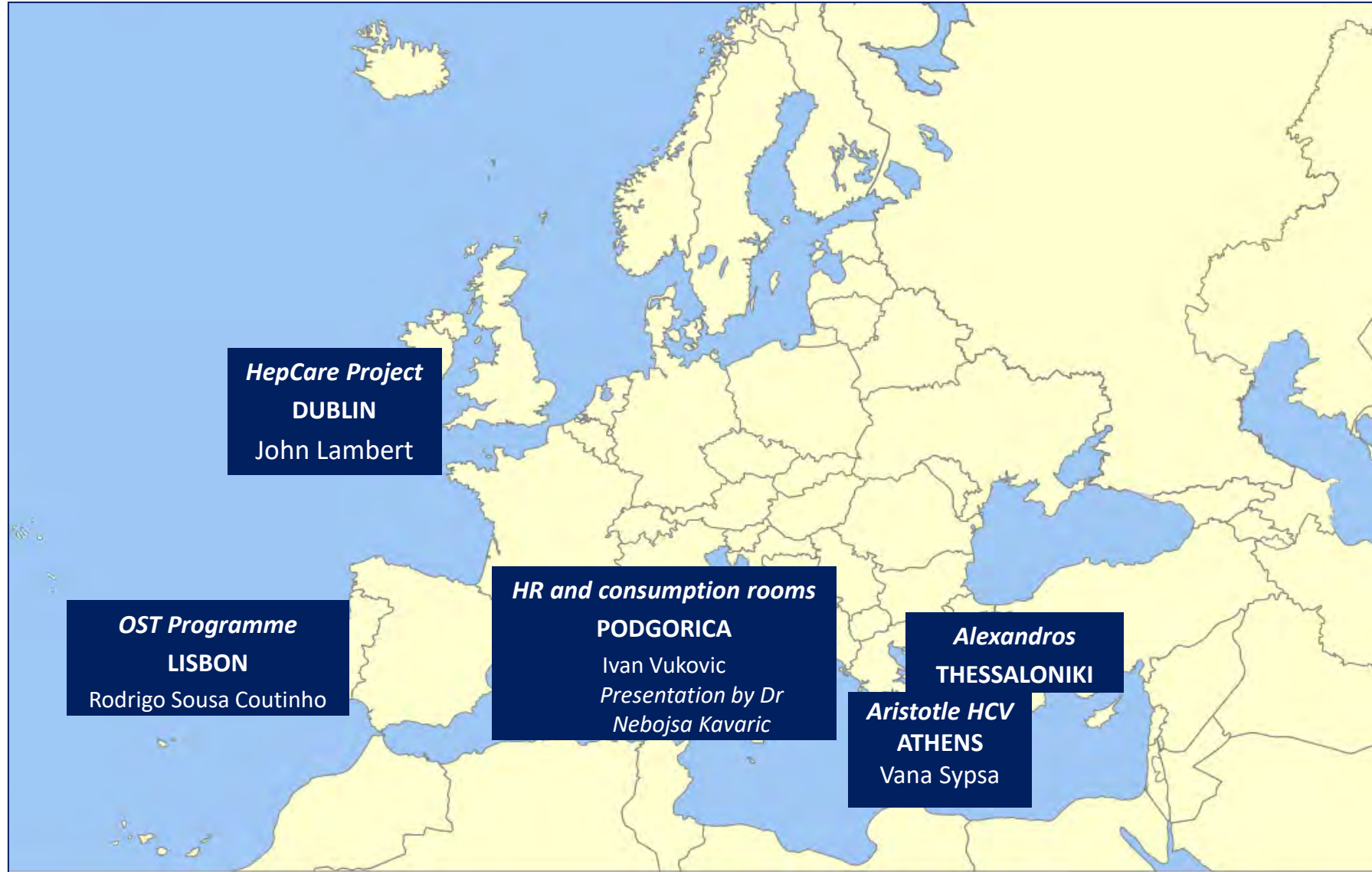


# *National elimination plans*

## *Updates on progress*

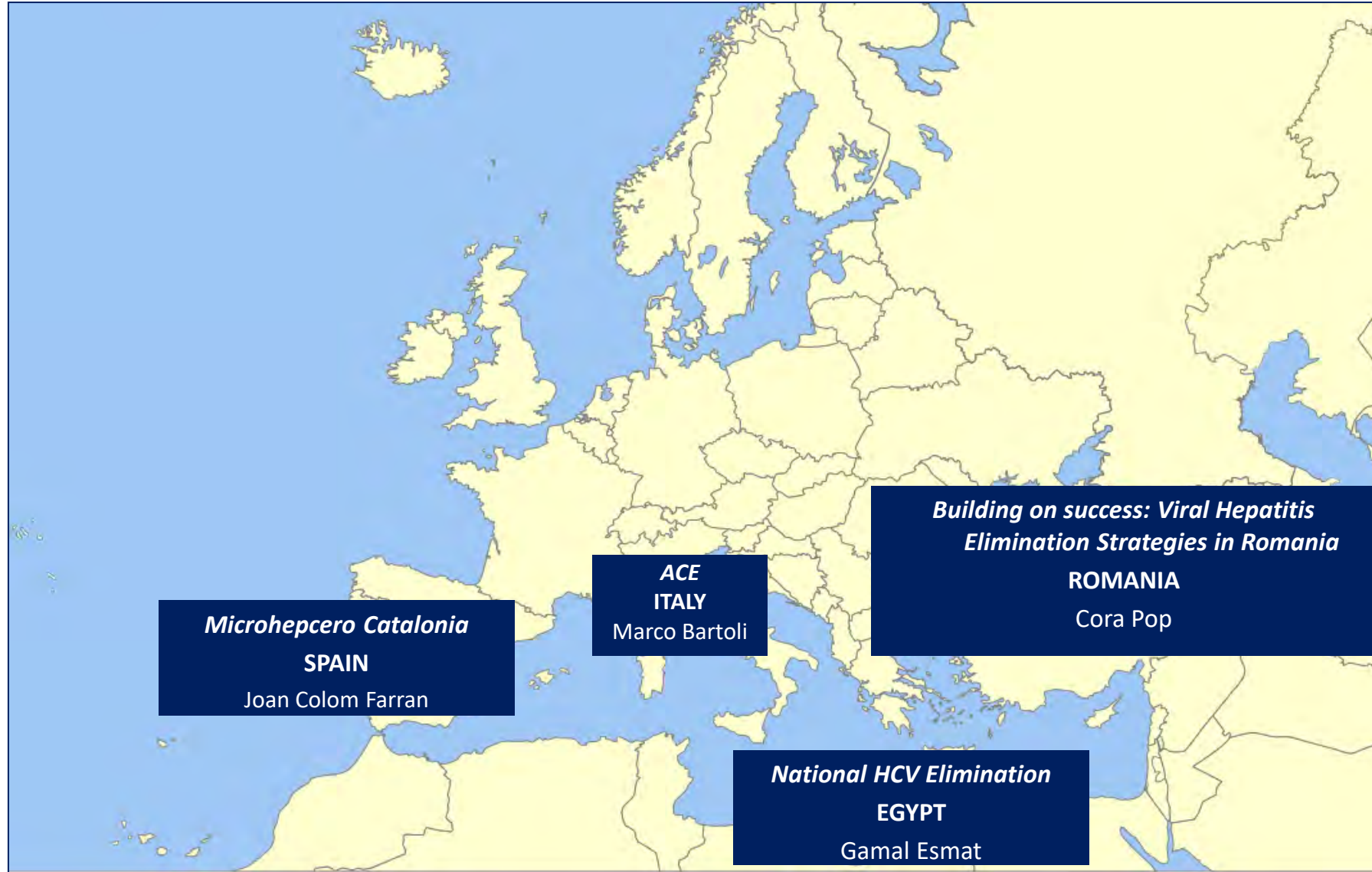


# Best practice case studies





# *Best practice case studies*



# Breakout sessions:

## Best Practices at the National level

### Breakout session A

ACHIEVE Coalition – “Lessons to be learned from COVID 19 for the elimination of HCV”

*Moderated by Prof David Goldberg, Public Health Scotland*

- **“A clinical perspective”** Prof Rui Tato Marinho, Santa Maria Hospital, Medical School of Lisbon, Portugal
- **“A harm reduction perspective”**, Dr Philip Bruggmann, Arud Centre for Addiction Medicine, Zurich, Switzerland
- **“A laboratory/technological perspective”**, Prof Mario Poljak, Slovenian HIV/AIDS Reference Centre, University of Ljubljana, Slovenia
- Discussion and Q&A

### Breakout session B

National Elimination Plans

*Moderated by Dr Zobair Younossi, Inova Health Fairfax Medical Campus, VA USA*

- **“Update on progress in the UK”**, Mr Mark Gillyon-Powell, Head of HCV Elimination Programme, NHS England
- **“Update on progress in Italy”**, Dr Loreta Kondili Head of HCV Elimination Programme, National Health Institute, Italy
- **“Update on progress in Israel”**, Dr Yuval Dadon, HCV National Plan Director, Ministry of Health, Israel
- **“Update on progress in Spain”** Dr Pilar Aparicio Azcárraga, Director of Public Health, Ministry of Health, Spain
- Discussion and Q&A

### Breakout session C

Best practice case studies from Ireland, Greece, Portugal and Montenegro

*Moderated by Prof Antonio Craxi, University of Palermo, Italy*

- **“HepCare Project, Dublin”**, Prof John Lambert, Mater Misericordiae Hospital, UCD Medical School Dublin, Ireland
- **“Aristotle HCV, Athens and Alexandros in Thessaloniki”**, Prof Vana Sypsa, University of Athens Medical School, Greece
- **“OST Lisbon Programme for people who inject drugs”**, Dr Rodrigo Sousa Coutinho, Ares do Pinhal, Lisbon, Portugal
- **“PWIDs: harm-reduction and supervised consumption rooms”**, Mr Ivan Vukovic, Mayor of Podgorica, Montenegro  
> Presentation by Dr Nebojsa Kavacic
- Discussion and Q&A

### Breakout session D

Best practice case studies from Spain, Italy, Romania and Egypt

*Moderated by Prof Laurent Castera, Department of Hepatology Hôpital Beaujon, University of Paris-VII, France*

- **“Microhepcero Catalonia: SLTC in migrant-vulnerable population”**, Dr Joan Colom Farran, Public Health Agency Catalonia, Barcelona, Spain
- **“Dual testing of HCV and Covid-19 (ACE)”**, Mr Marco Bartoli, EpaC Onlus, Italy
- **“Building on success: Viral Hepatitis Elimination Strategies in Romania”**, Prof Cora Pop, Ministry of Health, Romania
- **“Egypt: national best practice for HCV elimination”**, Prof Gamal Esmat, University of Cairo, Egypt
- Discussion and Q&A

# Breakout Session A: ACHIEVE Coalition - Lessons learnt from COVID-19 for the elimination of HCV

**Chair:**

**Prof David Goldberg, Public Health Scotland, UK**

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# BREAKOUT SESSION A: ACHIEVE COALITION

Lessons learnt from COVID-19 for the elimination of viral hepatitis

**Professor David Goldberg**, Public Health Scotland - *Chair and Moderator*

**Professor Rui Tato Marinho**, Head of Department of Gastroenterology, Hepatology, Hospital S. Maria, 2018; Full Professor of Medical School of Lisbon – *Clinical Perspective*

**Dr. Philipp Bruggmann**, Arud Centre, Zurich – *Harm Reduction Perspective*

**Professor Mario Poljak**, Head of Laboratory for Molecular Microbiology and Slovenian HIV/AIDS Reference centre; University of Ljubljana, Faculty of Medicine- *Laboratory/ Technological Perspective*

## ACHIEVE

ASSOCIATIONS COLLABORATING ON HEPATITIS TO  
IMMUNIZE AND ELIMINATE THE VIRUSES IN EUROPE

# Prof Rui Tato Marinho

**Santa Maria Hospital, Medical School of  
Lisbon, Portugal**



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# Dr Philipp Bruggmann

**Arud Centre for Addiction Medicine,  
Zurich, Switzerland**



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**arud**

Zentrum für Suchtmedizin

# A harm reduction perspective

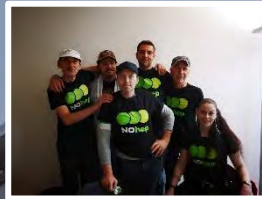
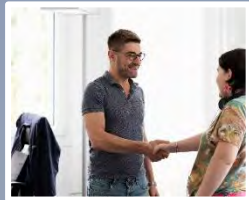
Philip Bruggmann

- Arud Centre for Addiction Medicine, Zurich, Switzerland

# All under one roof – the Arud model in Zurich



social work



peer work



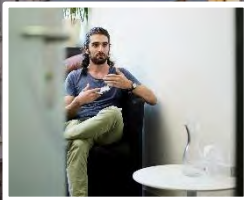
research

general internal  
medicine



wound specialist

psychiatry



HIV and Hepatitis care

walk-in clinic



needle/syringe  
program



opioid-agonist therapy



# People who use drugs and COVID-19

- High vulnerability for severe COVID-19
  - liver-cirrhosis
  - COPD
  - cardiovascular disease
  - HIV
- Elevated vulnerability for infection
  - Living situation

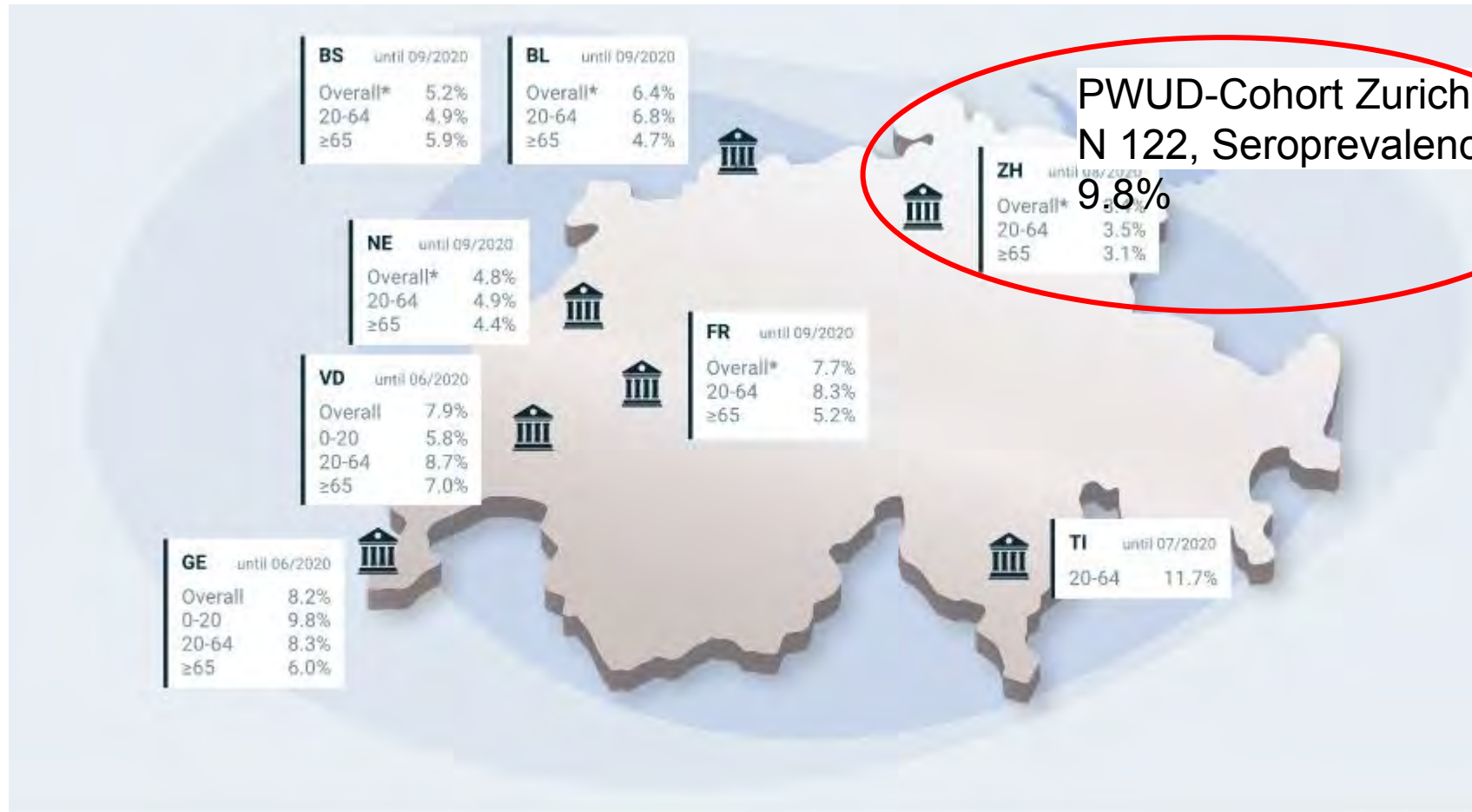


## Harm Reduction during Corona-Pandemic

- Extended take-home dosages
  - Heroin from 1 to 7 days
  - OAT from 7 to 30 days
- Home-delivery of Opioid-Agonist-Treatment
- Enlarged supervised consumption rooms



# Sars-CoV-2-antibody prevalence among PWUD



# COVID-19 influence on HCV-elimination

- Inhibited HCV care provision

- ↓ treatment uptake
- ↓ testing activities
- ↓ peer work
- ↓ awareness

- Increased symptoms of mental diseases

- anxiety
- depression



## HCV influence on COVID-19 prevention

- HCV-network helped to put PWID in phase 1 of COVID-vaccinati



**→ lesson learnt:**

**political will along with corresponding budgets is deciding to fight an infectious disease**

# Prof Mario Poljak

**Slovenian HIV/AIDS Reference Centre,  
University of Ljubljana, Slovenia**



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# 3<sup>RD</sup> HEPATITIS C POLICY SUMMIT

BREAKOUT SESSION: LESSONS LEARNT FROM  
COVID-19 FOR THE ELIMINATION OF HCV

**MARIO POLJAK**

INSTITUTE OF MICROBIOLOGY AND IMMUNOLOGY  
FACULTY OF MEDICINE, UNIVERSITY OF LJUBLJANA, SLOVENIA

**ACHIEVE**

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IMMUNIZE AND ELIMINATE THE VIRUSES IN EUROPE





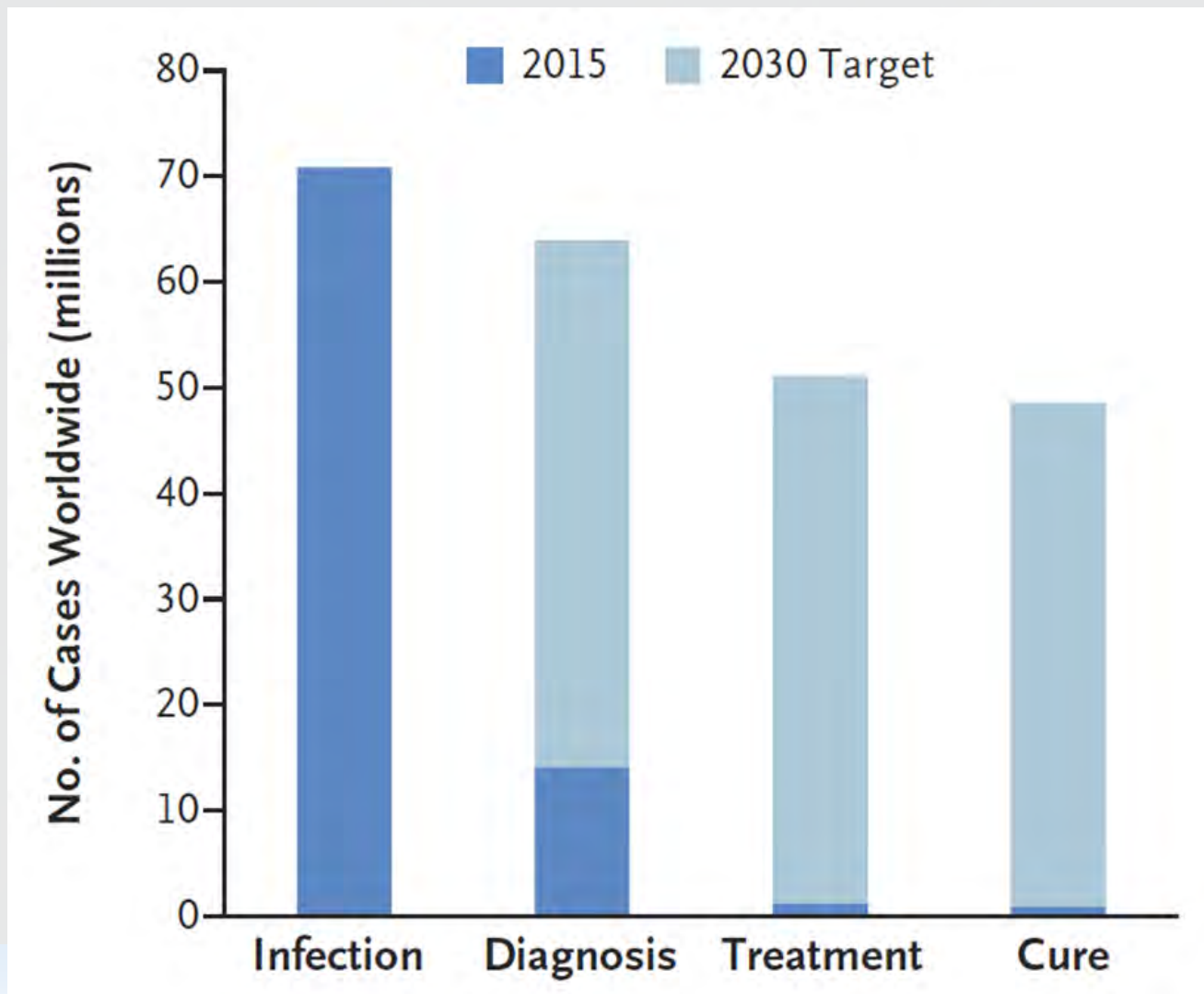
# ACHIEVE

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# Global Elimination of Chronic Hepatitis

N Engl J Med 2019;380:2041

David L. Thomas, M.D., M.P.H.



Global continuum of care for HCV infection and 2030 WHO elimination targets

## HCV diagnostics

- complicated & costly



- simplified & cheaper

Fully integrated, automated sample-to-result molecular analysers and platforms installed initially for COVID-19 testing can be successfully occupied for large scale hepatitis testing



# ACHIEVE

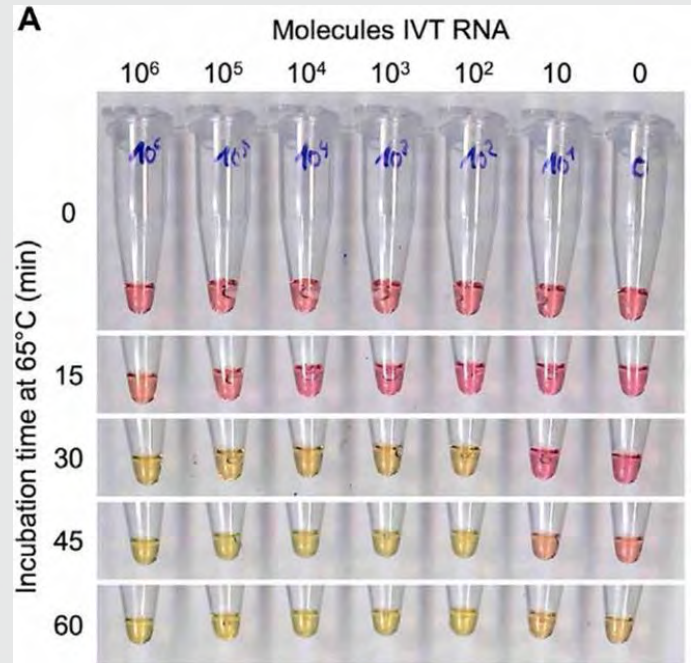
ASSOCIATIONS COLLABORATING ON HEPATITIS TO  
IMMUNIZE AND ELIMINATE THE VIRUSES IN EUROPE

Innovation around molecular COVID19 portable testing tools and recycling of neglected technologies can be easily converted to drive forward the detection of HCV in both point-of-care and field settings



## A colorimetric RT-LAMP assay and LAMP-sequencing for detecting SARS-CoV-2 RNA in clinical samples

Viet Loan Dao Thi<sup>1,2\*</sup>, Konrad Herbst<sup>3†</sup>, Kathleen Boerner<sup>2,4†</sup>, Matthias Meurer<sup>3†</sup>, Lukas PM Kremer<sup>3,5,6</sup>, Daniel Kirrmaier<sup>3,5</sup>, Andrew Freistaedter<sup>1,2</sup>, Dimitrios Papagiannidis<sup>3</sup>, Carla Galmozzi<sup>3,6</sup>, Megan L. Stanifer<sup>2</sup>, Steeve Boulant<sup>2,5</sup>, Steffen Klein<sup>1,2</sup>, Petr Chlanda<sup>1,2</sup>, Dina Khalid<sup>2</sup>, Isabel Barreto Miranda<sup>2</sup>, Paul Schnitzler<sup>2</sup>, Hans-Georg Kräusslich<sup>2,4</sup>, Michael Knop<sup>3,5,6\*</sup>, Simon Anders<sup>3\*</sup>  
 Sci Transl Med 2020;12:eabc7075



ASSOCIATIONS COLLABORATING ON HEPATITIS TO IMMUNIZE AND ELIMINATE THE VIRUSES IN EUROPE

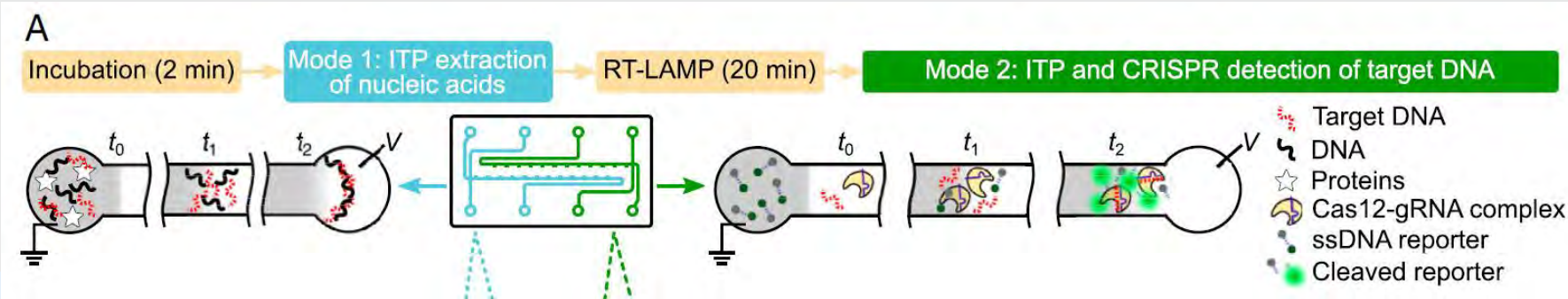
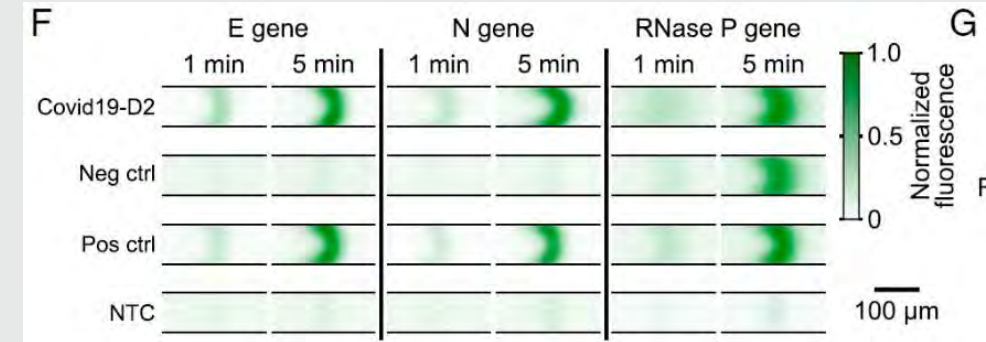
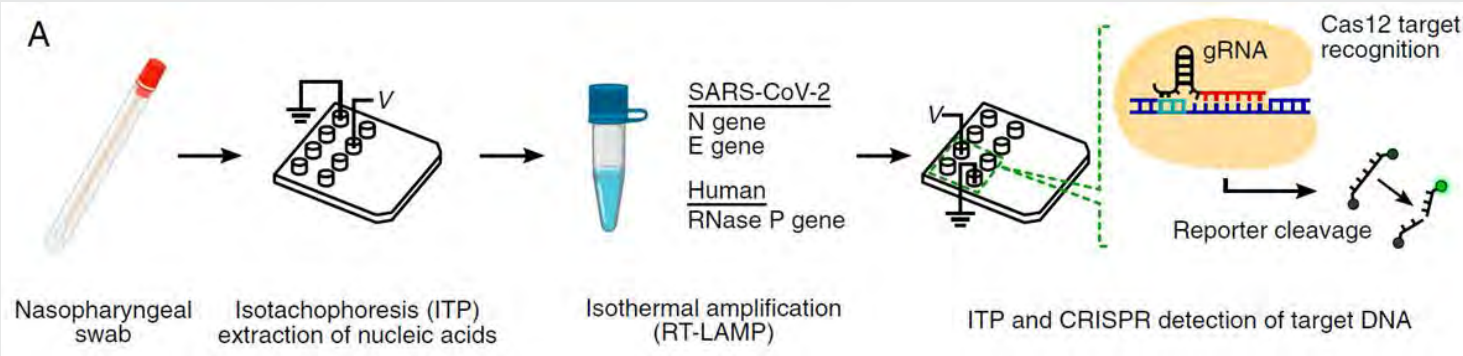


Innovation around molecular COVID19 portable testing tools and recycling of neglected technologies can be easily converted to drive forward the detection of HCV in both point-of-care and field settings

## Electric field-driven microfluidics for rapid CRISPR-based diagnostics and its application to detection of SARS-CoV-2

Ashwin Ramachandran<sup>a</sup>, Diego A. Huyke<sup>b</sup>, Eesha Sharma<sup>c</sup>, Malaya K. Sahoo<sup>d</sup>, ChunHong Huang<sup>d</sup>, Niaz Banaei<sup>d,e</sup>, Benjamin A. Pinsky<sup>d,e</sup>, and Juan G. Santiago<sup>b,1</sup>

<sup>a</sup>Department of Aeronautics & Astronautics, Stanford University, Stanford, CA 94305; <sup>b</sup>Department of Mechanical Engineering, Stanford University, Stanford, CA 94305; <sup>c</sup>Department of Biochemistry, Stanford University, Stanford, CA 94305; <sup>d</sup>Department of Clinical Pathology, Stanford University, Stanford, CA 94305; and <sup>e</sup>Department of Medicine, Division of Infectious Diseases and Geographic Medicine, Stanford University, Stanford, CA 94305



Total assay time: 35 min

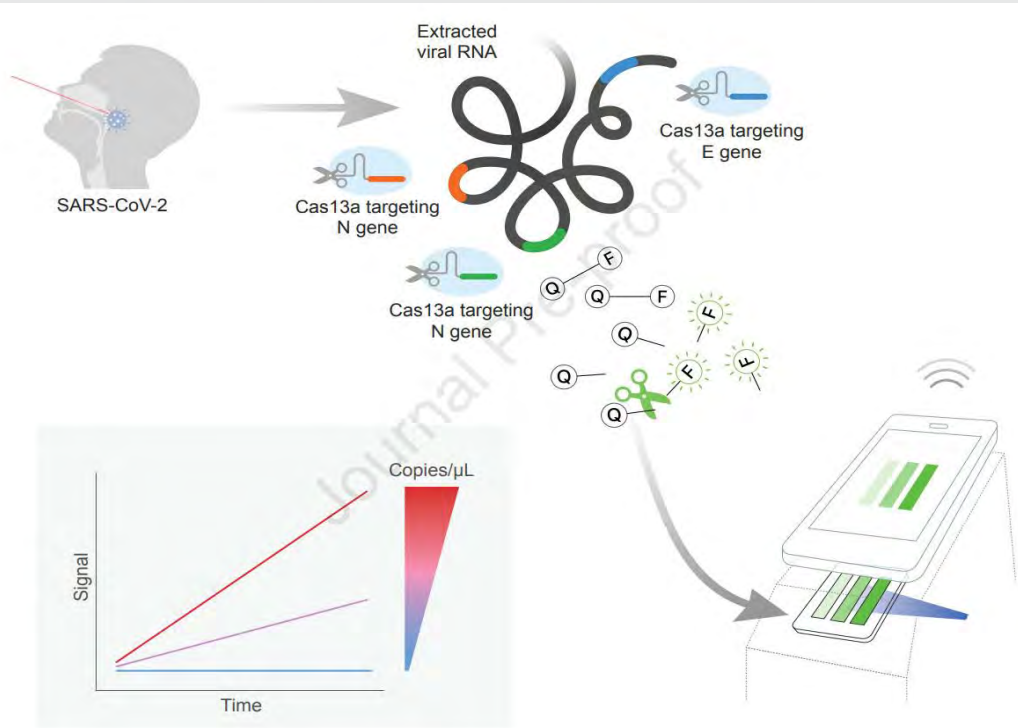
Plastic chips could be produced through the injection molding process for \$2-4 each.

IMMUNIZE AND ELIMINATE THE VIRUSES IN EUROPE

# Innovation around molecular COVID19 portable testing tools and recycling of neglected technologies can be easily converted to drive forward the detection of HCV in both point-of-care and field settings

## Amplification-free detection of SARS-CoV-2 with CRISPR-Cas13a and mobile phone microscopy

Parinaz Fozouni<sup>1,2,3,4,24</sup>, Sungmin Son<sup>5,24</sup>, María DÍaz de León Derby<sup>5,6,24</sup>, Gavin J. Knott<sup>7,8</sup>, Carley N. Gray<sup>1,4</sup>, Michael V. D'Ambrosio<sup>5</sup>, Chunyu Zhao<sup>9</sup>, Neil A. Switz<sup>10</sup>, G. Renuka Kumar<sup>1,4</sup>, Stephanie I. Stephens<sup>1,4</sup>, Daniela Boehm<sup>1,4</sup>, Chia-Lin Tsou<sup>1,4</sup>, Jeffrey Shu<sup>1,4</sup>, Abdul Bhuiya<sup>5,6</sup>, Max Armstrong<sup>5</sup>, Andrew R. Harris<sup>5</sup>, Pei-Yi Chen<sup>1,4</sup>, Jeannette M. Osterloh<sup>1</sup>, Anke Meyer-Franke<sup>1</sup>, Bastian Joehnk<sup>11,12</sup>, Keith Walcott<sup>11</sup>, Anita Sil<sup>2,3,11</sup>, Charles Langelier<sup>9,13</sup>, Katherine S. Pollard<sup>1,3,9,14,15</sup>, Emily D. Crawford<sup>9,11</sup>, Andreas S. Puschnik<sup>9</sup>, Maira Phelps<sup>9</sup>, Amy Kistler<sup>9</sup>, Joseph L. DeRisi<sup>2,3,9,16</sup>, Jennifer A. Doudna<sup>1,7,17,18,19,20</sup>, Daniel A. Fletcher<sup>1,5,6,9,21,22,23\*</sup>, Melanie Ott<sup>1,2,3,4,25\*</sup>



# ACHIEVE

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The assay achieved ~100 copies/ $\mu$ L sensitivity in under 30 minutes and accurately detected a set of positive clinical samples in under 5 minutes.

- Highly trained increased laboratory workforce to support the delivery of COVID19 testing can transfer their skills to support other molecular testing, such as for hepatitis;
- Possibility to jump in into de novo established laboratory facilities in post-COVID-19 time or near to end of COVID-19 time is great opportunity not to be missed



# ACHIEVE

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IMMUNIZE AND ELIMINATE THE VIRUSES IN EUROPE

- Experience from recent pan-European centralized tenders for COVID-19 testing tools and vaccines should be utilised to successfully conclude similar pan-European tenders in hepatitis;
- The global implementation of a “test-and-treat” strategy for the elimination of hepatitis C is possible, but requires greater coordination and cooperation of different governmental agencies and manufacturers.



## **European Commission**

**Call for tenders SANTE/C3/2020/015 -**

**for the supply of laboratory equipment used in the  
diagnosis of novel coronavirus (COVID-19)**

**Negotiated procedure<sup>1</sup>**

# **ACHIEVE**

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IMMUNIZE AND ELIMINATE THE VIRUSES IN EUROPE



# Discussion and Q&A



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# Breakout Session B: National Elimination Plans

**Chair:**

**Dr Zobair Younossi, Inova Health Fairfax Medical Campus, USA**

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# Mr Mark Gillyon-Powell

**Head of HCV Elimination Programme, NHS  
England**



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# HCV Elimination – Progress in England

EU HCV Policy Summit - 24 March 2021

**Mark Gillyon-Powell JP**

NHS England and NHS Improvement



# Background, pre-DAA

## HEP C ODNs AND CLINICAL LEADS



### North

1, North East & Cumbria  
The Newcastle Upon Tyne Hospitals  
NHS Foundation Trust  
Dr Stuart McPherson

### 2, Greater Manchester

& Eastern Cheshire  
Parrinla Acute Hospitals NHS Trust  
& Central Manchester University  
Hospitals NHS Foundation Trust  
Dr Andrew Ostrowski  
Dr Martin Payne

### 3, Cheshire & Merseyside

Royal Liverpool & Broad Green  
University Hospital NHS Trust  
Dr Paul Richardson  
Professor Anna Maria Garret

### 4, South Yorkshire

Sheffield Teaching Hospitals NHS  
Foundation Trust  
Dr Alan Stone

### 5, Humberside and

North Yorkshire  
Hull & East Yorkshire NHS Trust  
Dr Peter Moss

### 6, West Yorkshire

Leeds Teaching Hospitals  
Dr Mark A. Aldenley

### 7, Lancashire and South

Cumbria (in development)

### Midlands & East

8, Leicester  
University Hospitals of Leicester  
Dr Martin Wobella

### 9, Birmingham

University Hospitals Birmingham  
NHS Foundation Trust  
Professor David Muttmar

### 10, Nottingham

Nottingham University  
Hospitals NHS Trust  
Dr Stephen Ryder

### 11, Eastern Hepatitis Network

Cambridge University Hospitals NHS  
Foundation Trust  
Dr William Gibson

### London North West

12, West London  
Imperial College Healthcare Trust  
Prof Mark Thursz

### North Central London

13, North Central London  
Viral Hepatitis Network  
Royal Free London NHS  
Foundation Trust  
Prof Willem Rosenberg

### London North East

14, Barts  
Barts Health (Royal London site)  
Prof Graham Foster

### London South

15, South Thames Hepatitis  
Network (STHepNet) Kings  
& St George's  
Kings College Hospital NHS  
Foundation Trust and St George's  
University Hospitals NHS  
Foundation Trust  
Dr Kish Aggarwal  
Dr Dan Forton

### South

16, Surrey Hepatitis Services  
Royal Surrey County Hospital NHS FT  
Dr Michelle Gallagher

### 17, Sussex Hepatology

Network  
Brighton & Sussex University  
Hospitals - Royal Sussex County  
Hospital (RSC) Dr Jeremy Tibble

### 18, Oxford University

Hospitals NHS Trust  
Oxford  
Dr Jane Collier

### 19, Wessex Hep C ODN

University Hospital Southampton  
NHS Foundation Trust  
Dr Mark Wright

### 20, Bristol and Severn

Hep C ODN  
University Hospitals Bristol NHS  
Foundation Trust  
Dr Fiona Gordon

### 21, South West Peninsula

Hepatitis C ODN  
Plymouth Hospitals NHS Trust  
Professor Matthew Cramp

### 22, Kent Network via Kings

Kings College Hospital NHS  
Foundation Trust  
Dr Kish Aggarwal



# Post DAA



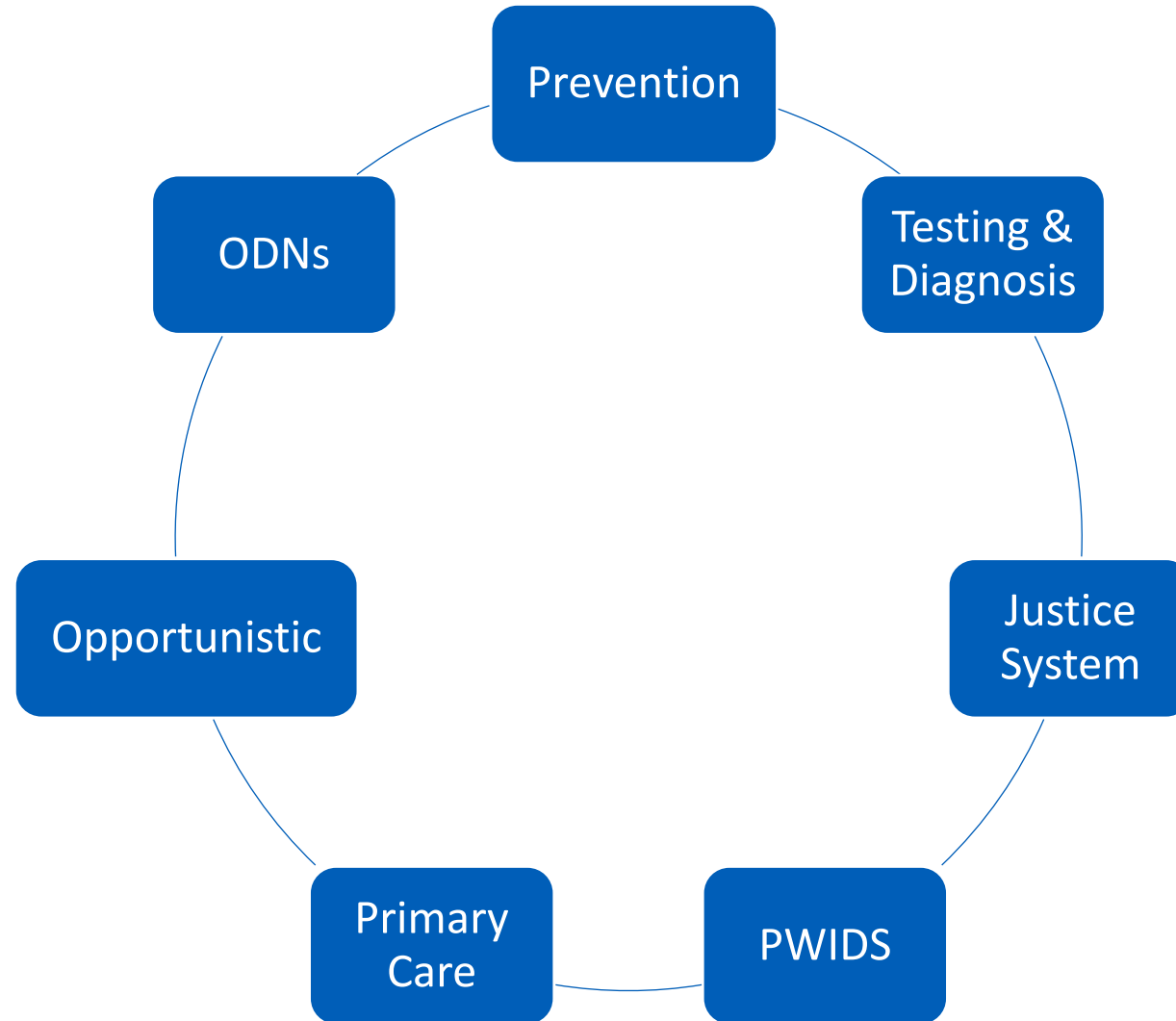
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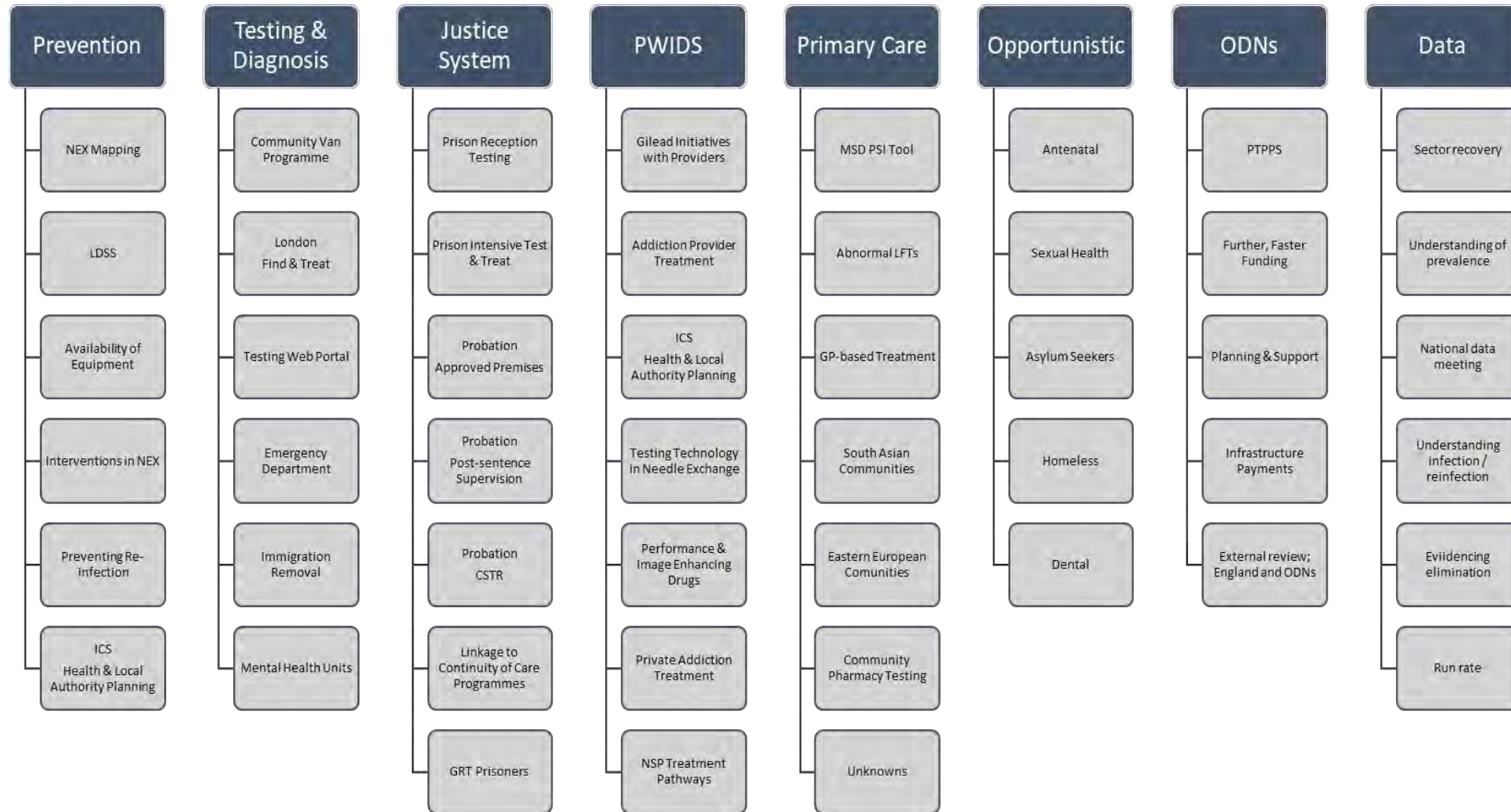
THE  
HEPATITIS



TRUST

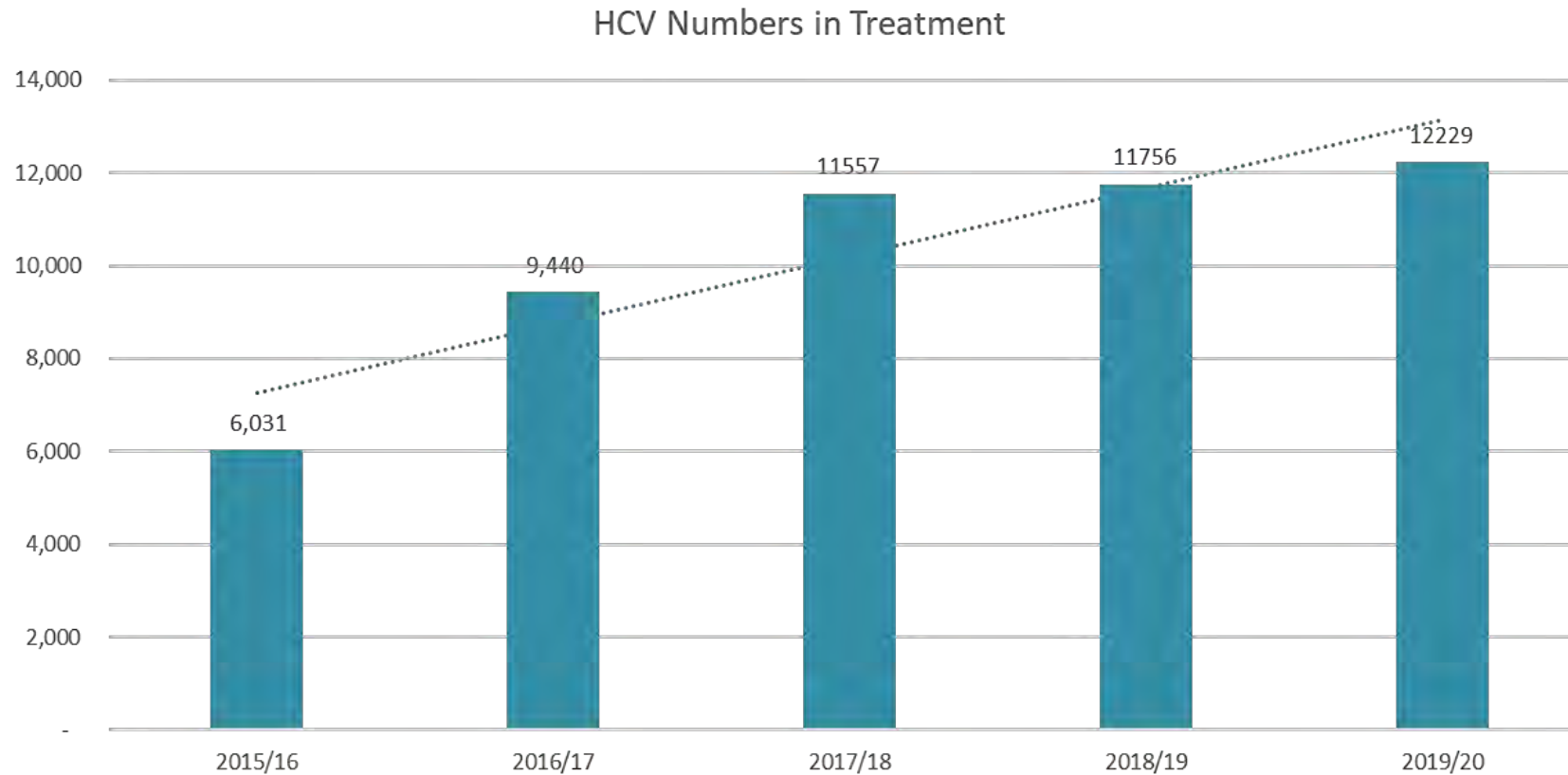
# The Elimination Map







# Over 50,000 treated by Apr '20 (51,013)





# Eliminating hepatitis C as a major public health threat in England

## 2020 impact targets

### Reducing HCV related mortality (target 10% reduction by 2020)

Death registrations for Hep C-related end-stage liver disease and cancer fell by 20% between 2015 and 2018



### Reducing new chronic HCV infections (target 30% reduction by 2020)

The UAM survey of people who inject drugs (PWID) provides no evidence of any decline in new HCV infections in recent years; estimated rates of infection in 2018 were 17/100 person years, compared to 14/100 in 2011, while prevalence of infection in recent initiates to injecting drug use was higher in 2018 (33%) than in 2011 (20%)



**89,000** people estimated to be living with chronic Hep C in England

## Coverage of key services

### Number treated

11,756 people accessed treatment in tax year 2018 to 2019; up 2% on tax year 2017 to 2018, and up 131% on pre-2015 levels



### Proportion of people diagnosed

53% of PWID surveyed in 2018 were aware of their current infection



### Number of sterile needles/syringes provided

64% of those surveyed reported adequate needle/syringe provision for their needs in 2018



# Dr Loreta Kondili

**Head of HCV Elimination Programme,  
National Health Institute, Italy**



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@HepBCPPA



# Securing Wider EU Commitment to the elimination of HCV

## Update on progress in Italy

Loreta Kondili

National Center for Global Health

Istituto Superiore di Sanità Rome Italy



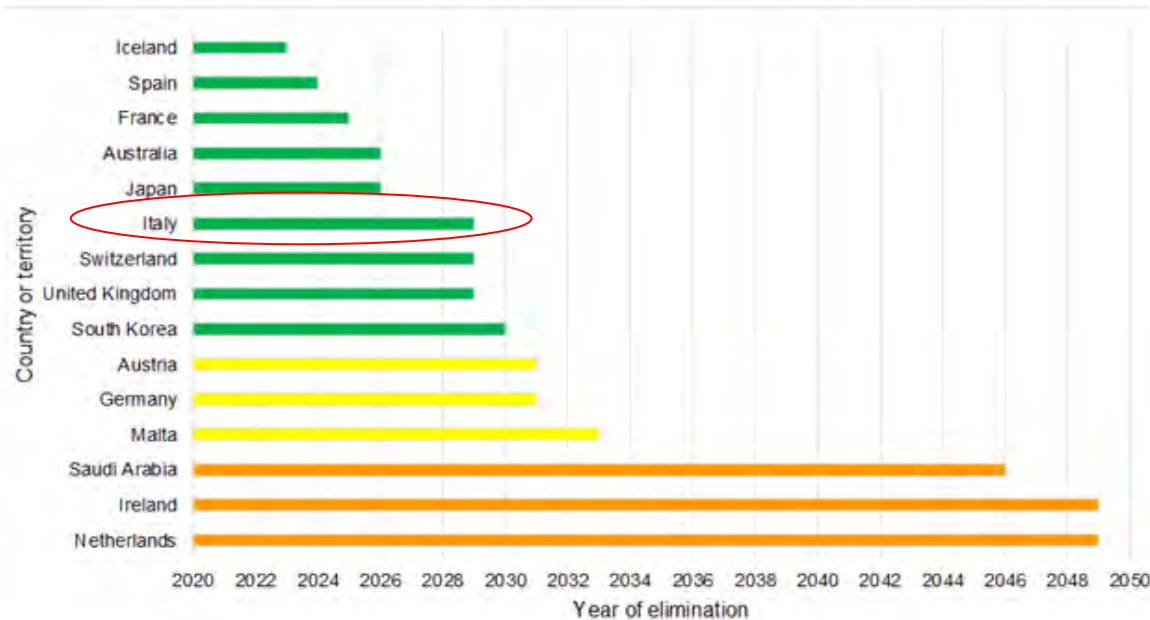


Italy

2019 Population: 60,550,000 | 2019 Adult Population: 50,858,000 | World Bank Classification: High Income

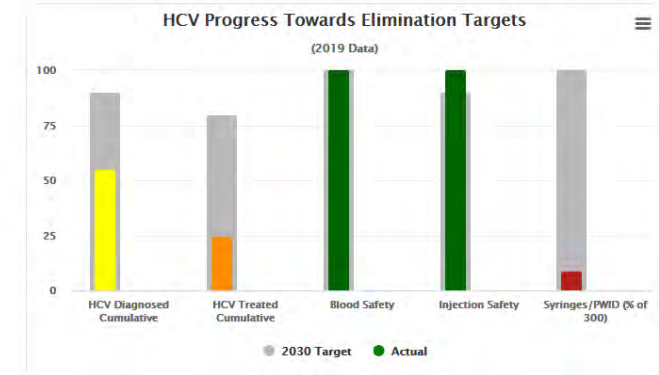
2017- 2018

Only 20% of 45 high income countries are forecasted to reach the WHO elimination targets by 2030 and only 33% by 2050



2019

Progress Towards Elimination Targets (2019 Data)



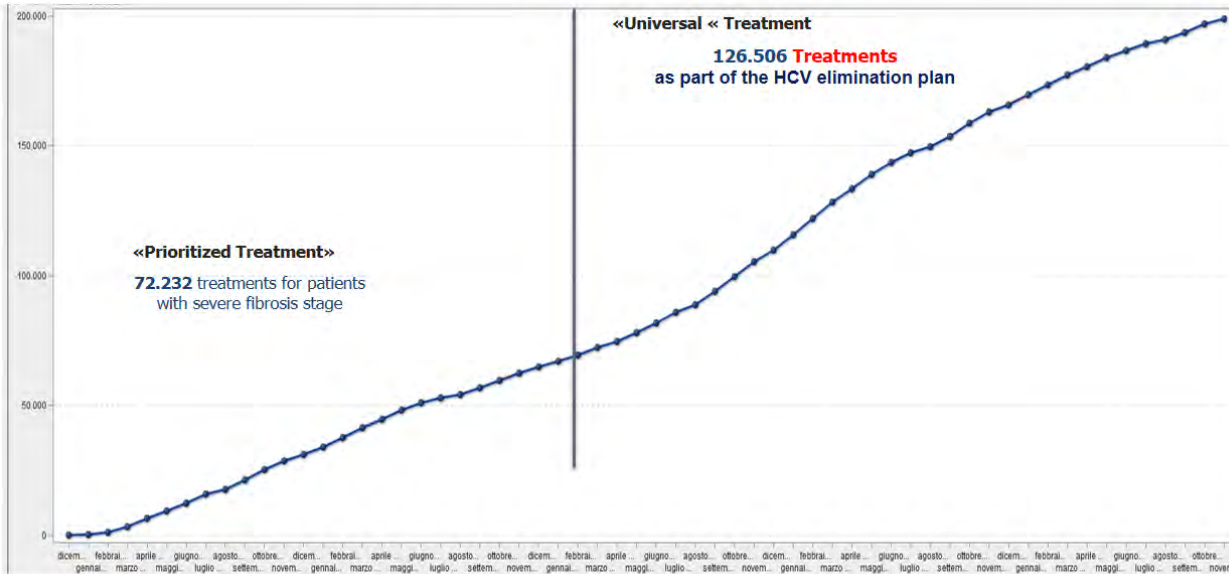
Year of Achieving Elimination Targets (Extrapolated from 2019 Data)

Current WHO Target is 2030



# DAA treatment rate in Italy

**Cumulative trend of DAA treatment 2015-2019  
December 2014- November 2019**



In addition to the substantial morbidity and mortality directly attributed to infection there are expected to be downstream consequences from delayed programming and care in other disease areas



**Patients with Chronic HCV treated with DAAs  
Official monthly data during 2020 from AIFA registry**



# Italian HCV Elimination Strategies and Health Policy Evolution

2015

2016

2017

2018

2019

2020

2021

**Prioritized access to antiviral treatment with new DAA therapy**

**Universal access is cost-effective vs prioritized access**

**Universal access to antiviral treatment with DAAs**

**Dedicated fund for innovative DAAs**

**Active Screening Approved**

**Active screening is cost-effective vs treatment of diagnosed patients**

**Expiration of dedicated funds for DAAs**

WHO elimination targets	n. treatments 2018 56,499	n. treatments 2019 36,348
	Year in which the WHO targets are met	
Incidence	2028	2037
Mortality	2023	2025
Diagnosis	*	2037
Treatment	2029	2035
Year of elimination	2029	>2037
On Track for Elimination	Yes	No

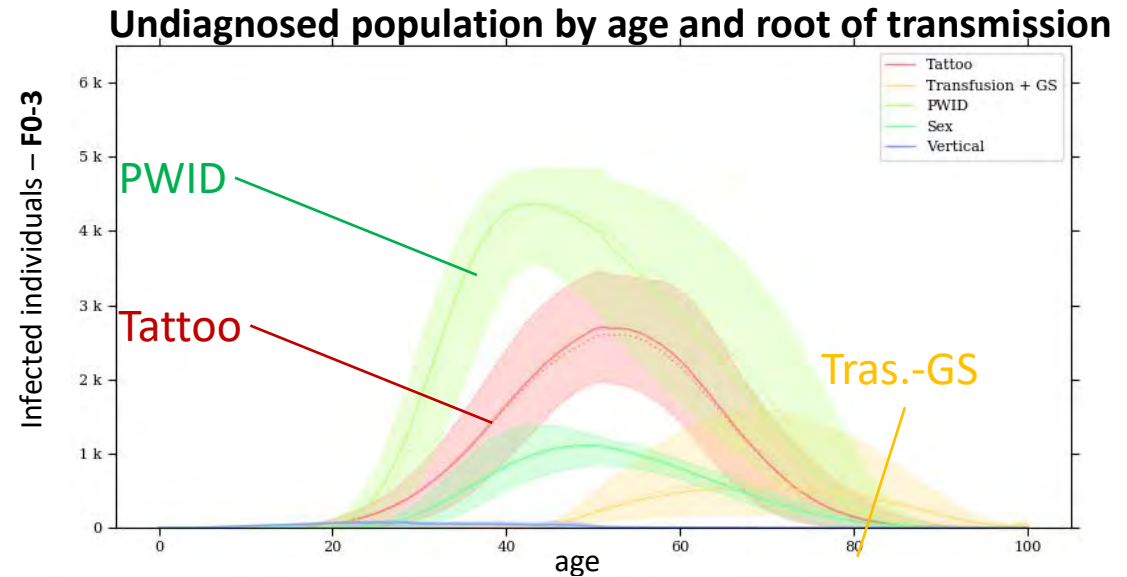
**Continuous investment in anti-HCV therapy is necessary to achieve the elimination of HCV**

**Economic evidence can support the allocation of *ad hoc* funds for screening and anti-HCV treatment.**

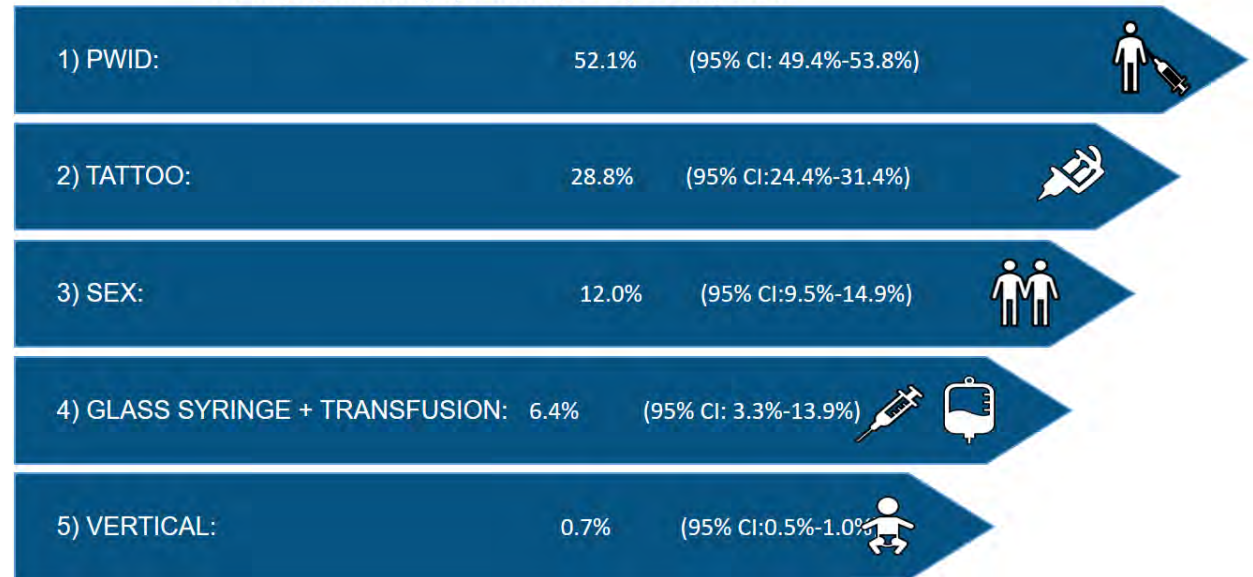
# Where is the submerged HCV infected population in Italy?- Modelling results

(F0–F3, asymptomatic = undiagnosed/unlinked to care)

	Absolute Number
	Reference
<b>Total</b>	<b>410775</b>
<b>Total F0-F3</b>	<b>281809</b>
<b>Total F4</b>	128966
<b>High risk groups</b>	
<b>PWID</b>	
<b>F0-F3</b>	<b>146652</b>
<b>F4</b>	58001
<b>Tattoo/body piercing</b>	
<b>F0-F3</b>	<b>81153</b>
<b>F4</b>	11928
<b>Sexual transmission</b>	
<b>F0-F3</b>	<b>33871</b>
<b>F4</b>	2615
<b>GS + transfusion</b>	
<b>F0-F3</b>	<b>18038</b>
<b>F4</b>	54567
<b>Vertical transmission</b>	
<b>F0-F3</b>	<b>2095</b>
<b>F4</b>	1854



The asymptomatic population (F0-F3) is composed:





# Evidence- based HCV health policy in Italy

## Cost-Consequences Across Different Phases of Treatment BPT – Break even point on Time

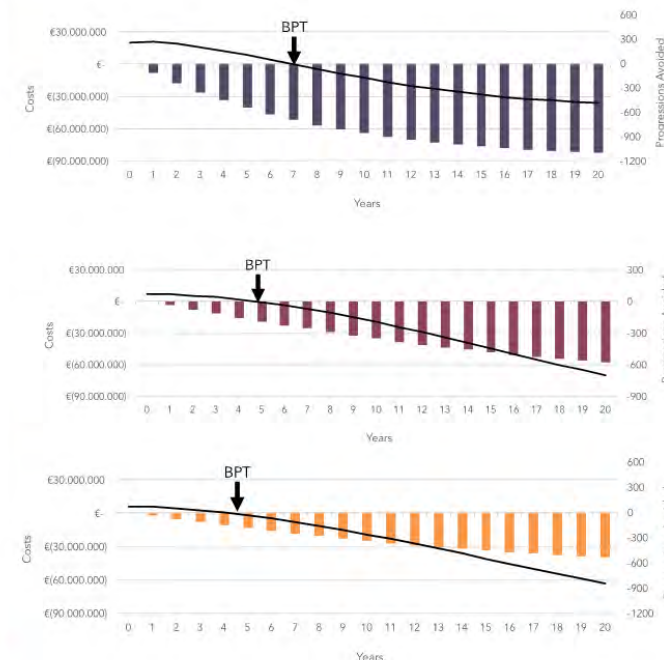


Direct costs and health effects, by scenario, 2018–2031

Scenario	Cost (€Millions), 2018–2031	QALYs Gained, 2018–2031	ICER Relative to Status Quo (€/QALY)	ICER relative to previous least costly scenario (€/QALY)	
Status quo	5,463	–	–	–	
GHSS Targets	<b>Graduated screening 1</b>	<b>5,974</b>	<b>144,000</b>	<b>3,552</b>	<b>3,552</b>
	Graduated screening 2	6,028	125,000	4,532	*
	Screening 1948–1977	6,081	142,000	4,349	*
	Screening 1958–1977	6,083	128,000	4,831	*
	Universal screening	6,441	145,000	6,758	562,855

**Graduated Screening 1: start screening in birth cohorts 1968–87 in year 2020 –identify young population at higher probability of HCV transmission risk**  
 expand screening for birth cohorts 1948–67 starting from 2023 – identify older population at risk for disease progression.

Parameter	2015-2016	2017-2019	Post Screening
Patient Population	F3+ Diagnosed	F0+ Diagnosed	F0+ All HCV-infected
Treatment Effectiveness	80-93% Genotype-dependent	98% Pan-genotypic	98% Pan-genotypic
Treatment Price	Assumption €15,000-€25,000	Assumption €9,000-€6,000	Assumption €6,000
Transition Probabilities	Data from literature, not scenario-specific		
Other Direct Medical Expenses	Data from real-life PITER cohort, not scenario-specific		
Results	2015-2016	2017-2019	Post-Screening
Avoided events of progression after 20 years	1099 (845-1351)	579 (433-754)	536 (404-687)
Cost-savings after 20 years, € million	-36.1 (0.02-183.20)	-70.2 (10.74-183.44)	-63.0 (18.03-37.40)
<b>BPT years</b>	<b>7.0 (4.56-12.91)</b>	<b>4.8 (3.30-6.81)</b>	<b>4.5 (2.70-6.75)</b>



**A Law Decree , recently approved , allocated 71.5 million Euro for  
FREE OF CHARGE HCV SCREENING  
for PWID, inmates and general population birth cohorts 1969-1889**

# HCV Screening pathway as indicated by the Law Decree in Italy (experimental project for 2 years)

## Success in reaching the key populations

The point of care should be implemented to simplify the patient pathway to improve information to promote prevention

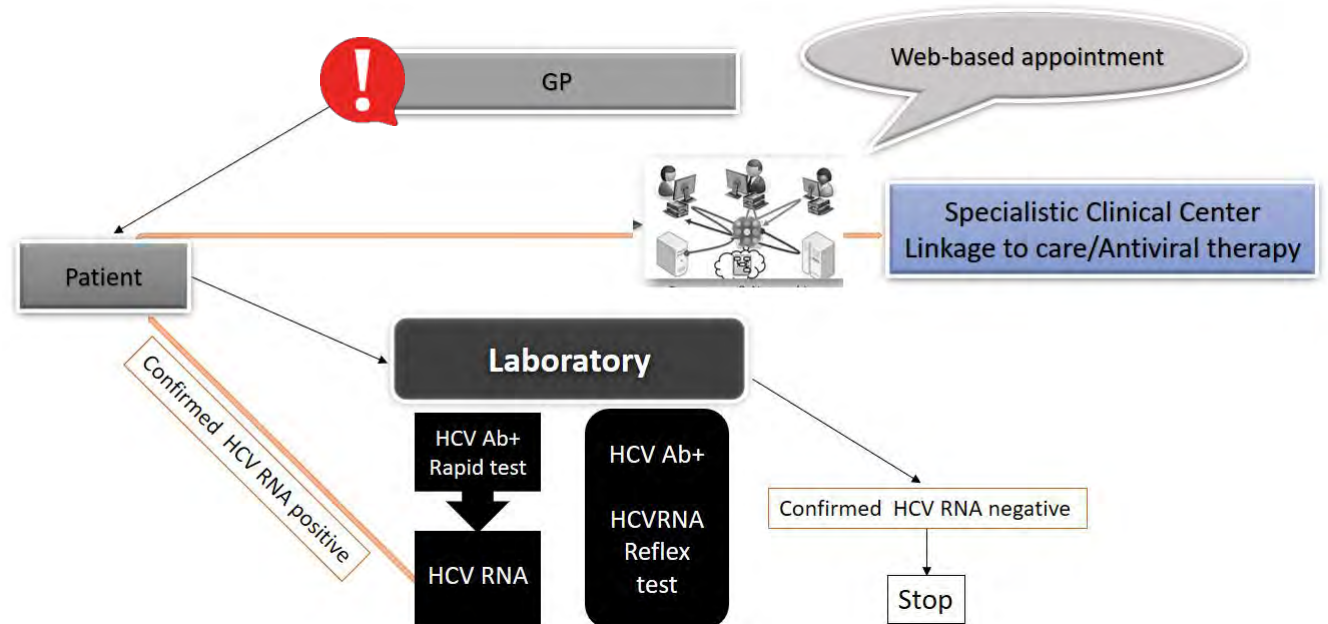
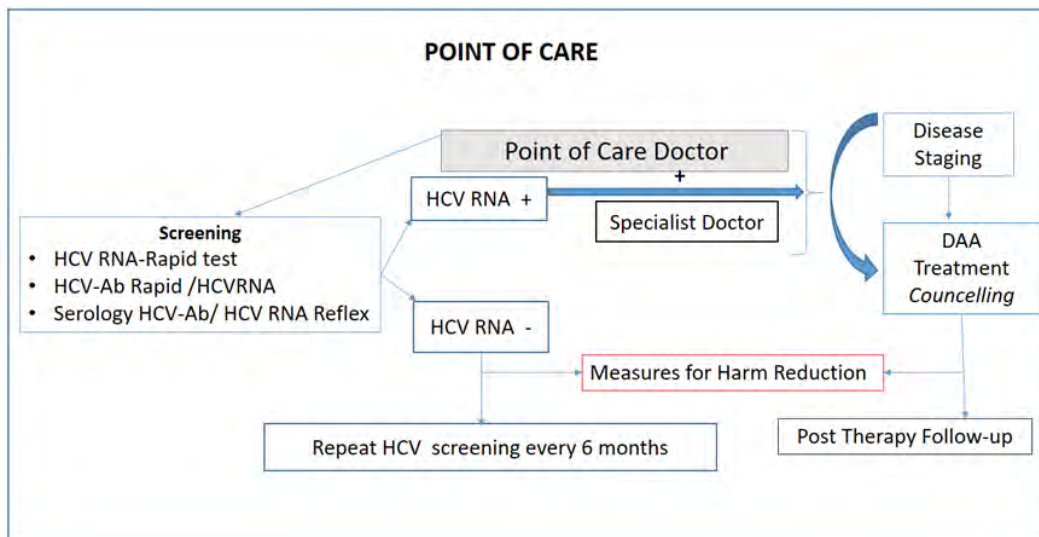
## General Practitioners Approach

- Commitment for training, information and collaboration
  - between GPs and Specialists
- Alerts to remind General Practitioner to test whole or cohorts of general population

Systematic opportunistic hepatitis testing



### POINT OF CARE



# Dr Yuval Dadon

**HCV National Plan Director, Ministry of Health, Israel**



#HCVSummit  
@HepBCPPA

# **THE NATIONAL PROGRAM FOR HEPATITIS C ELIMINATION**

**YUVAL DADON, MD MPH MBA**

**PROGRAM DIRECTOR  
DEPUTY DIRECTOR OFFICE  
MINISTRY OF HEALTH**



# Finally launching 17-FEB-2021



**World Health Organization** **MINISTRY OF HEALTH**

**THE NATIONAL PROGRAM FOR HEPATITIS C ELIMINATION** WEDNESDAY | 17.2.2021  
11:00 - 13:30

**OPENING REMARKS**

HEALTH MINISTER	<b>MK YULI (YOEL) EDELSTEIN</b>
MOH GENERAL DIRECTOR	<b>PROF. HEZI LEVI</b>
MOH DEPUTY DIRECTOR	<b>PROF. ITAMAR GROTTO</b>
FAMILY PHYSICIAN UNION - HEAD	<b>DR. MICHAL SHANI</b>
"HETZ" ASSOCIATION - HEAD	<b>MR. JULIO BURMAN</b>

**THE GLOBAL ENDEAVOR FOR ELIMINATION**  
WHO REP. OF REGIONAL DIRECTOR 11:20 - 11:35  
**DR. MICHEL THIÉREN**

**HEPATITIS C IN ISRAEL**  
HEAD OF LIVER COMMITTEE - THE NATIONAL COUNCIL OF GASTROENTEROLOGY & LIVER DISEASES 11:35 - 11:50  
**PROF. ZIV BEN-ARI**

**THE ROAD TO ELIMINATION**  
NATIONAL PROGRAM DIRECTOR 11:50 - 12:05  
**DR. YUVAL DADON**

**IPS: FIGHTING HCV TREATMENT & CHALLENGES**  
IPS CHIEF MEDICAL OFFICER 12:05 - 12:20  
**DR. LIAV GOLDSTEIN**

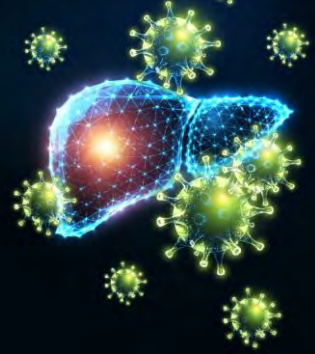
**HCV ELIMINATION AS A PUBLIC HEALTH THREAT IN ISRAEL**  
FAMILY PHYSICIANS UNION 12:20 - 12:35  
**DR. IAN MISKIN**

**HCV AMONG PWUBS - MICRO-ELIMINATION & THE "WAY TO CURE" PROGRAM**  
ADDICTION TREATMENT DEPARTMENT - HEAD 12:35 - 12:50  
**DR. PAULA ROSHKA**

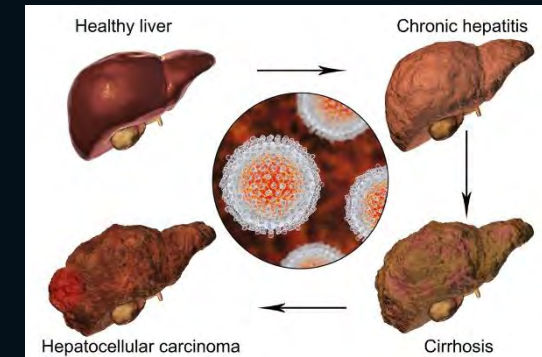
**TREATMENT OF HIGH-RISK HCV PATIENTS - A NOVEL MODEL FOR THERAPY IN ISRAEL**  
DIRECTOR OF LIVER CLINIC - WOLFSON MED. CENTER 12:50 - 13:05  
**DR. VERA DREIZIN**



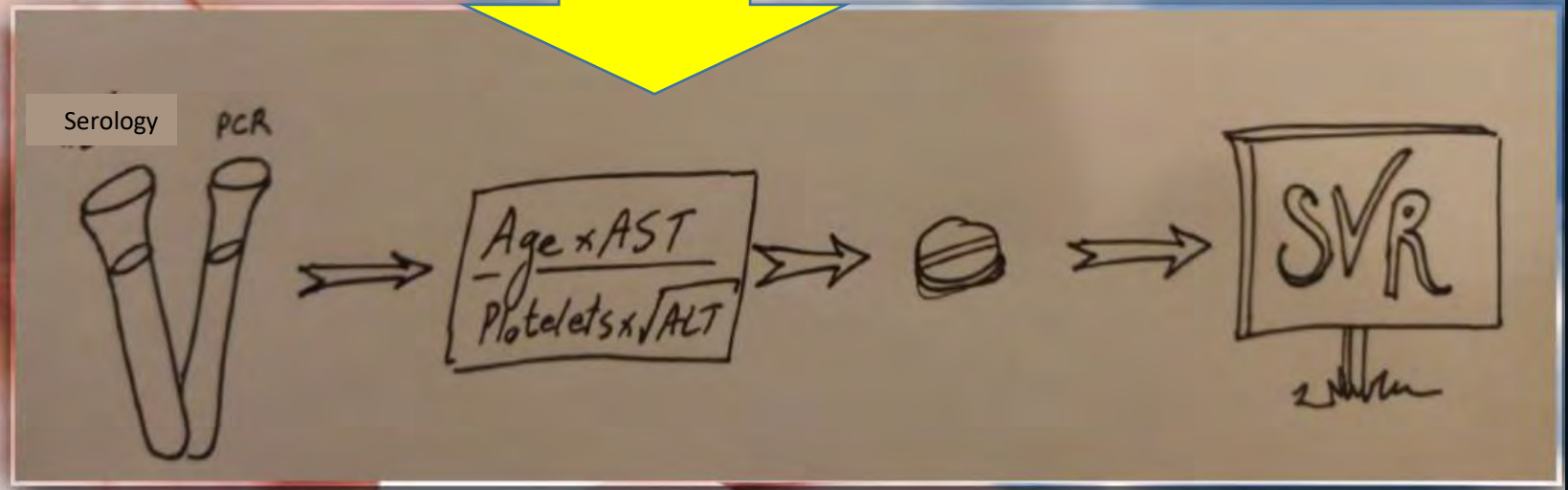
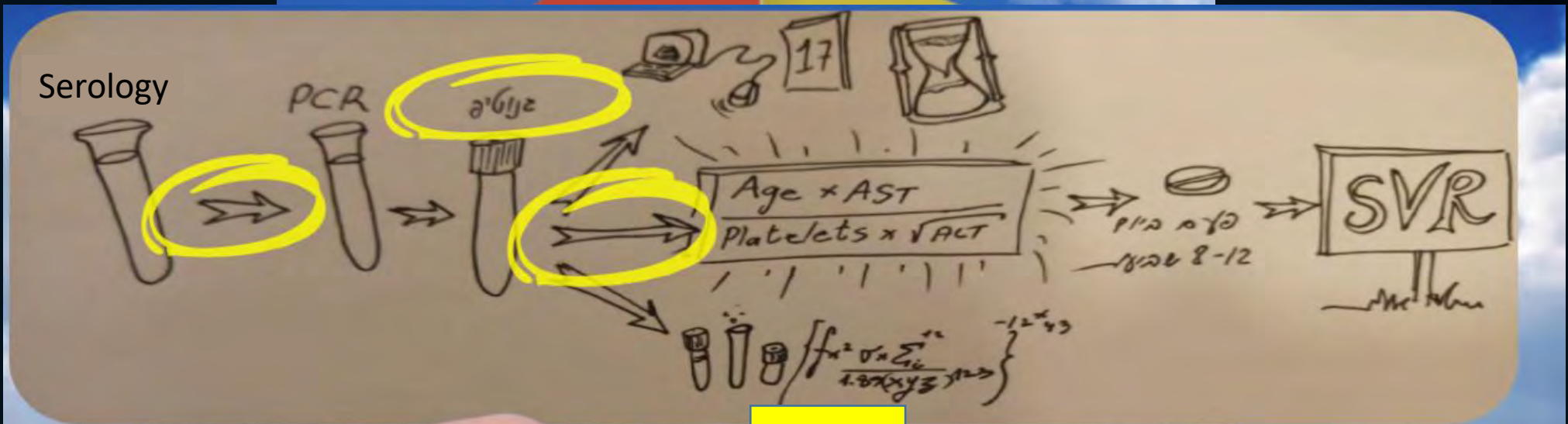
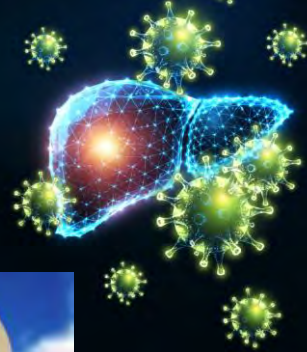
# Epidemiology and Risk Groups

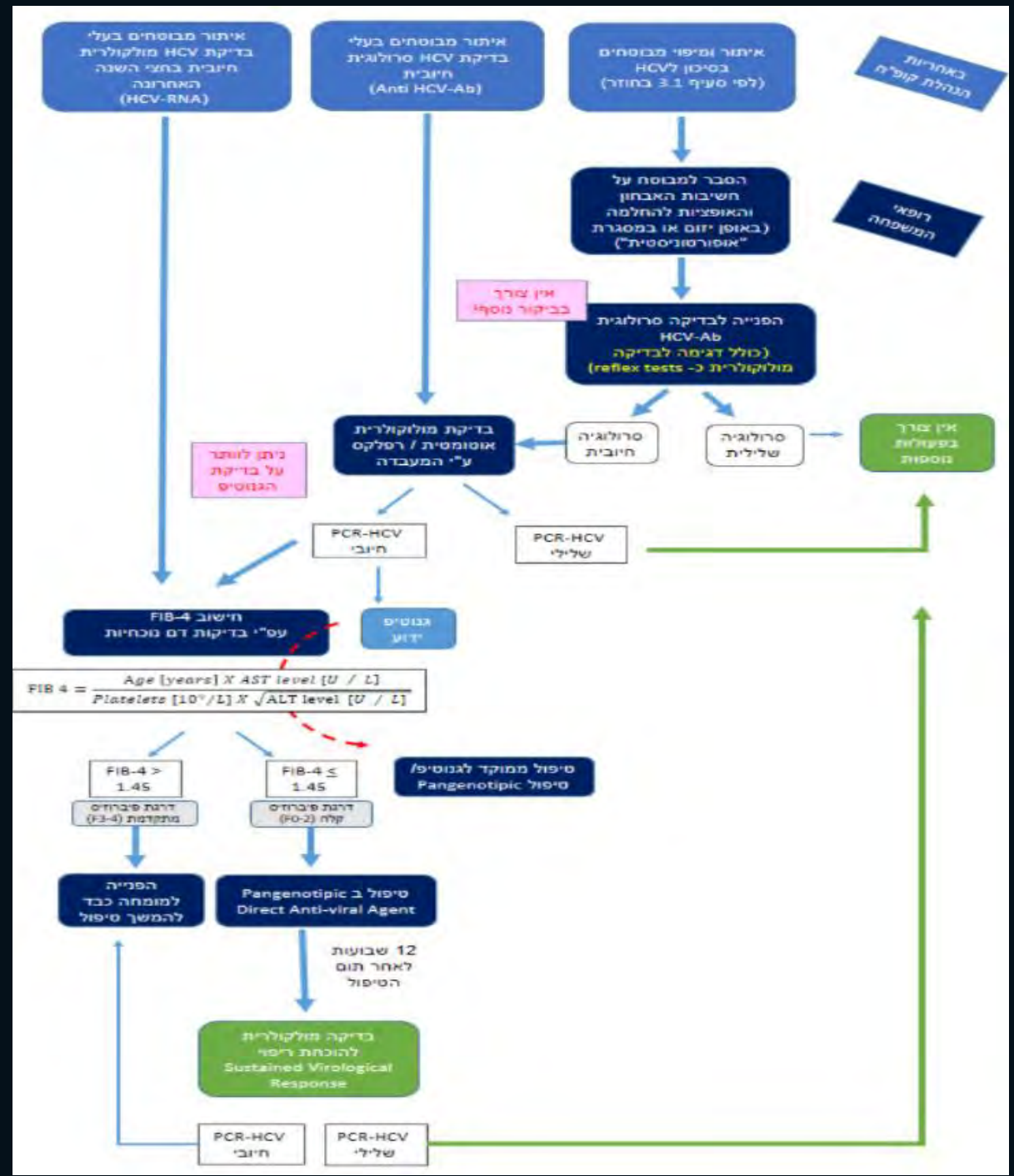
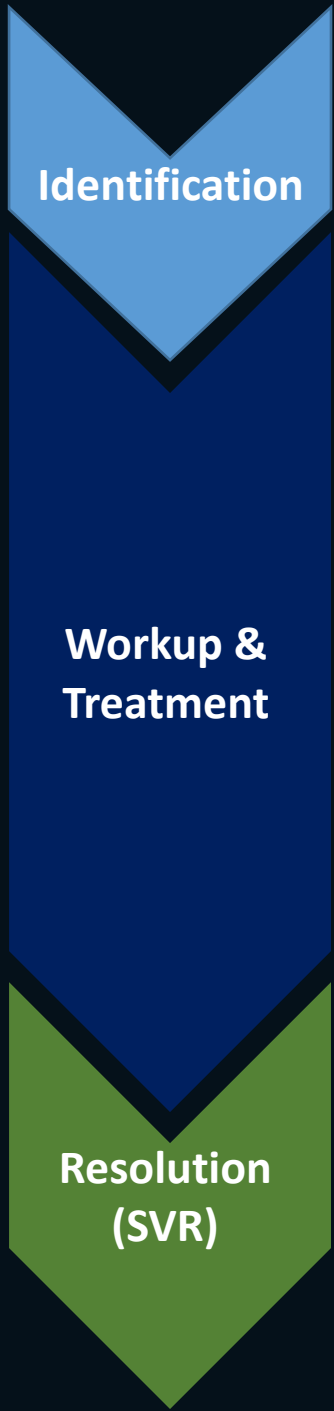


- Prevalence 1.5% - 6.5%
- 70% awaiting treatment
- 800K at risk
- Ex-USSR, PWID, Non-sterile procedures, HIV/HBV, Blood products <1992



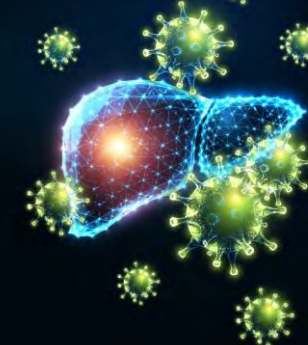
# Program Elements







# Operational Excellences



**כבר נבדקת  
לצהבת נגיפית C?**

ברדק שיטתי יכולה לחלם את המחלה. שיכולה לדמו בעיני  
שנים רבות ללא כל תסמינים. עד התחלת תסמינים  
כמו תפירת, כשל הכבד והפרק מרגיש נפוח.

למה בל בך חשוב להיבדק?  
אם אצבעתך מוקינה יכולה להיות שטח נזל להיבדק

**Вы проверились  
на вирусный гепатит С?**

Против этой болезни могут выработать антитела, которые  
могут оставаться в организме долгое время без каких-либо  
симптомов. Иногда, спустя длительное время, у вас могут  
появиться симптомы, такие как: желтуха, боли в печени и  
увеличение печени и селезенки.

Почему так важно пройти тестирование?  
При ранней диагностике заболевания простее лечение  
и прогноз.  
**в большинстве  
случаев к полному излечению!**

Заболевание вызывает серьезные проблемы. С ним связаны  
и другие осложнения, например при использовании  
инструментов или игл для инъекций. Инфекционная  
форма может

Если ждать слишком долго, может быть слишком  
поздно!

Позвоните по телефону 112, чтобы узнать о тестах и  
получить дополнительную информацию на сайте C.

**التهاب الكبد الفيروسي ج**  
يمكنك التعافي، المحصرا اليوم.

**מפאות בקרבת אוכלוסיית יוצאי ברה"מ**  
מחלקת BI ו-GIS, משרד הבריאות, מנהלים מינסס

מצא כתובת או מקום

**רשימת שכונות**

- שכונות
- מפאות שטחה ומספרת שירותי נטות החולים
- מלחה
- למפית
- מאודת
- מב
- מגזר חסי
- ללא
- חלש
- כנס
- גבה
- גבה נמוך

שכונה	מספר תושבים	מספר מקרים
מלחה	12000	15
למפית	8000	10
מאודת	10000	12
מב	9000	11
מגזר חסי	11000	14
ללא	7000	9
חלש	6000	8
כנס	5000	7
גבה	4000	6
גבה נמוך	3000	5



**A collaborative work will  
get us there!**

**[YUVAL.DADON@MOH.GOV.IL](mailto:YUVAL.DADON@MOH.GOV.IL)**

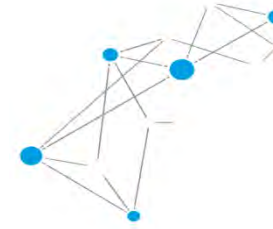


# Dr Pilar Aparicio Azcárraga

**Director of Public Health, Ministry of Health, Spain**



#HCVSummit  
@HepBCPPA



# Advances towards HCV Elimination in Spain

Dr. Pilar Aparicio  
Director General of Public Health  
Ministry of Health  
Spain

# Outline

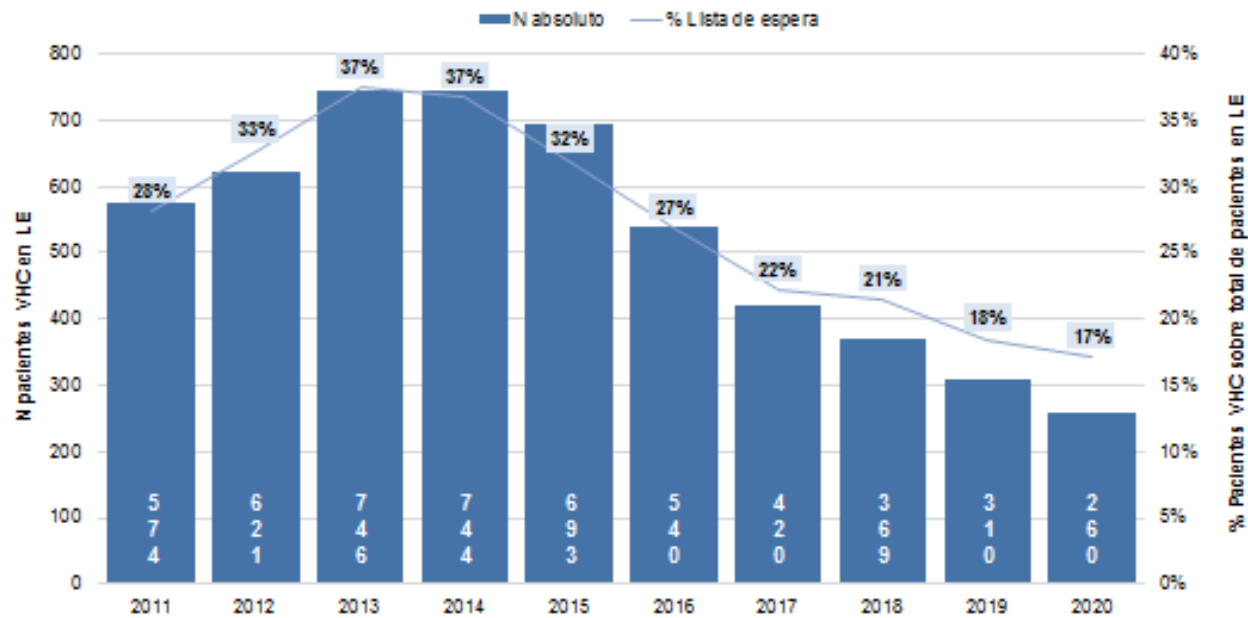
- Strategic Plan to Address Hepatitis C in the National Health System .
- Epidemiology of HCV infection in Spain:
  - Prevalence in general population; 2017-2018
  - Prevalence in high-risk settings; 2012-2018
- Public health & policy on HCV screening in Spain

# Strategic Plan to Address Hepatitis C in the National Health System (PEAHC)

Example of results in the context of hepatic transplant in HCV patients



## INDICACIONES DE TRASPLANTE HEPÁTICO EN PACIENTES VHC



Fuente: Organización Nacional de Trasplantes

# Epidemiology of HCV infection in Spain

	N	ANTIBODIES				ACTIVE INFECTION			
		n	%	CI95% LL	CI95% UL	n	%	CI95% LL	CI95% UL
<b>Sex</b>									
Men	3 670	48	1.24	0.92	1.58	14	0.35	0.17	0.53
				0.28	0.66	3	0.08	0.01	0.18
				0.00	0.15	0	0.00	0.00	0.00
30 to 39 (1987-1978)	1 202	1	0.09	0.01	0.17	1	0.09	0.01	0.17
40 to 49 (1977-1968)	1 432	14	0.99	0.57	1.48	2	0.14	0.00	0.28
50 to 59 (1967-1958)	1 417	22	1.56	0.99	2.27	7	0.50	0.22	0.85
Other	489	7	1.30	0.44	2.44	2	0.34	0.00	0.96
<b>Habitat</b>									
(+prov. cap.)	1 866	18	0.94	0.57	1.33	4	0.24	0.08	0.43
More than 500 000	1 310	10	0.70	0.27	1.19	4	0.24	0.01	0.52
<b>Level of education</b>									
1 <sup>st</sup> grade or lower	2 340	38	1.71	1.22	2.24	12	0.54	0.28	0.84
2 <sup>nd</sup> grade 1st cycle	1 478	9	0.62	0.28	1.05	1	0.07	0.00	0.21
2 <sup>nd</sup> grade 2nd cycle	1 756	13	0.66	0.27	1.10	3	0.14	0.00	0.36
3 <sup>rd</sup> grade	1 888	5	0.27	0.06	0.49	1	0.05	0.00	0.15
<b>Social class</b>									
I (Privileged)	1 717	7	0.40	0.16	0.71	2	0.12	0.00	0.29
II (Middle)	1 459	8	0.50	0.16	0.85	2	0.10	0.00	0.30
III (Under-privileged)			1.20			13			48
<b>TOTAL</b>	<b>7 675</b>		<b>0.85</b>			<b>17</b>	<b>0.22</b>		<b>31</b>

**N= 7 675 participants**

**HCV Ab prevalence 0.85% (0.64%-1.08%)**

**HCV active infection 0.22% (0.13%-0.31%)**

## Prevalence of HCV Ab and active HCV infection

Age group	Prevalence of Ab	Prevalence of active infection
2-80 years	<b>0,69%</b> (IC 95%: 0,50%-0,87%)	<b>0,17%</b> (IC 95%: 0,08%-0,28%)
2-19 years	0,00% (IC 95%: 0,00%-0,00%)	0,00% (IC 95%: 0,00%-0,00%)
20-80 years	<b>0,85%</b> (IC 95%: 0,64%-1,08%)	<b>0,22%</b> (IC 95% 0,12%-0,32%)

**Undiagnosed  
fraction 19%**

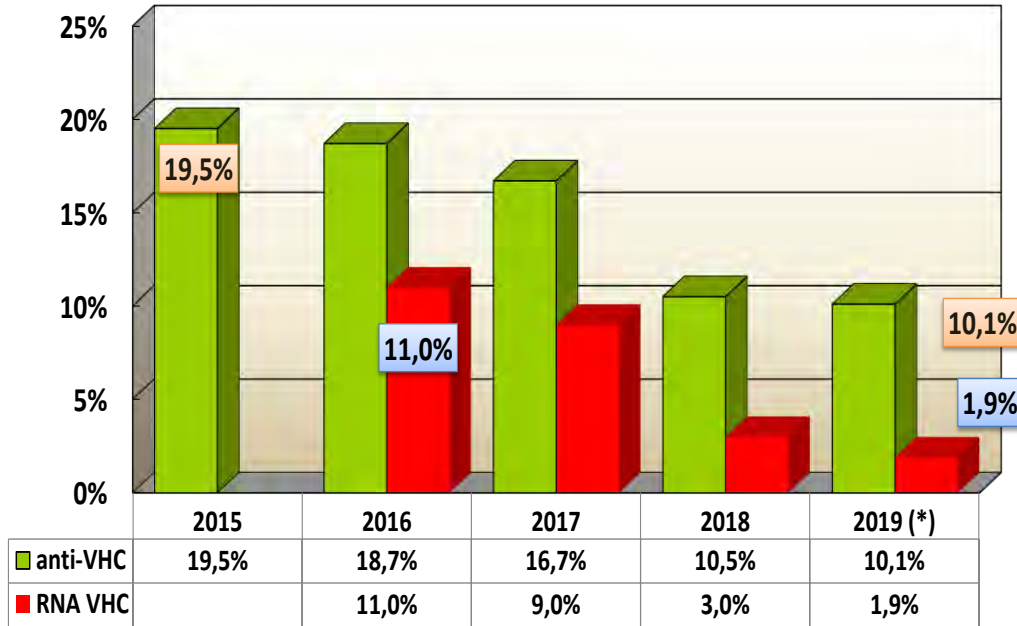
**Undiagnosed  
fraction 29%**



## In population terms, in Spain, in 2018:

- 34 753 283 million inhabitants aged 20 - 80 years
- Given an HCV active infection prevalence 0.22%
  - 76 839 persons with active HCV infection
- Given an undiagnosed fraction of 29.4%
  - **22 478 persons with undiagnosed active HCV infection**
  - 54 361 persons with diagnosed active HCV infection
    - 50% on DAA: 27 181
    - **17% with no evidence of linkage to care: 9 241**
    - 33% with no information: 17 939

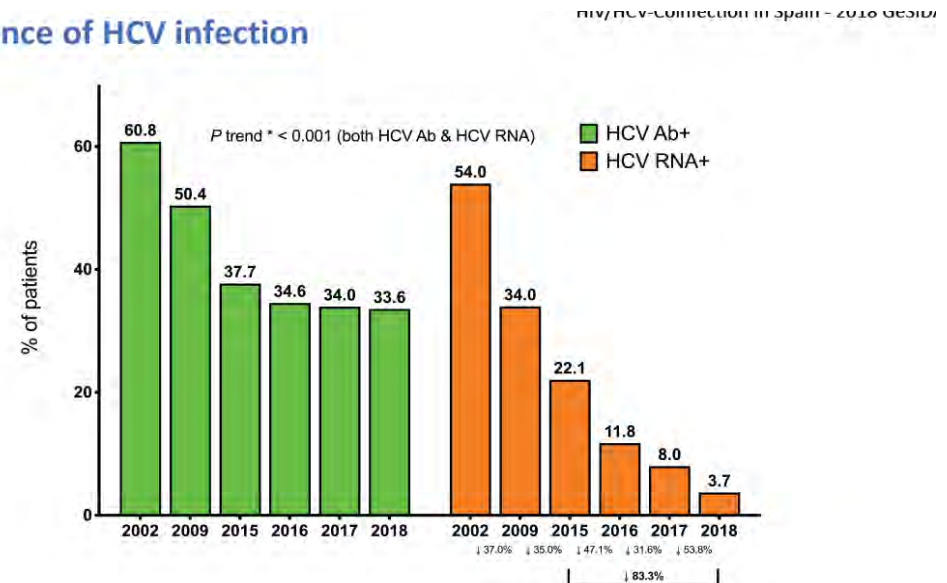
# Prevalence in high-risk settings; 2012-2018



## HCV prevalence in HIV-positive population in Spain (GeSIDA studies)

### HCV prevalence in Prison Settings in Spain (except Catalonia and Basque Country)

#### Prevalence of HCV infection



# Guide for the screening of HCV infection

Screening is recommended exclusively for individuals with **exposures** or **situations** of risk for the transmission of HCV:

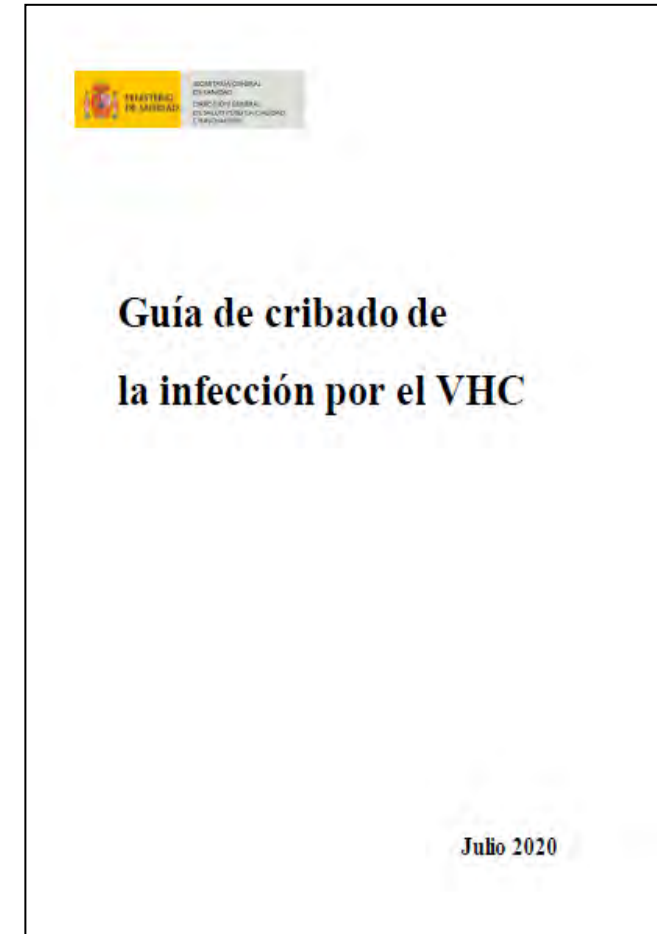
## Exposures

- Injected or inhaled drug use
- High-risk sexual relations
- Co-infection with HIV or HBV
- Health or esthetic procedures performed without the proper safety precautions

## Situations

- Admission to prisons
- Origin from countries with a medium or high prevalence of HCV infection.

Screening for HCV infection is not recommended in asymptomatic people without exposure or risk situations



# Discussion and Q&A



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# Breakout Session C: Best practice case studies from Ireland, Greece, Portugal and Montenegro

**Chair:**

**Prof Antonio Craxi, University of Palermo**

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#HCVSummit

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# Prof John Lambert

**Mater Misericordiae Hospital, UCD  
Medical School, Dublin, Ireland**



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# HEPCARE EUROPE

## **Transitioning HCV Care into the Community**

Professor John Lambert, Consultant Infectious Diseases,  
Mater and University College Dublin, Ireland

Prof Walter Cullen, Professor of General Urban Practice,  
University College Dublin

# PRIOR TO HEP CARE- DUBLIN RESULTS FROM A HOMELESS SERVICES STUDY

- 🍃 Study from 2014. Describes standard of care in homeless services at the time.
- 🍃 Out of 547 people screened, 206 were Antibody positive, 51 were referred to the hospital, 33 attended, only 2 completed treatment.

**STANDARD OF CARE DID NOT WORK FOR  
VULNERABLE POPULATIONS**





# HEPCARE: A new Hepatitis C Care service model

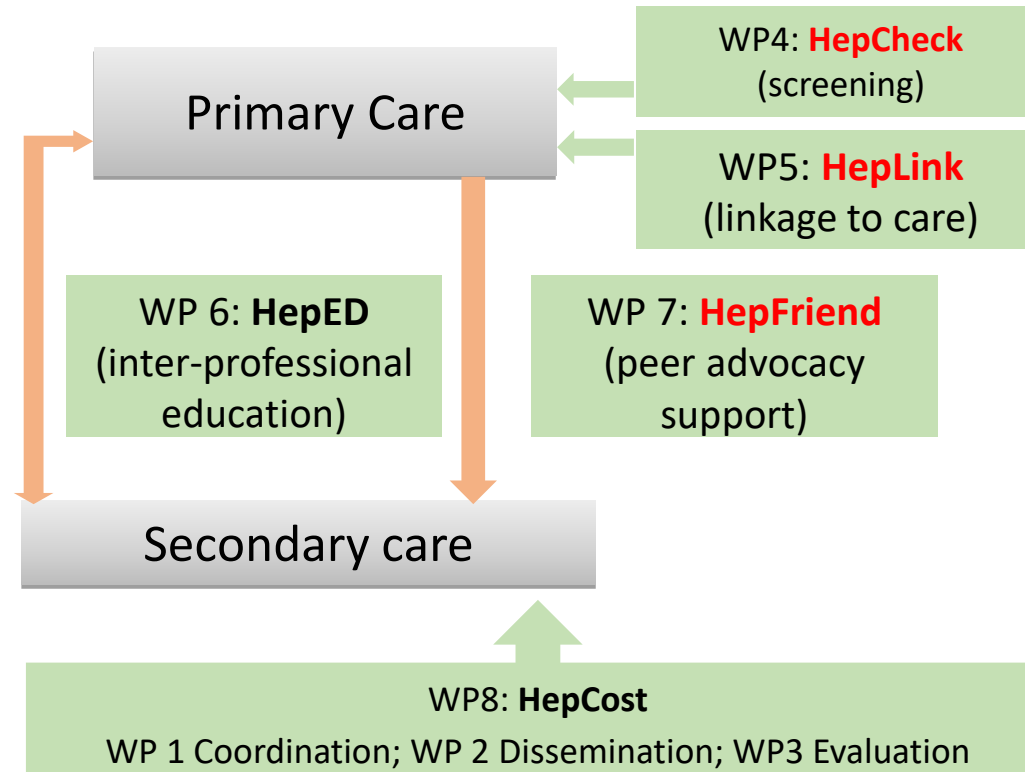
## Adaptable, Flexible and Replicable

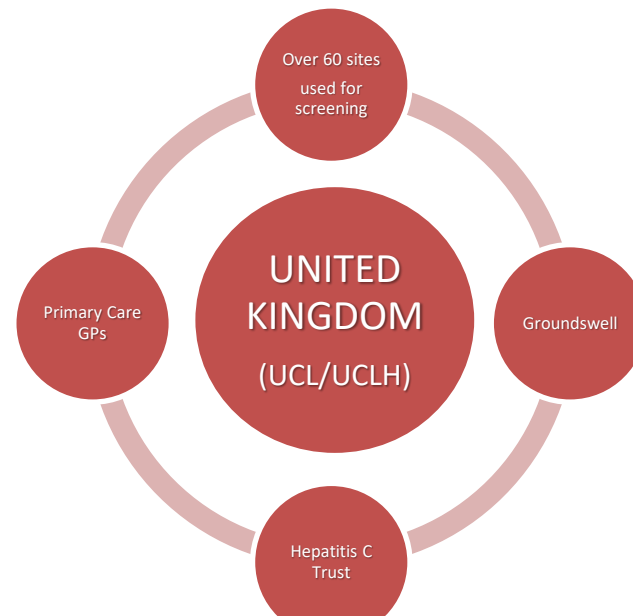
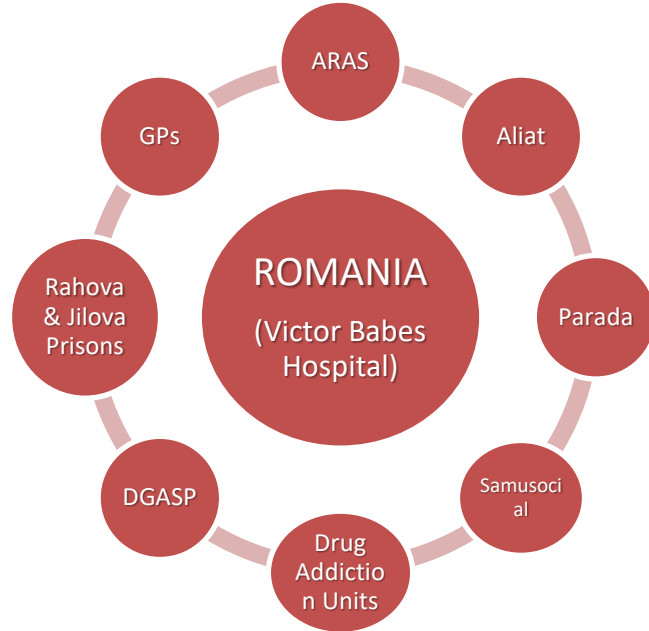
### FLEXIBILITY & ADAPTABILITY

allowed its successful replication in 4 very different settings in the EU

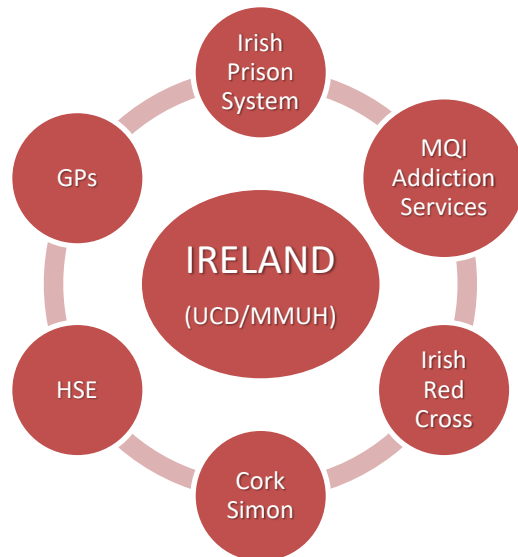
### Revolves around the PRINCIPLES of

- Intensified Screening (HEPCHECK)
- Linkage to care (HEPLINK)
- Intensified patient support (HEPFRIEND)
- Education (HEPED)
- Cost analysis (HEPCOST)





# HEPCARE NETWORKS





Example of mobile unit (Safetynet Primary Care)

# INTERVENTIONS

- 👉 Intensified screening was conducted in the community. A mobile fibroscan was used in community sites.
- 👉 A specialist nurse intervention was developed for GPs and primary care centres. The nurse provided support to a large number of GPs to deal with HCV patients.
- 👉 Peer support was offered to patients needing additional support to link to care and complete treatment.
- 👉 Education was provided to patients, peer workers and health care professionals.
- 👉 A cost effectiveness analysis was conducted. The peer support intervention in the UK and nurse intervention in Ireland are cost effective.

# CASCADE OF CARE

	Romania	Ireland	Spain	England	Total
No. of individuals recruited	525	812	636	635	2,608
No. of participants antibody test results recorded	525 (100%)	772 (95.9%)	636 (100%)	635 (100%)	2568 (98.5%)
No. of HCV Ab Positive Results	230 (43.8%)	257 (33.0 %)	197 (31.0 %)	390 (61.4%)	1074 (41.8%)
No. of participants Linked to Care *	151 (65.6%)	176 (68.5%)	104 (52.8%)	219 (56.1%)	650 (64%)
No. RNA positive HCV infection	71 (30.9%)	162 (63.0%)	108 (54.8%)	346 (88.7%)	687 (60.5%)
No. of participants Put on Treatment	24 (33.8%)	104 (64.2%)	56 (51.9%)	115 (33.2%)	299 (43.5%)
No still on treatment	4 (16.7%)	44 (42.3%)	20 (35.7%)	40 (34.8%)	108 (36.1%)
No Completed treatment (including virologic failure and death)	20 (83.3%)	58 (55.7%)	54 (96.4%)	71 (61.7%)	203 (67.9%)
Abandon treatment	0 (0%)	2 (2%)	2 (3.6%)	4 (3.5%)	8 (2.7%)
No. achieved SVR by data cut off point (vs nb put on treatment)	18 (75%)	57 (54.8%)	52 (92.9%)	69 (60%)	196 (65.5%)

# EFFICACY OF DAA TREATMENT

	Romania	Ireland	Spain	England	Total
No Completed treatment (including virologic failure and death)	20	58	54	71	203
No. achieved SVR	18 (90%)	57 (98.3%)	52 (96.3%)	69 (97.2%)	196 (96.5%)

# Challenges of HCV Roll out to the Community

- ✿ Number of community sites involved. Devolving care to the community is a challenge.
- ✿ Care for cirrhotic patients will still need some involvement from specialty care services.
- ✿ Integrated care is still the best way forward to support widespread community networks. Its not about either hospital or community care: both can work in partnership.
- ✿ There is still a large burden of HCV related disease in the community, not accessing care.
- ✿ The HCV patient may have a journey through many different services: hospital, GP, prison, drug treatment services, homeless services
- ✿ Most care is still being focused on the 'easy to treat' and not the high transmitters
- ✿ Services that care for HCV are not joined up: lack of vertical and horizontal health care system partnerships
- ✿ HCV is just one of many conditions to address in such individuals



# HEPCARE EUROPE

🌿 Lessons learned from HepCare Europe can be used as a model for future projects

- Targeting multiple disease
- Involving community in treatment
- Reaching at risk populations





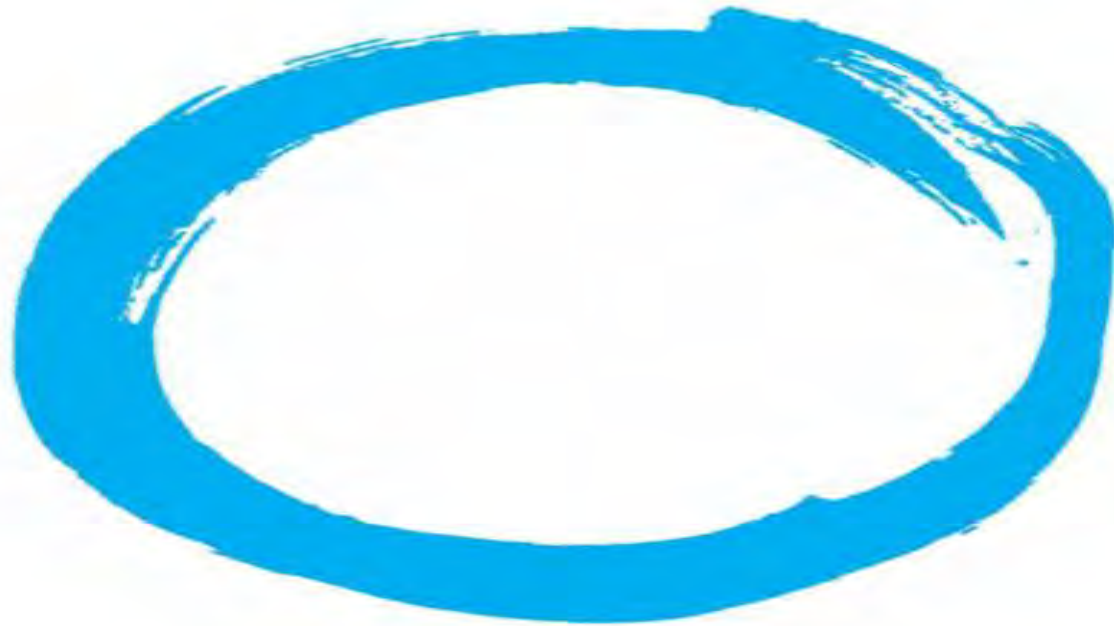
## Next Steps?

- ✦ Taking the Lessons Learned from HepCare Europe
- ✦ Integrating Diseases into one initiative
- ✦ Scaling up 'Testing and Treatment of Multiple Diseases'
- ✦ Reaching Vulnerable Populations not Accessing Care
- ✦ Expanding to new geographic areas with 'high burden' of disease
- ✦ Strengthening Cross border initiatives (mobile health units)



UNAIDS | 2011-2015 STRATEGY

# GETTING TO ZERO



# Prof Vana Sypsa

**University of Athens Medical  
School, Greece**



#HCVSummit  
@HepBCPPA



**Best practice case studies:**

**ARISTOTLE HCV-HIV, Athens &  
ALEXANDROS, Thessaloniki  
in Greece**

**Vana Sypsa**

Assoc. Professor of Epidemiology and Medical Statistics  
Medical School, National and Kapodistrian University of Athens,  
Athens, Greece

# People Who Inject Drugs (PWID): A key population for HCV elimination

High prevalence  
of HCV infection

Ongoing  
transmission  
among active  
PWID

Barriers in  
linkage to HCV  
care and  
retention to  
treatment

Presence of  
other  
comorbidities

# Challenges

1

Reaching a hard-to-reach population  
High coverage - Reach those in most need  
(active PWID, not linked to other services)

---

2

Linkage to HCV care

---

3

Retention in HCV treatment

# Addressing these challenges in Greece

**ARISTOTLE HCV-HIV (Athens)**

**ALEXANDROS (Thessaloniki)**

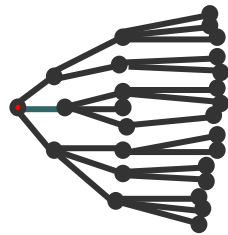
1

# Reaching a hard-to-reach population

High coverage - Reach those in most need  
(active PWID, not linked to other services)



Community-based (in the centre of Athens and Thessaloniki)



Peer-driven recruitment: chain referral from members of the target population (RDS)



Multiple recruitment rounds → PWID have the chance to participate multiple times



Incentives → rapid recruitment, high coverage, reach deep into the network of PWID



# Linkage to HCV care



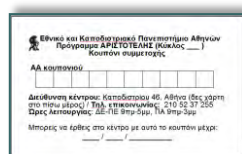
All necessary procedures performed on-site in a single visit



Patients are entered to the national chronic hepatitis C registry for treatment approval



A network of collaborating clinicians is set up and visit the study site – Peer navigators assist patients



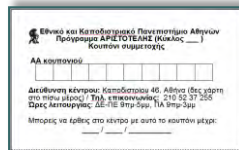
Monetary incentives

# 3

# Retention in HCV treatment



Follow-up of patients during treatment



Monetary incentives



Counseling

# Participants

## **ARISTOTLE HCV-HIV (April 2018-March 2020)**

---

**1,635 participants**  
**1,943 visits**  
**(82% population coverage)**

---

**75%** active PWID  
**27%** homeless

---

**77%** not linked to opioid  
substitution treatment  
programs

---

**76%** anti-HCV(+)

---

## **ALEXANDROS (Sep 2019 - ongoing)**

---

**981 Participants**  
**1,370 visits**

---

**55%** active PWID  
**16%** homeless

---

**80%** not linked to  
opioid substitution  
treatment programs

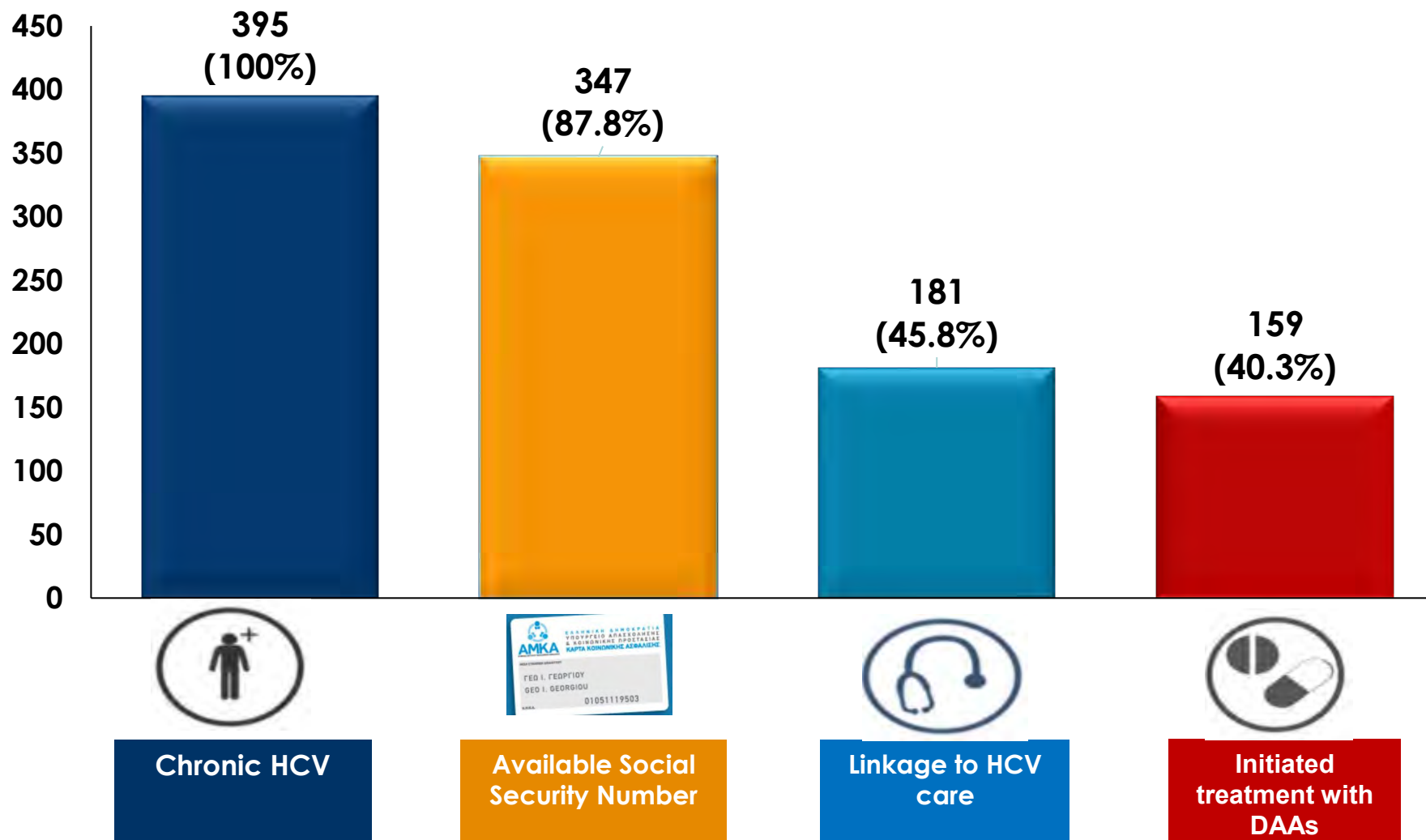
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**62%** anti-HCV(+)

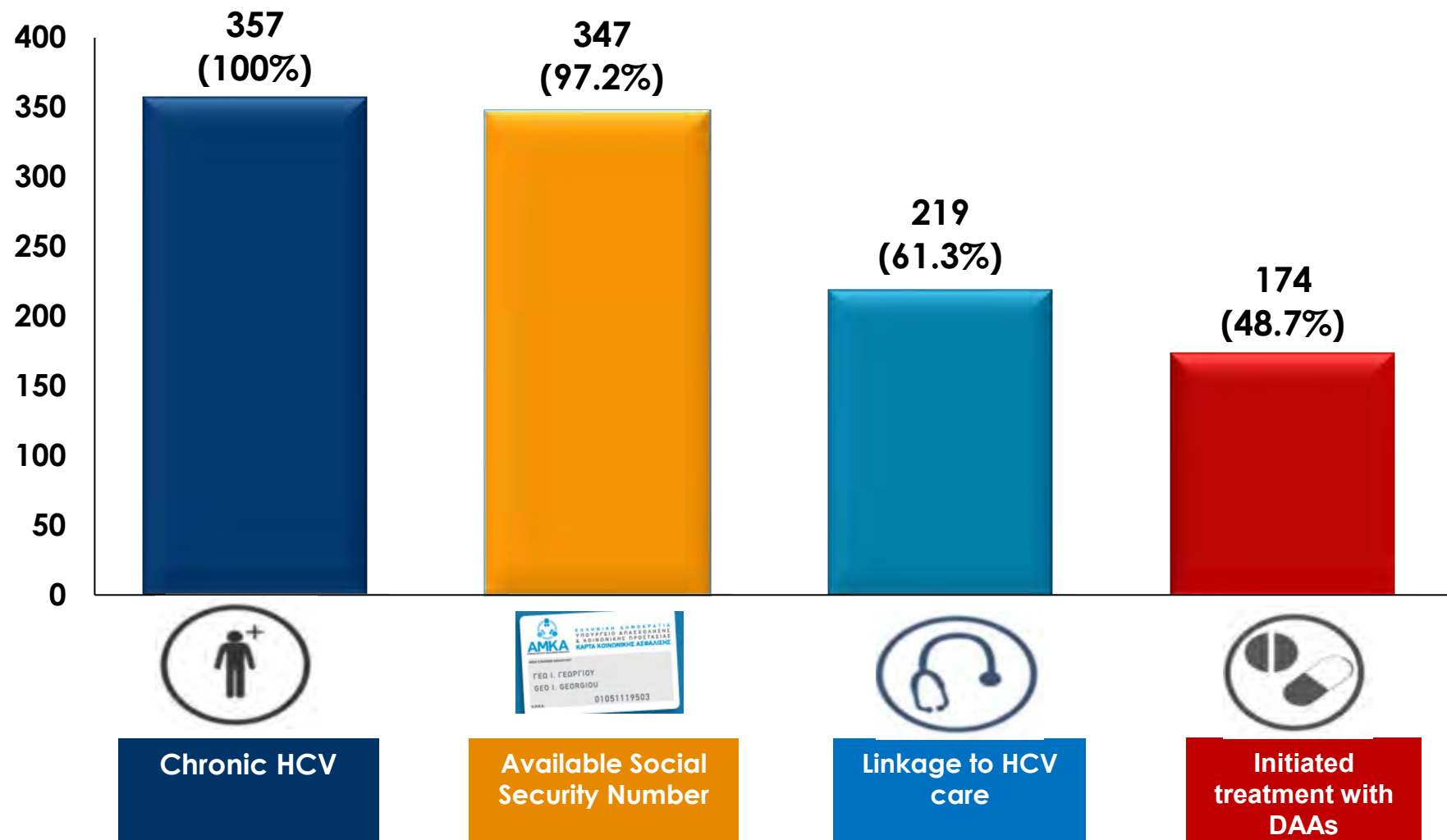
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# The impact of ARISTOTLE HIV-HCV program: Cascade of HCV care

(for PWID with HCV mono-infection who fulfilled treatment criteria)



# The impact of ALEXANDROS program: Cascade of HCV care (ongoing program) (for PWID with HCV mono-infection)



# Discussion

The interventions were successful as they were designed to address the population of PWID:

**Community-based**

**Peer-driven recruitment**

**Testing, linkage and retention to care provided on-site with the help of a network of clinicians and dedicated staff/peer navigators**

In Thessaloniki, ALEXANDROS allowed the early identification of an HIV outbreak among PWID

# Funding

ARISTOTLE HCV-HIV and ALEXANDROS  
received funding from:

Gilead

Abbvie

MSD

Hellenic Scientific Society for the  
Study of AIDS and STDs

# Dr Rodrigo Sousa Coutinho

**Ares do Pinhal, Lisbon, Portugal**



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# MOBILE OUTREACH PROGRAMME

## MICROELIMINATION OF HEP C VIRUS IN SEVERE DRUG USERS

3rd EU HCV Virtual Policy Summit  
|24 March 2021|



**ARES DO  
PINHAL**

Mais Cidadão

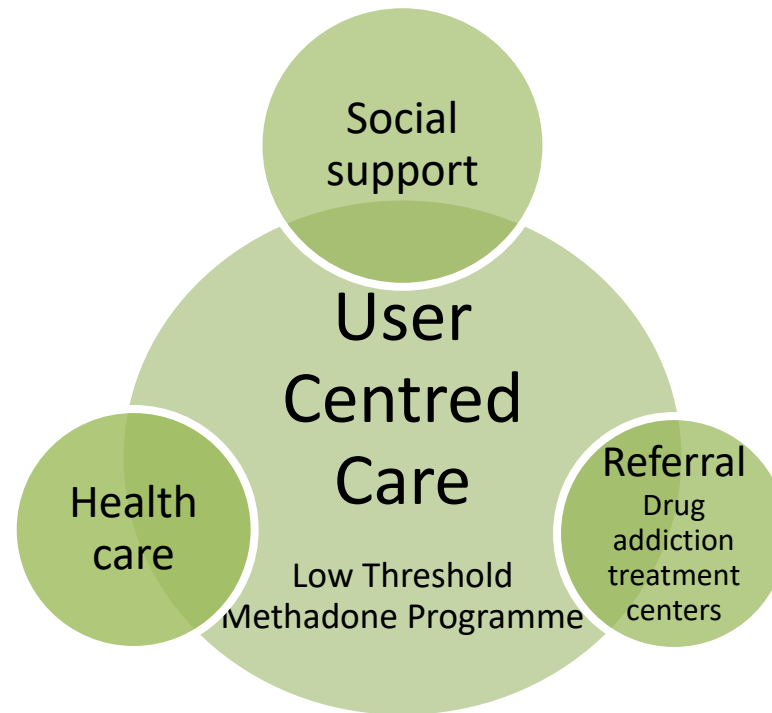




To reach opioid drug users (with polydrug use or not) who do not attend conventional drug addiction treatment centers or other health and social services

**MOP users profile:**

- Personal disorganization
- Physical impairment or disease
- Psychiatric diseases
- Psychological vulnerabilities
- Social exclusion
- High-risk behaviours



- Homeless ± 10%
- PWID (± 20%)
- HCV Ab (67%)
- HCV RNA (68%/67%)
- HCV+HIV (13,5%)
- HIV (15%)
- TB (1%)

# MOBILE OUTREACH PROGRAMME



## MOP Main Features

- Easy accessibility (close to problematic neighbourhoods and/or to main transport interfaces)
- Prompt response to any request and simplified admission procedures (if indicated)
- Low-threshold methadone program and NSP
- Screening for Infection diseases
- Administration/monitoring of medication (namely psychiatric and infection diseases) in the MOP
- Referral to all healthcare and social services
- Abstinence of drugs use is not required

MOP-L is frequented by +- **1300** heroin/polydrug users on a daily basis



# MICROELIMINATION OF HEP C VIRUS IN THE MOP - CHALLENGES



## System level

**Bureaucracy/Acessibility**

**To many stages to attain**

**HCV medication**

- The more the number of stages the less the chances of success

## Provider level

- Are skeptical about their compliance to treatment
- Moral judgments and prejudice
- Have difficulty to understand that treatment is not a priority

## Client level

- Lack of concern about their health condition
- To be HCV+ → Not a menace (silent disease → no symptoms...no disease)
- Requirement of many travels to healthcare services (many stages)
- Fear of disrupting their daily routine
- Stigma
- Difficulties towards formal procedures in the healthcare attendance services

Protocols with  
Hospitals



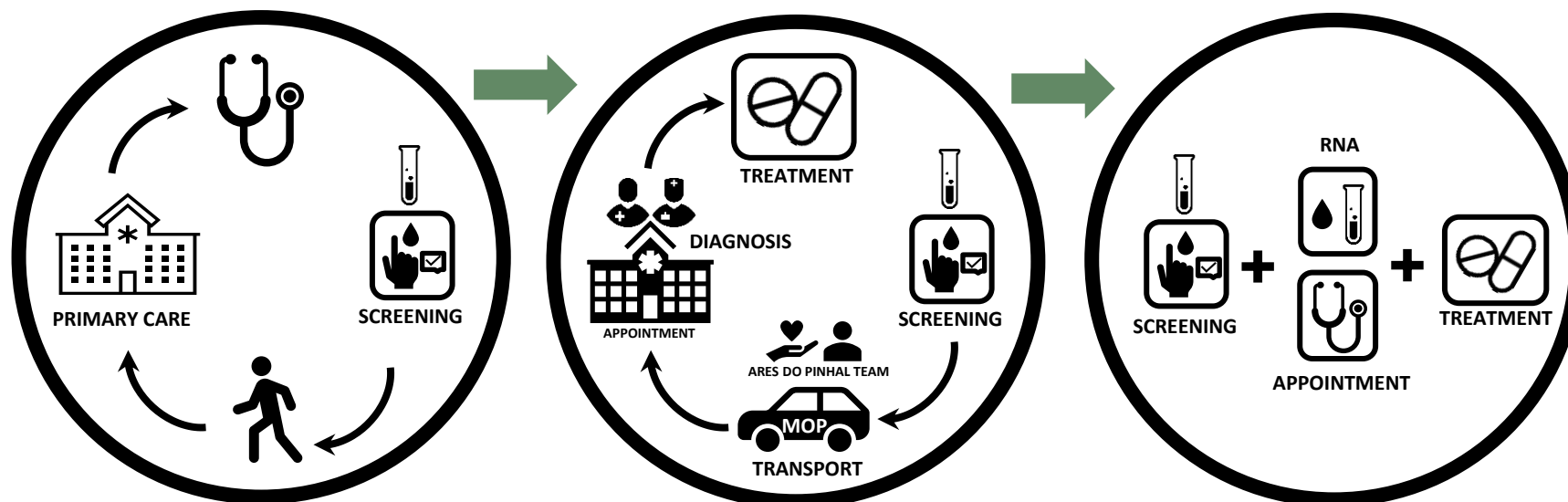
Peer Navigator



Awareness sessions



# MICROELIMINATION OF HEP C VIRUS IN THE MOP - TACKLING THE CHALLENGES



## Referral to GP/family doctor (since 2015 until 2017)

- Not effective
  - Many steps and slow process.
- (Low adherence: < 1%)**



## Protocol with hospital specialized services

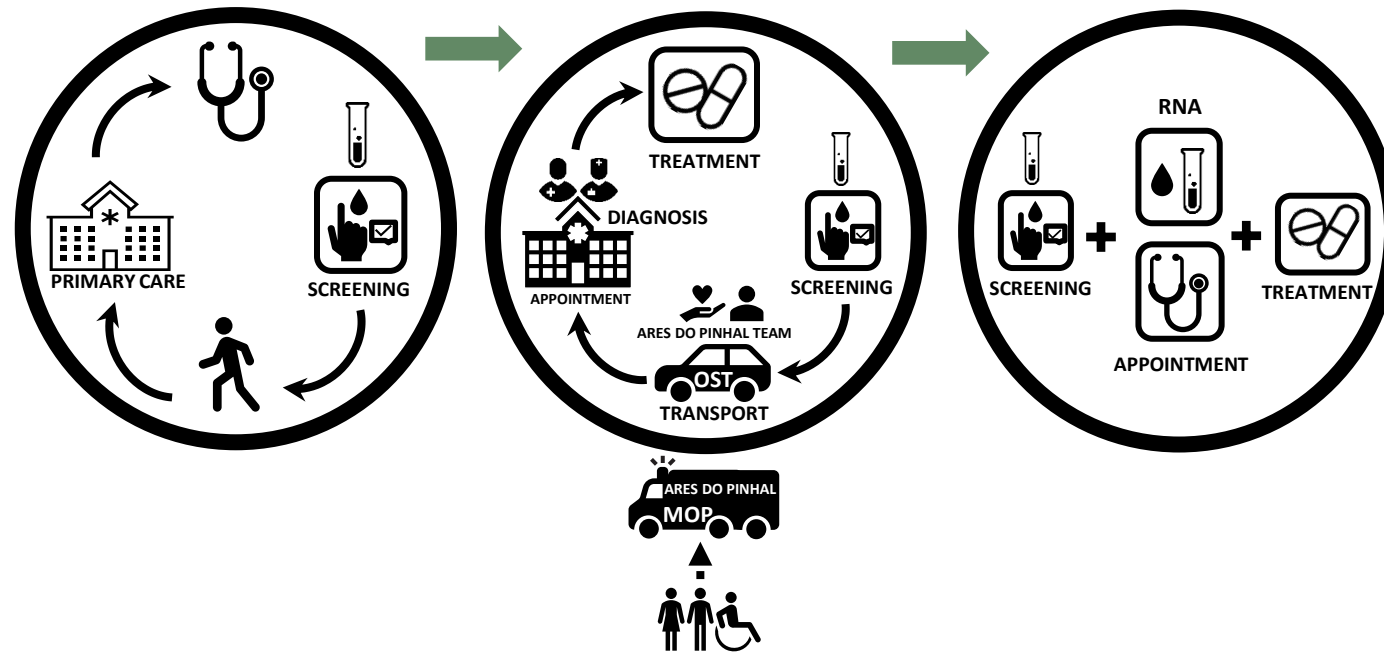
- (since Oct. 2017)**
- Appointments arranged with the Hospitals including patients transport UM → Hospitals
  - Follow up monitored by MOP
  - DOT in the Mobile Units
- (adherence: ± 45%)**

## All steps in the Mobile Units

**(since Feb. 2019)**

- Appointments with Hepatologist;
  - Blood collection;
  - DOT
- (adherence ± 80%)**

# HEPATITIS C PATIENT CENTRED MODEL OF CARE



**Cascade of care for hepatitis C before and during the MOP, Lisbon, 2015-2021**

Model	Duration	Scheduled	Consulted	Adherence	Treatment ongoing	Treatment complete	Pending lab results
Link to family doctor	2015 - 2017	307	30	~0.10	-	-	-
Transport to Hospital Appointment	Oct 2017- Ongoing	273	123	~0.45	0	79	0
Appointment by Hepatologist in MOP van	Feb 2019- Ongoing	213	172	~0.81	3	76	42

# MICROELIMINATION OF HEP C VIRUS IN THE MOP WITHIN COVID19 PANDEMICS



Appointments with Hepatologists at the MOP - Multimedia Van.



# THANK YOU



MOP supported by



email

[rodrigo.coutinho@aresdopinhal.pt](mailto:rodrigo.coutinho@aresdopinhal.pt)

website

[www.aresdopinhal.pt](http://www.aresdopinhal.pt)



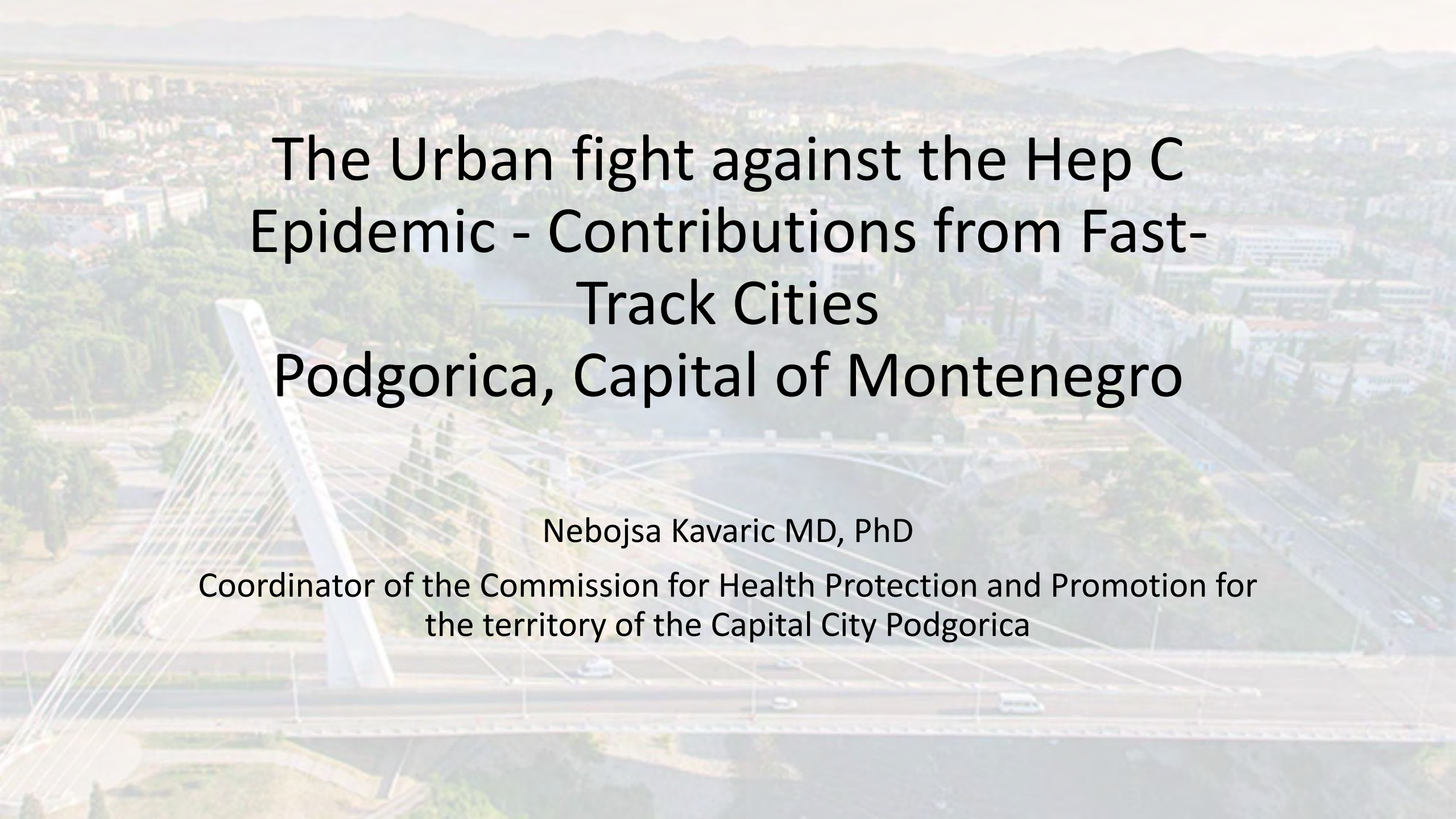
**Mr Ivan Vuković**

**Mayor of Podgorica, Montenegro**

*Presentation by Dr Nebojša Kavarić*



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# The Urban fight against the Hep C Epidemic - Contributions from Fast- Track Cities Podgorica, Capital of Montenegro

Nebojsa Kavaric MD, PhD

Coordinator of the Commission for Health Protection and Promotion for  
the territory of the Capital City Podgorica



Montenegro  
670,000 citizens

Podgorica, Capital of Montenegro  
250,000 citizens

Annual number of tourists in Montenegro  
1,500,000-2,000,000

## Basic MNE HCV information

- Hepatitis B and C are the main causes of viral hepatitis in Montenegro
- No clear picture of the size of the problem.
- 2.200 chronic HBV inf.
- 2.000 HCV positive antibodies.

## Current situation

- People who use drugs and harm reduction program are recognized by the Local Plan for Social Inclusion through a vulnerable group of people with HIV and at risk of HIV (they automatically fall here). Like potentially people with HCV...
- At the same time, the population is recognized by the National Strategy for HIV.
- More than 500 unique PWID users are covered annually through harm reduction programs in Podgorica

## Future directions of action

- We know that all the challenges in achieving global goals in the elimination of hepatitis and AIDS start with harm reduction programs and a large scope of testing.

## Future directions of action

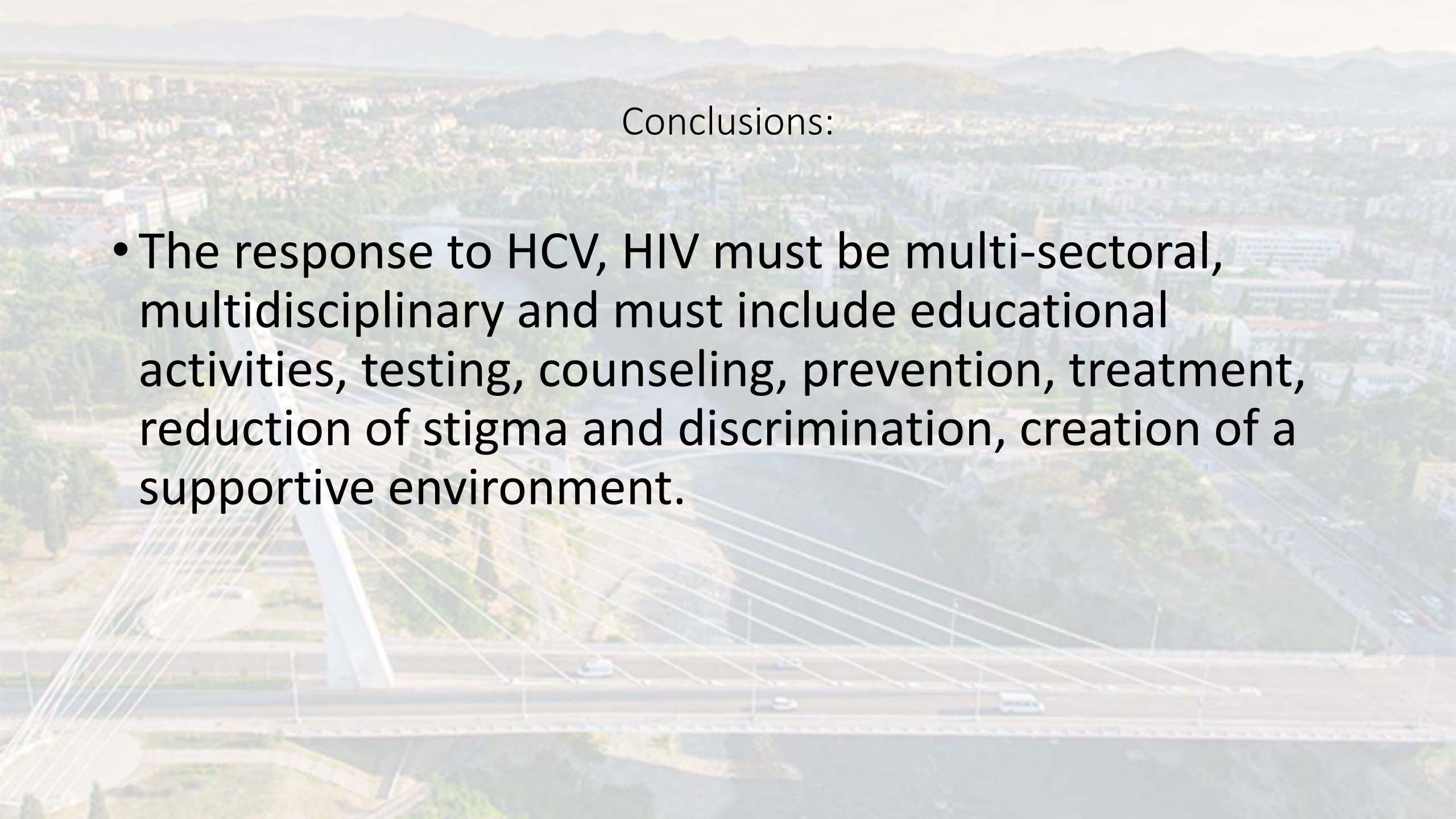
- At this time, supervised consumption rooms have not been identified as possible options to harm reduction in PWID individuals.
- But, in future plans, we will strongly consider the concept of supervised consumption rooms, which can be an important option for harm reducing, especially in Podgorica and more developed municipalities on the coast.
- We believe that this concept, with all the cultural and social characteristics of our society, can be considered and developed with the NGO sector.

# Future directions of action

## New projects

- Health House - will be a place where more services will gather so that the most vulnerable have access to the necessary services, where the city will provide psychosocial support, counseling, education and referral to other services. The project is being prepared with an NGO
- Commission for Health Protection and Promotion, an expert consultative body that will significantly improve all activities related to the improvement of the environment and communication with citizens regarding promotional and preventive activities related to public health



An aerial photograph of a city with a prominent cable-stayed bridge in the foreground. The city is densely packed with buildings and greenery, with mountains visible in the distance under a clear sky. The text is overlaid on this image.

## Conclusions:

- The response to HCV, HIV must be multi-sectoral, multidisciplinary and must include educational activities, testing, counseling, prevention, treatment, reduction of stigma and discrimination, creation of a supportive environment.

## Conclusions:

- In the future, the Capital City will, through its legal obligations, give priority to a better quality of life for its citizens, through intensive work on improving the environment for the protection and improvement of health.

# Conclusions:

- Many other projects promoting healthy lifestyles with NGO partners,
- will strongly contribute to raising awareness of both citizens and decision-makers,
- which will affect the improvement of public health in the Capital,
- in which activities related to HCV will certainly be one of the priorities.

An aerial photograph of a city featuring a prominent cable-stayed bridge in the foreground. The bridge has a tall, white, A-shaped pylon on the left side, with numerous white cables fanning out to support the bridge deck. The bridge spans a wide river. In the background, there is a dense urban area with many buildings, green spaces, and a large bridge crossing the river. The city is surrounded by rolling hills and mountains under a clear sky. The word "Thanks" is overlaid in the center of the image.

Thanks

# Discussion and Q&A



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# Breakout Session D: Best practice case studies from Spain, Italy, Romania and Israel

**Chair:**

**Prof Laurent Castera, Hôpital Beaujon, University of Paris-VII, France**

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# Dr Joan Colom Farran

**Catalonian Public Health Agency,  
Barcelona, Spain**



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@HepBCPPA



HEPATITIS C

3<sup>rd</sup> EU HCV ELIMINATION POLICY SUMMIT

Wednesday 24<sup>th</sup> March 2021 14:00 to 18:15 CET

**Securing Wider EU Commitment to the Elimination of HCV**

📺 Online event

Breakout session 5. Best practices case studies

# The case of Catalonia: SLTC in migrants and other vulnerable populations



**Dr. Joan Colom Farran**

Director of the Program for Prevention, Control and Treatment of HIV, STIs and Viral Hepatitis and Director of the Program on Substance Abuse (Public Health Agency of Catalonia)



# Plan for prevention and control of hepatitis C in Catalonia



## Main aim:

Facilitate the design and implementation of the necessary measures to **reduce the incidence, the morbidity and the mortality associated with HCV infection in Catalonia, in order to eliminate the infection as a public health problem by 2030.**

6 general objectives

47 specific objectives

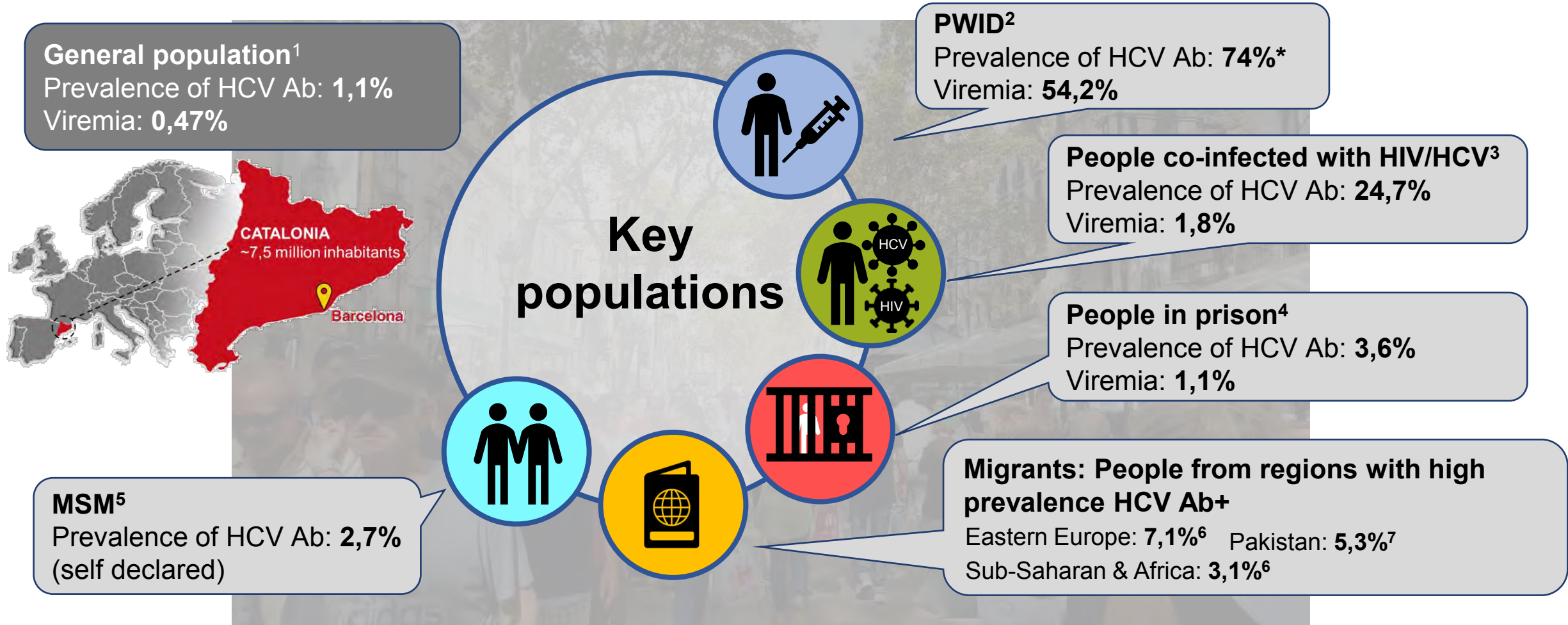
131 actions



## General Objectives:

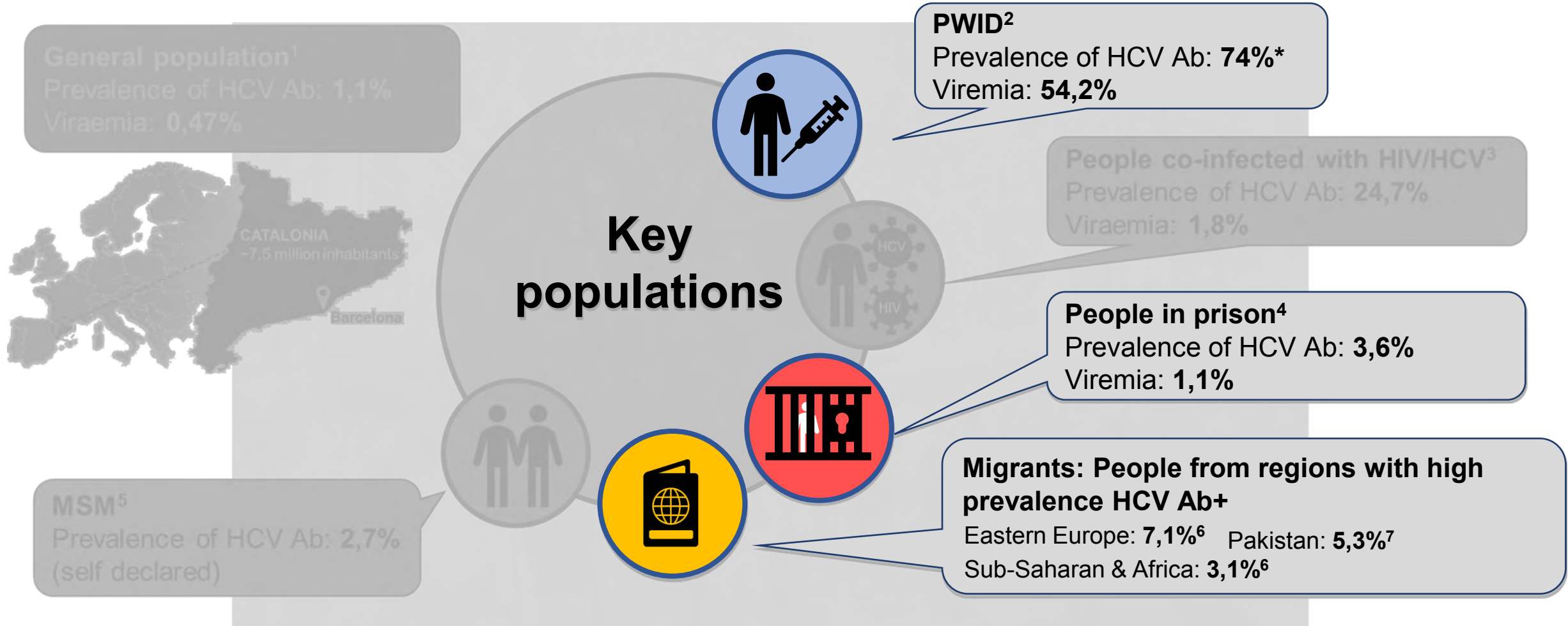
- 1 Obtain updated epidemiological information
- 2 Reduce the incidence of new HCV infections
- 3 Increase the detection of hidden infections
- 4 Coordinate health care to improve access to treatment
- 5 Improve the information and raise awareness among health professionals and citizens
- 6 Monitoring and evaluation

# Catalan epidemiological data



1. Lens S. Update of the prevalence and viraemia of hepatitis C in Catalonia, 2018; 2. HCV Ab : Bio-Behavioral Study 2019 (REDAN Project), CEEISCAT. People who inject drugs (PWID) recruited at Harm Reduction Centers. Viraemia: Extrapolation results from the study HepCDetect II: The hepatitis C care cascade among people who inject drugs in Catalonia: major gaps among migrants (Folch C., Saludes V., Reyes-Ureña J., Antuori A., Ibáñez N., Majó X., Colom J., Matas L., Casabona J., Martró E.; HepCdetect II Study Group). 3. Population Cohort of HIV PISCIS. CEEISCAT, 2018; 4. Department of Justice corresponding to December 2020. Available at: [http://www.gencat.cat/justicia/estadistiques\\_serveis\\_penitenciaris/12\\_pob.html](http://www.gencat.cat/justicia/estadistiques_serveis_penitenciaris/12_pob.html) (accessed March 2021); 5. Catalan data from the Spanish national report (unpublished) from the European MSM Internet Survey (EMIS, 2017); 6. Lazarus JV, et al. Enferm Infecc Microbiol Clin 2019;37:222–30; 7. Falla et All. (2018) Estimating the scale of Chronic hepatitis C virus infections on the EU/EEA: a focus on migrant from anti-HCV endemic countries. BMC Infectious Diseases.

# Catalan epidemiological data



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# PWID – People who inject drugs

Protocol for increasing the detection of hidden infections (*test and treat*) and improving access to treatment (*linkage to care*)

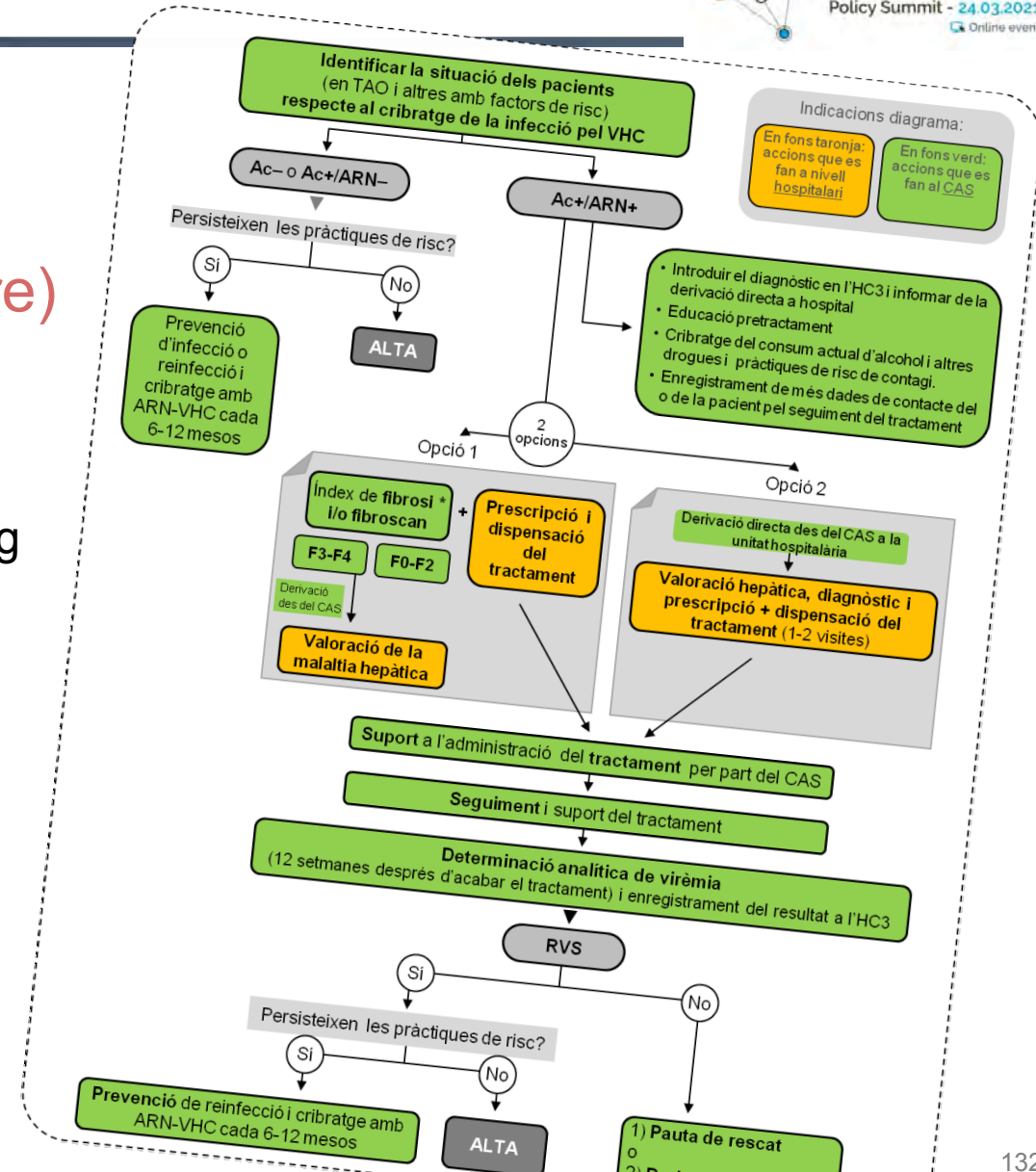
## Two key ideas:

- Diagnosing viremia and treating immediately: **test & treat**
- **In situ**: ideally in DAU (if not possible, 1 or 2 visits to the hospital service, and the rest at DAU)

DAU: Drug Addiction Unit



Systematize & extend to the whole territory the good practices





# PWID – People who inject drugs

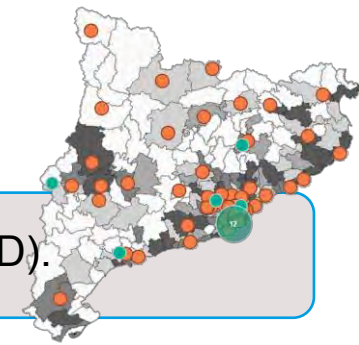
## PREVENTION

### Reduce the incidence of new HCV infections

- Reinforce Harm Reduction strategies: NSP & OST programmes, supervised consumption rooms

## SCREENING

Rapid serology test + dry blood with viremia (Genexpert) **in situ** (DAU and HRD).



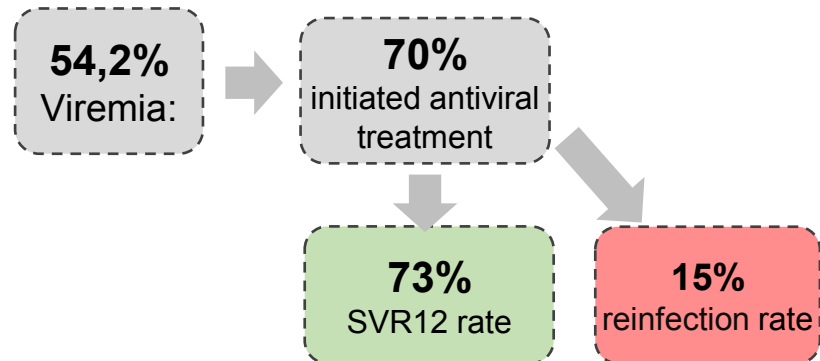
## Liver Assessment & TREATMENT

### Diagnosis + Fibroscan + Treatment in situ



HRC "La Mina" + Hospital Clínic of Barcelona

2019: >700 users. 50% accepted the screening.

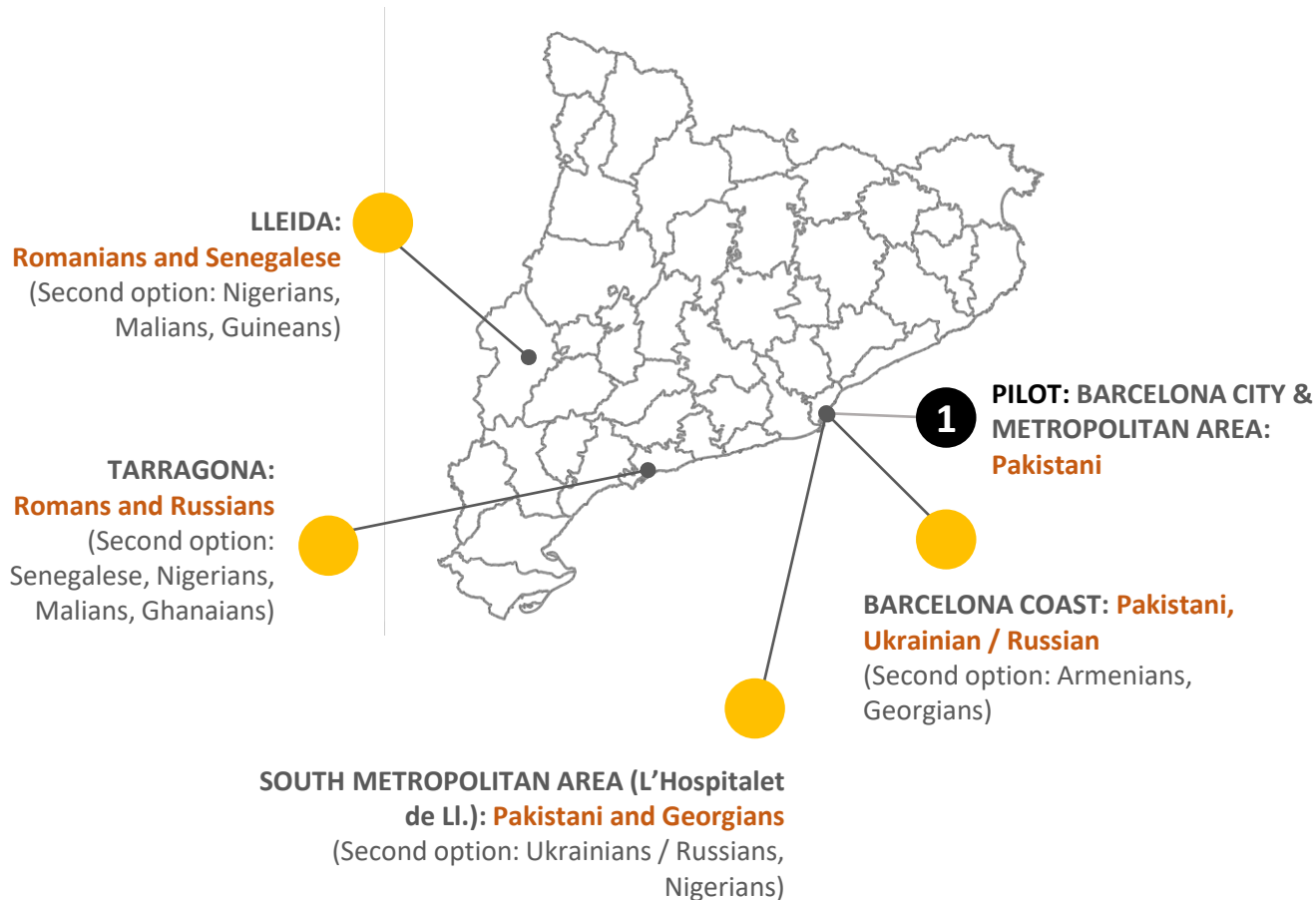


**Treatment prevention:**  
 Detections & treatment of potential HCV transmitters



# Migrants

## Rapid HCV antibody and DBS testing in community centres and events



**Community intervention:** screening, link to health care and early access to HCV treatment (and HBV and HIV opportunistically).

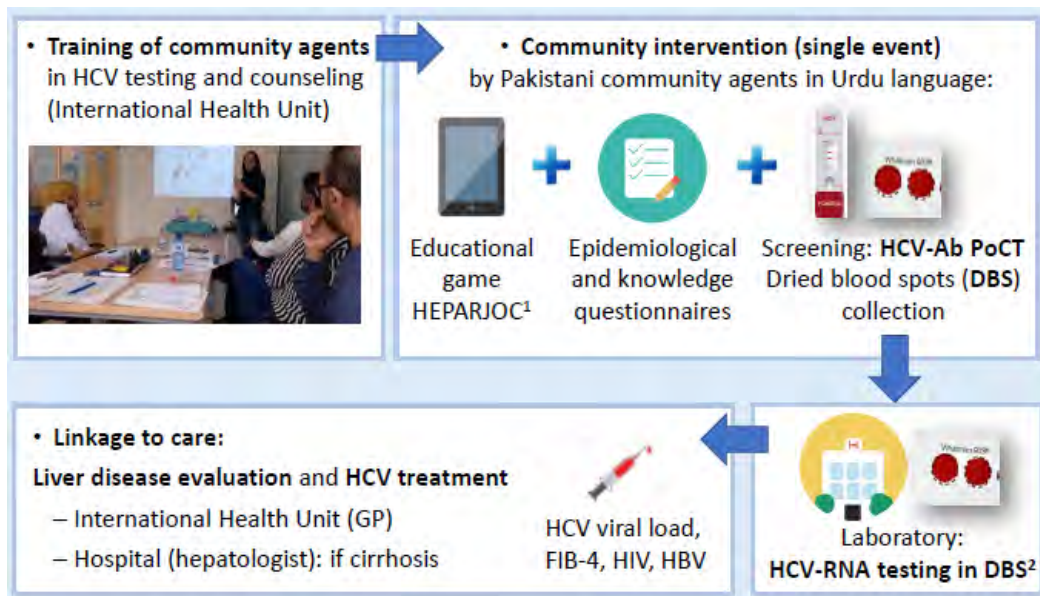
- **Collaboration with Immigration Services** of the territory.
- **Figure of the mediator / peer educator.**
- **Educational workshop + screening rapid tests** (+ dried blood collection).
- **Facilitation of access circuits to healthcare and treatment** with the collaboration of the healthcare agents involved in the territory.



# Migrants

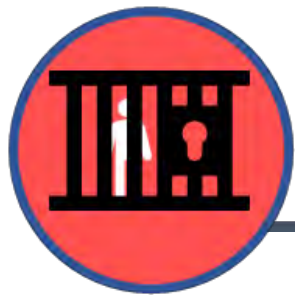
## Hepatitis C micro-elimination **pilot strategy** in Pakistani migrants in Catalonia through the implementation of a community intervention

**Aim:** To implement and evaluate an HCV micro-elimination strategy based on a **community intervention** that brings together education, screening and simplified access to treatment in the **Pakistani migrant population** (the fifth most common country of origin and endemic for hepatitis C virus –HCV– infection) . (N=520)



**Excellent acceptability** (both males and females).  
**High prevalence observed** (Ab: 4,6% / HCV-RNA: 1,2%)

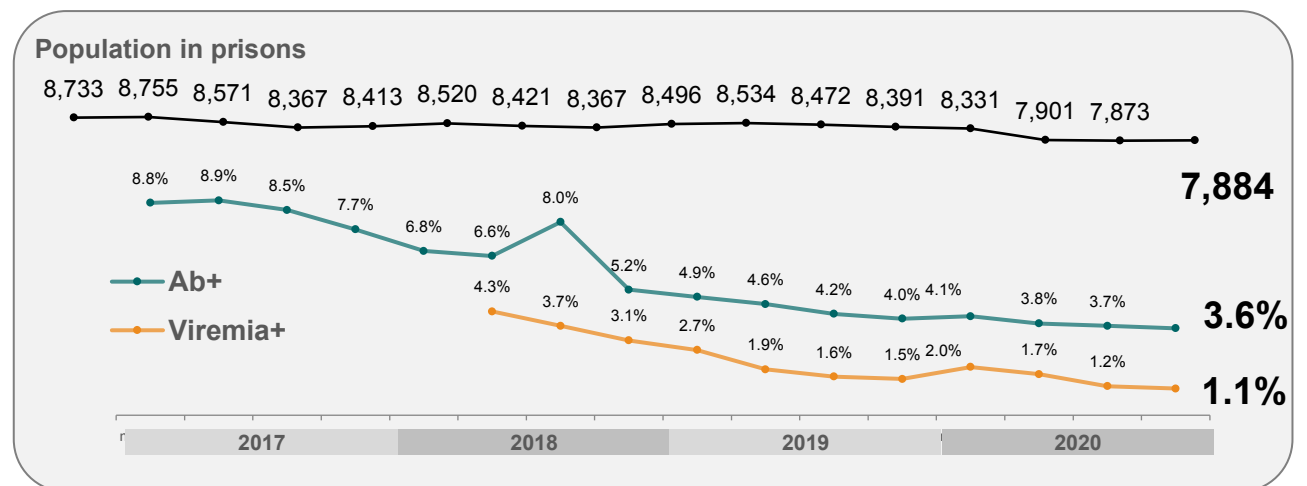
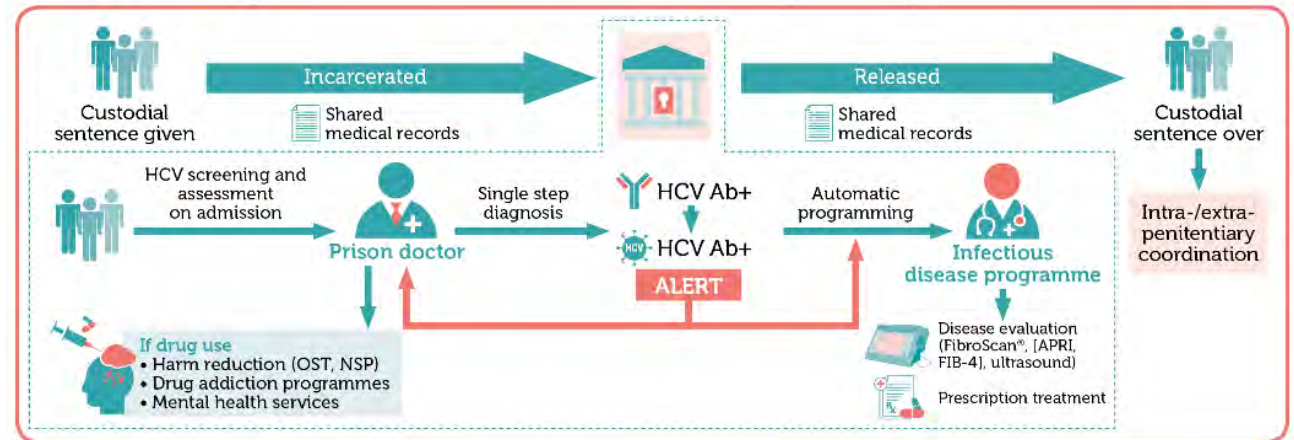
\* HepClink. E. Martró (IGTP), 2019 - 2020



# People in prison

## Hepatitis C elimination program in Catalan prisons (2016)

- ▶ **Systematic HCV screening** upon admission to prison (84%)
- ▶ **Treatment in the center**
- ▶ **Link to a community specialist upon release (liaison nurse)**
  - Decrease in the loss of post-release follow-ups
  - Improvement of links with specialists

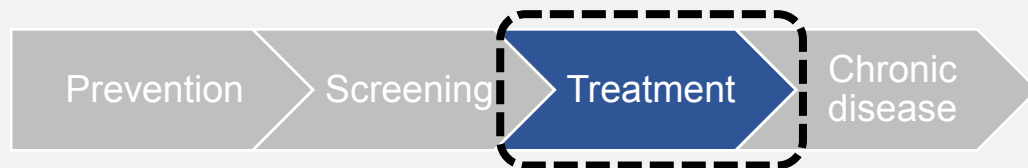
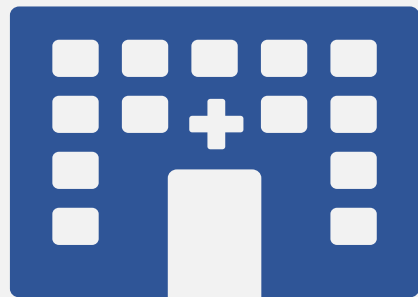




# Public health approach to hepatitis C elimination

**From healing....**

Clinic



Individual health

**.....to elimination**

Public health



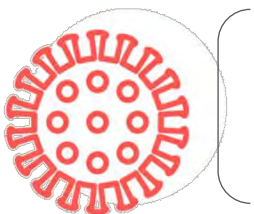
Collective health

**Treatment as prevention!**

# Challenges and conclusions

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- **Public Health perspective:** integrative and community model.
- **Micro elimination strategies in vulnerable populations**, designed according to their environment
- **Overcome the barriers of the system.**
- **Simplification all the processes.** Adaptation of the health structure to the patients instead of “adapting the patient to the health structure”.
- **Use Good Practices to make them scalable.**
- **Leadership at all levels.**
- **The coordinated support of all actors is essential.**



**Take advantage of the windows of opportunity that appear with COVID-19**  
(massive tests to detect COVID-19, telecare, use of TICs ...)



HEPATITIS C

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**Securing Wider EU Commitment to the Elimination of HCV**

🖥️ Online event



# Thank you!

**Dr. Joan Colom Farran**

Director of the Program for Prevention, Control and Treatment of HIV, STIs and Viral Hepatitis and Director of the Program on Substance Abuse (Public Health Agency of Catalonia)

# Mr Marco Bartoli

## EpaC Onlus, Italy



#HCVSummit  
@HepBCPPA

# Associated screening for HCV and SARS-Cov2 infection in an urban area of Southern Italy: the “Casola di Napoli” cohort study



**Authors:** Carmine Coppola<sup>1</sup>, Mario Masarone<sup>2</sup>, Marco Bartoli<sup>3</sup>, Laura Staiano<sup>1</sup>, Pietro Torre<sup>2</sup>, Massimiliano Conforti<sup>3</sup>, Daniela Amoruso<sup>1</sup>, Ivan Gardini<sup>3</sup>, Marcello Persico<sup>2</sup>

**Affiliations:**

1: Department of Hepatology, Gragnano Hospital, Naples, Italy;

2: Internal Medicine and Hepatology Division, Department of Medicine and Surgery, “Scuola Medica Salernitana”, University of Salerno, Italy;

3: EpaC Onlus, Italian Liver Patient Association, Turin, Italy.

# Introduction

- The spread of SARS-Cov2 pandemic led to a substantial **reorganization of the available resources** for the management of other potentially curable diseases.
- This is the case of the **HCV infection** that, in Italy, had recently seen **important milestones towards its elimination** which, now, **risk being nullified**.
- Covid-19 pandemic caused a **deep reduction in treatment rates and stopped most of the HCV-testing initiatives**; but, conversely, **the pandemic could be an opportunity to promote HCV testing**

**Aim:** the 1° Italian HCV-FREE Community that also stops the Covid-19 pandemic

**How:** **joining the screening** for both the diseases, in order to effectively respond to important clinical needs

- Burden of **COVID-19**
- **Update Epidemiology of HCV infection** in general population of southern Italy
- Show that **micro-elimination activities are winning strategies.**

# Methods

- We installed a stable testing center in the main square
- Invited the whole population (> 6years old):
  - Mayor social messages
  - Posters in all the commercial activities
  - widespread announcement with megaphones throughout the country (twice per day)





# Methods

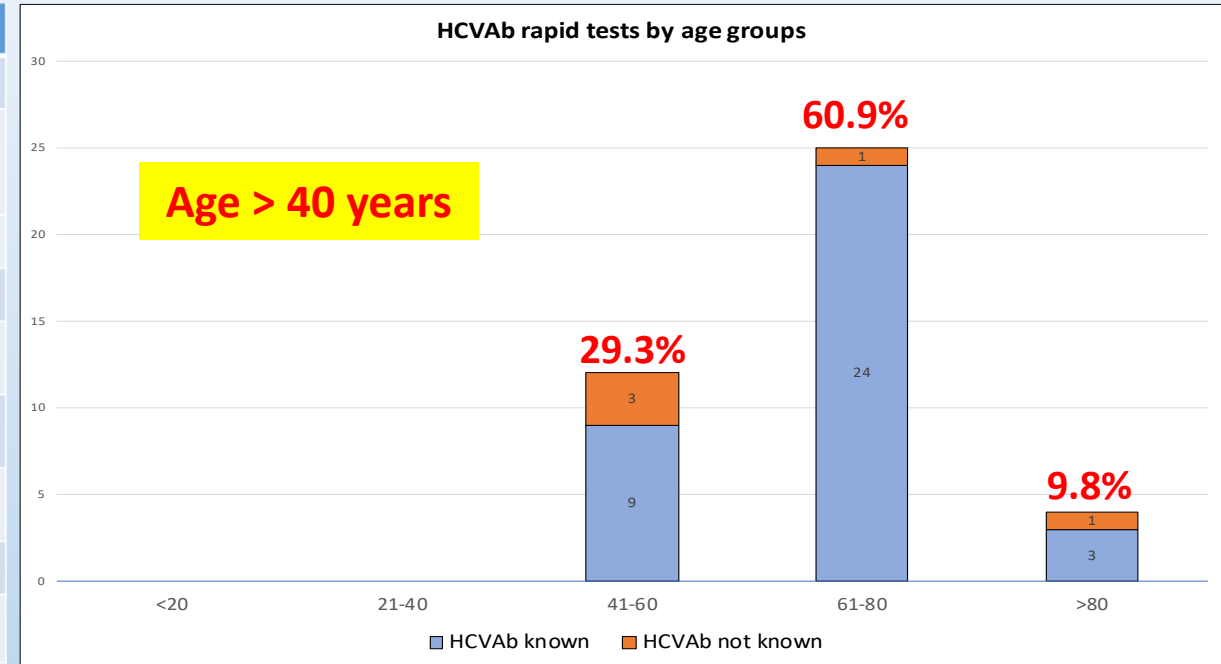
The people voluntarily underwent to

- A contemporary screening for **HCV-Ab** and for **SARS-Cov-2 IgG/IgM rapid blood tests\***
- All the positive people underwent **RT-PCR**
  - for **SARS-Cov-2-RNA**
  - for **HCV-RNA**
    - **Fibroscan & blood tests**
    - **Genotype**
      - **Treatment**

From June 25 to July 12, 2020:

- 3.845 inhabitants
- 3.556\* eligible for the screening (age>6yrs)
- **2.740 (77,05%) participated voluntarily**
  
- **39 pts (1.4%) SARS-Cov2-Ab IgM- or -IgG-positive**
  - 0 pts positive for SARS-Cov2-RNA
- **41 (1.5%) pts HCVAb-positive**
  - **5 (0.18%) pts HCVRNA-positive**

Variable	overall	Males	Females	p
HCV Quick test positive	54/2740 (1.9%)	17 (30.4%)	37 (66.1%)	-
HCV Ab confirmation pos	41 (1.5%)	14 (82.4%)	27 (73.0%)	0.68
Quick test false HCV Ab positive	13 (0.4%)	3 (17.6%)	10 (27.0%)	
Age (SD)	64.31 (15.17)	65.94(12.98)	63.57(16.18)	0.59
Clinical Cirrhosis	4 (0.14%)	3 (17.7%)	1 (2.7%)	0.14
HCV infection already known	36/41 (87.8%)	13 (76.5%)	23 (62.2%)	0.36
HCV-RNA positive	5/2740 (0.18%)	1 (5.9%)	4 (10.8%)	0.56
Previous AVT therapy	32/36 (88.8%)	13/13 (100%)	21/23 (91.3%)	0.29
SVR	31/32 (96.9%)	12/13 (92.3%)	19/19 (100%)	0.84
HCV Known but not treated	2/36 (5.5%)	0/13	2/23 (8.7%)	0.27



**2 HCV-RNA+ unknown**  
**1 HCV-RNA+ treated, NO SVR**  
**2 HCV-RNA+, aware but never treated**

Age classes	N	HCV-Ab quick test	SARS-Cov2 IgM/IgG rapid blood test
<20 yrs	348 (12.7%)	0 (0%)	0 (0%)
21-40 yrs	721 (26.3%)	0 (0%)	2 (0.3%)
41-60 yrs	996 (36.4%)	12 (1.2%)	14 (1.4%)
61-80 yrs	604 (22.1%)	25 (4.1%)	20 (3.3%)
>81 yrs	69 (2.5%)	4 (5.8%)	3 (1.4%)

# Conclusions

- The screening of a cohort of an urban area of Southern Italy showed a **seroprevalence** of **SARS-Cov2-Ab** and **HCV-Ab** of **1.4%** and **1.5%**, respectively, whereas only **0.18%** had an **active HCV** infection.
- This study shows how
  - the **pandemic** can be an **opportunity** to promote **testing activities** for **HCV**
  - **Micro-elimination** activities can strongly contribute to reach the goal at HCV elimination



This has been supported also by a grant from Gilead Sciences Europe Ltd





# *TOUR IN THE MAIN ITALIAN CITIES*



- Joint screening HCV&Covid-19
- Testing point in the main squares with a mobile health unit
- Participation of clinicians and nurses of the local hospitals
- Wide communication campaign to promote the events
  
- Great participation of people: at 9AM we had to stop the bookings because more than 2-300 people were in queue



Thank you for the attention



# Prof Cora Pop

**Carol Davila University of Medicine  
and Pharmacy, Bucharest, Romania**



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@HepBCPPA

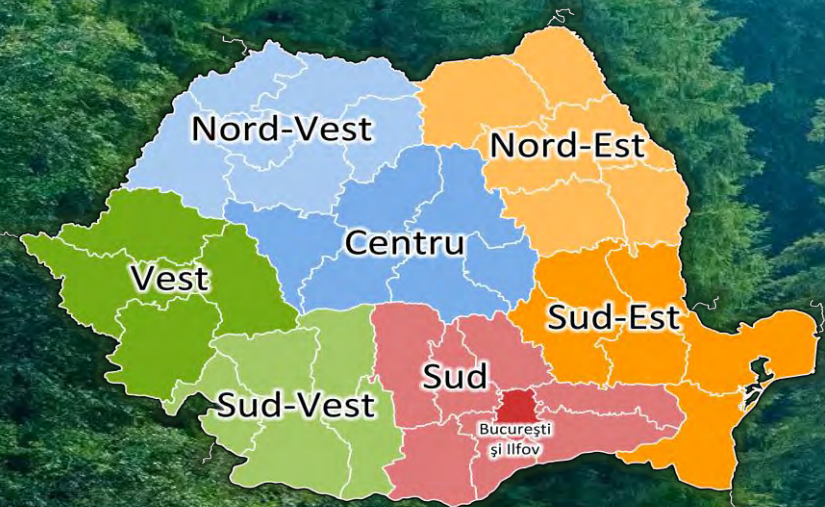
# Building on success: Viral Hepatitis Elimination Strategies in Romania

dr Cora Pop

*Professor of Internal Medicine and Gastroenterology*

*Carol Davila University of Medicine and Pharmacy Bucharest*





- 19 mil inhabitants
  - 50% rural
- 8 development regions
- 10-15% opportunistic screening
  - >40% diagnosis too late

**ROMANIA**

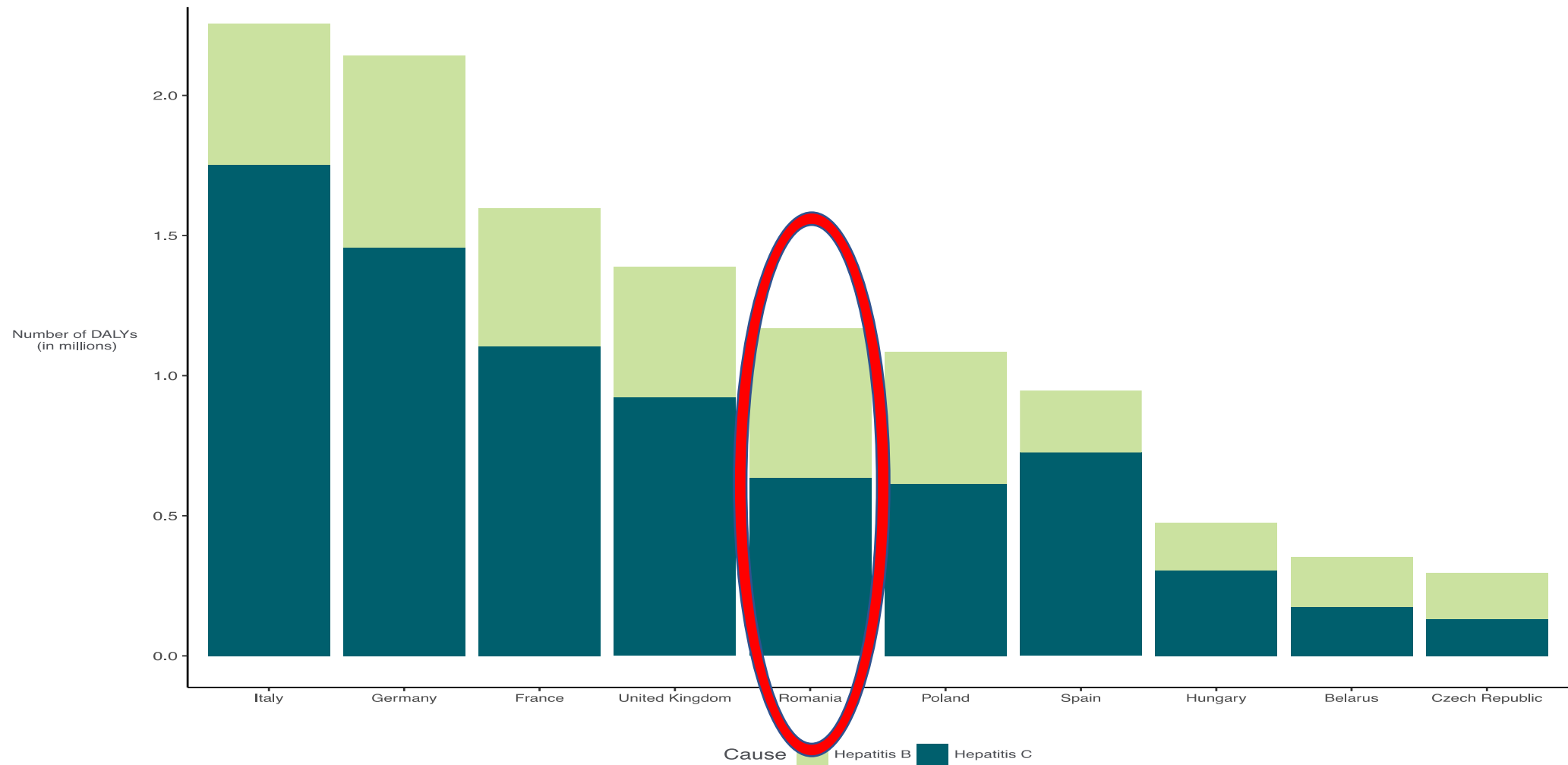


# Romania: Historical context

- 2000: HCV the most prevalent infectious disease
- 2014: no preventive services in the country for viral hepatitis
- 2010: high prevalence of HCV-related End-stage liver disease
- 2015: first DAAs program for HCV-related cirrhosis

	N or/and %	Comments
HCV Disease Burden		
<ul style="list-style-type: none"> <li>• Leading cause of chronic hepatitis</li> <li>• liver cirrhosis</li> </ul>	<ul style="list-style-type: none"> <li>• 64%</li> <li>• 59%</li> </ul>	
HCC	49.5% out of HCC cases diagnosed in tertiary centers	
<i>Special populations</i>		
Chronic Kidney Disease	>11-->20%	
HIV/HCV co-infection	~40-50% out of HIV+ population	
<b>HCV diagnosis rate</b>	<b>16%</b>	<b>Low</b>
<b>Treated</b>	<b>60,000</b> <b>2002-2015</b> <b>Peg/RBV</b> <b>5850</b> <b>2016</b> <b>DAAs</b>	<i>&gt;56,500 treated between 2002-2015 w/ Peg/RBV (~50% SVR in real life)</i> <i>A very fey in clinical trials and EAP</i>  99% SVR

# Burden of disease of viral hepatitis in Europe 2016



# European Framework



**Vision:** “a WHO European Region in which *the transmission of new viral hepatitis infections is halted, testing is accessible, and people living with chronic viral hepatitis have access to care and affordable and effective treatment.*”

**Goal:** Eliminate viral hepatitis as a major public health threat by 2030

**Five strategic directions:**

1. Information for focused action
2. Interventions for impact
3. Delivering for equity
4. Financing for sustainability
5. Innovation for acceleration

**Frameworks for action:** universal health coverage; the continuum of services; and the promotion of a public health approach.

# Targets from European action plan for Chronic Viral Hepatitis Eradication

Core Indicators									
Timely birth dose vaccine (%)	10	72	39	34	83	39	50	90	
Third dose HBV vaccine (%)	76	89	81	87	90	84	90	90	
Blood donations screened (%)	80	90	95	95	98	97	95	100	
Needle/syringe distribution (/100 IDU year)	6	20	27	27	27	27	200	300	
Injection safety (% reused needles)	3.7	3.4	14	14	14	14	0	0	
Proportion of chronic HBV diagnosed (%)	0.3	9.1	1.8	14	14	14	14	90%	
Proportion of chronic HCV diagnosed (%)	5.7	36.3	17.7	31.2	8.7	8.7	10%	90%	
Treatment coverage HBV (%)	<1*	13*	2*	7*	<1*	10*	5 million	80%	
Treatment coverage HCV (%)	2.2	11.1	2.1	4.9	7.1	4.8	7.4	3 million	80%

**90%** reduction in new cases of chronic hepatitis B and C by 2030

65% reduction in hepatitis B and C with chronic hepatitis B and C infections treated by 2030

80% of treatment eligible persons with chronic hepatitis B and C

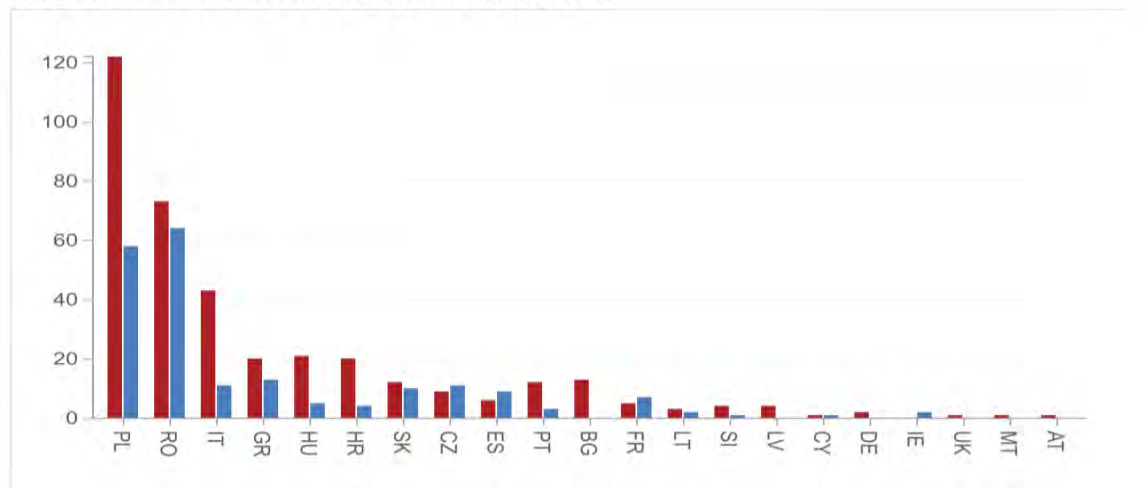


# European Commission Funding Programmes 2014-2020 for Preventive Health Services

## Major projects

Major projects are large-scale investments with a value of more than EUR 50 million each, supported by the EU's cohesion policy funding. The projects directly benefit Member States and their citizens, by creating better infrastructure, a healthier environment, new jobs and new business opportunities.

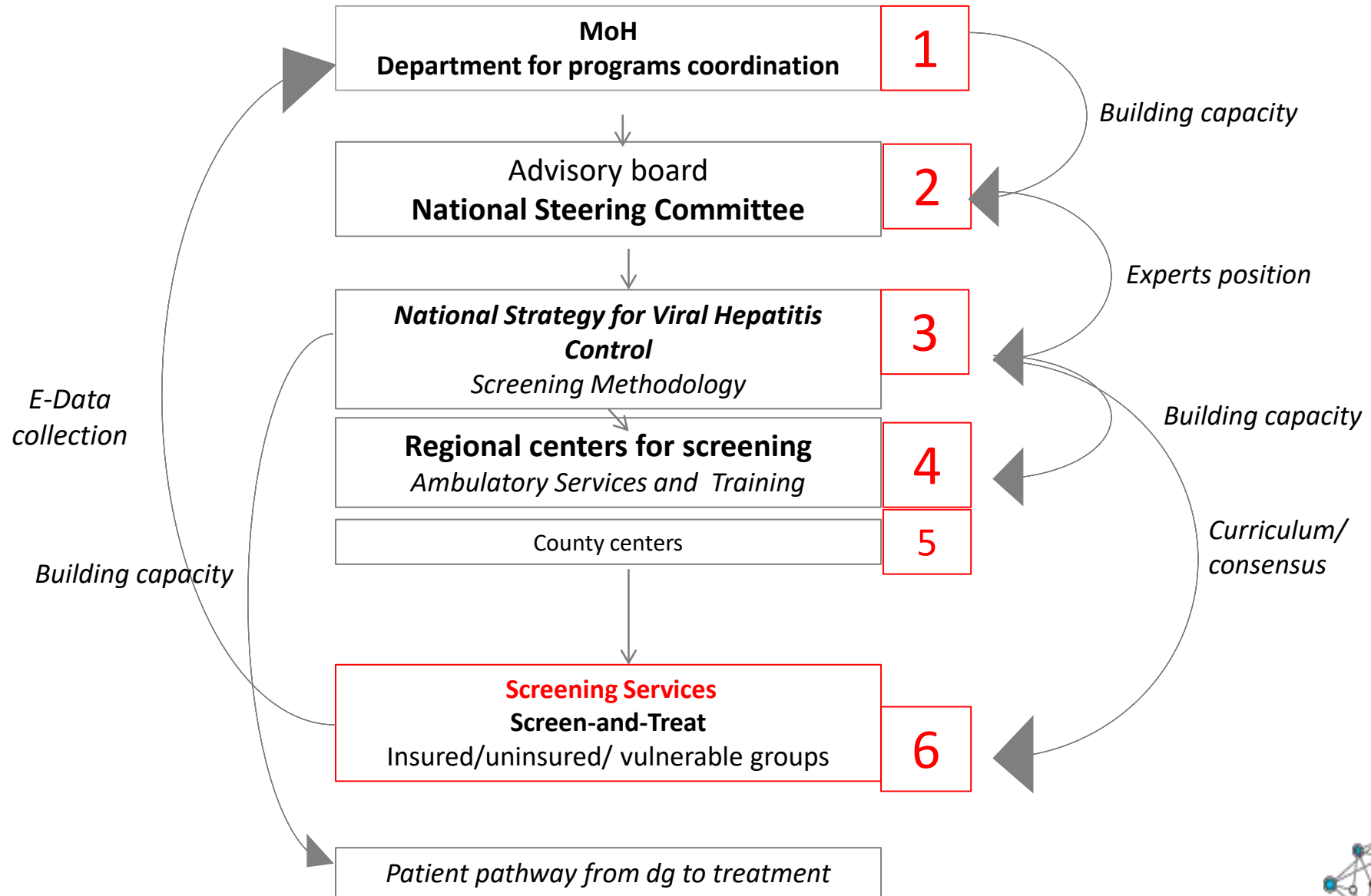
### Major Projects 2014-2020 submitted



...”Specific support will also be provided to social services, such as social assistance, health and care services”



# Organizational Framework for Viral Hepatitis Elimination Program





# Romanian commitment for viral hepatitis control and elimination

## *Facts 2016-2021*

2016

- Health Policy Decision from the Perspective of Stakeholders

2018

- National Plan for Control of viral hepatitis *approved*

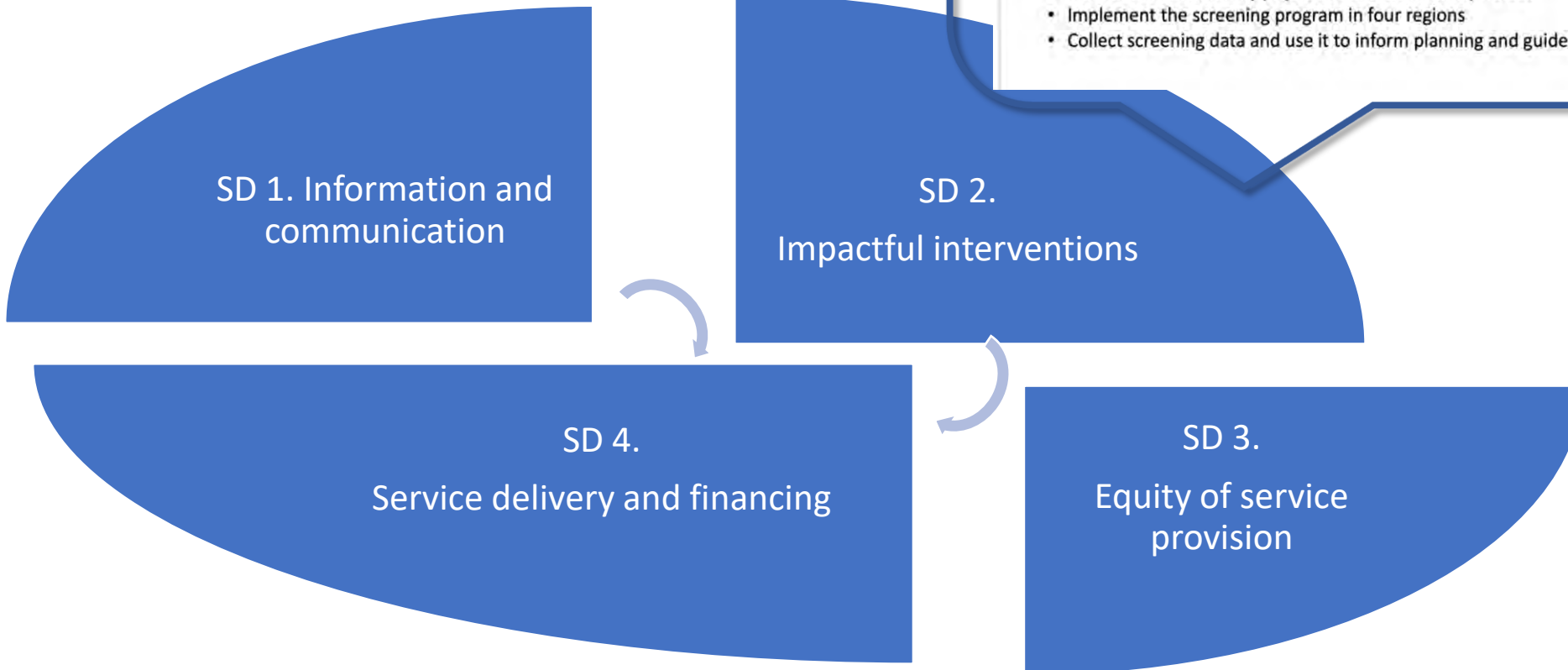
2019

- Populational-based Screening program  
*have started in the poorest – the prevalent regions*

2021

- Screen-to-Treat for all - *including vulnerable/ uninsured*

# National Plan Strategic Directions



## Testing and diagnosing need to become routine

- Opportunistic testing so far, hence a reduced pool of known patients
- Until 2018, diagnostic and staging not in the basic service package
- From 2018, testing is available to insurees with referral from the family physician
- From 2018, diagnostic and staging available to insurees in hospitals (day care admission)
- From 2018, screening program in four regions under inception (funded from EU-grants)

## Priorities

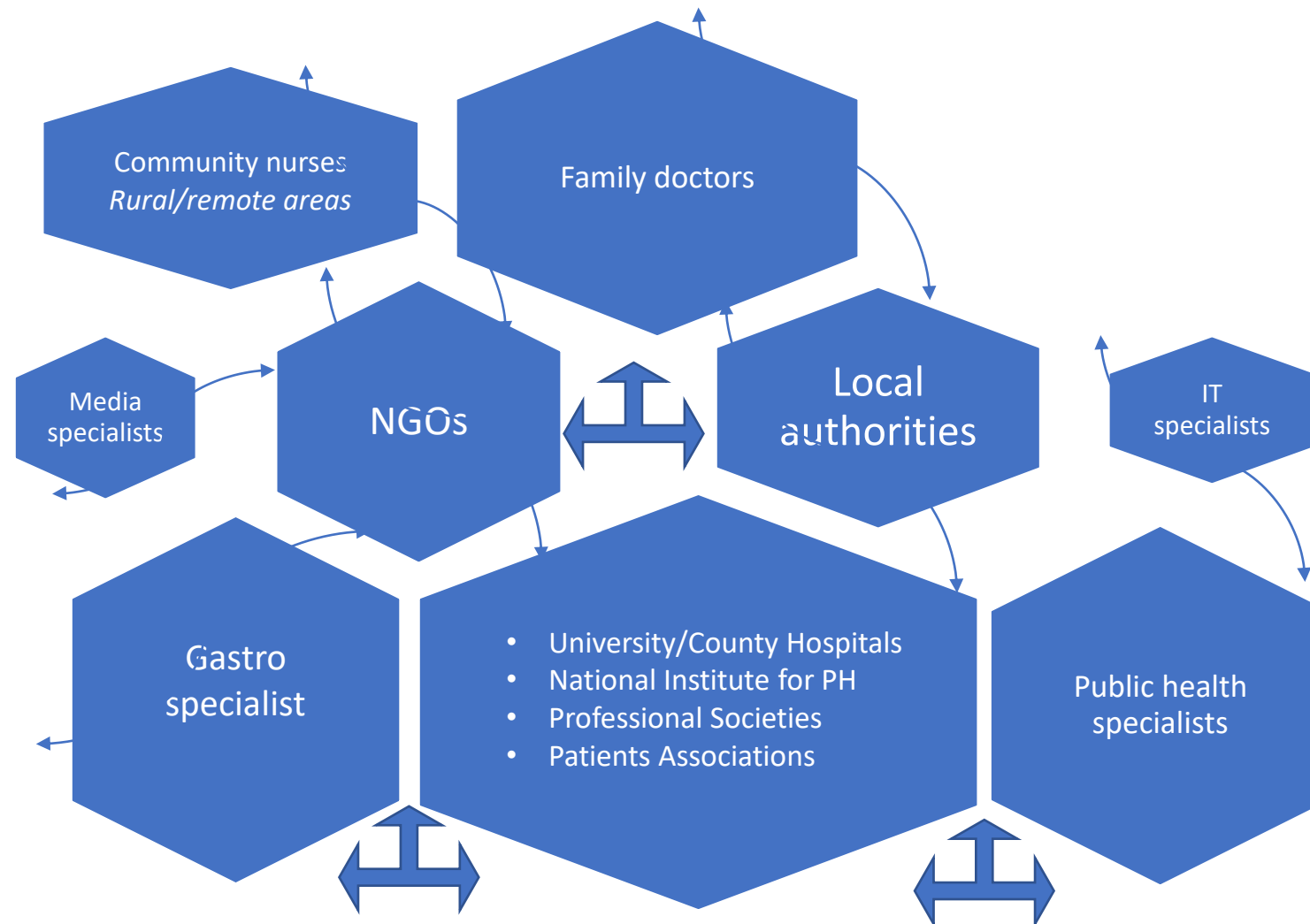
- Routine annual checks for adults to include HBV/ HCV testing
- Develop infrastructure for diagnosing and staging in public hospitals, including screening centers and mobile units
- Train and involve family physicians and community nurses
- Implement the screening program in four regions
- Collect screening data and use it to inform planning and guidelines

## TARGET 2023

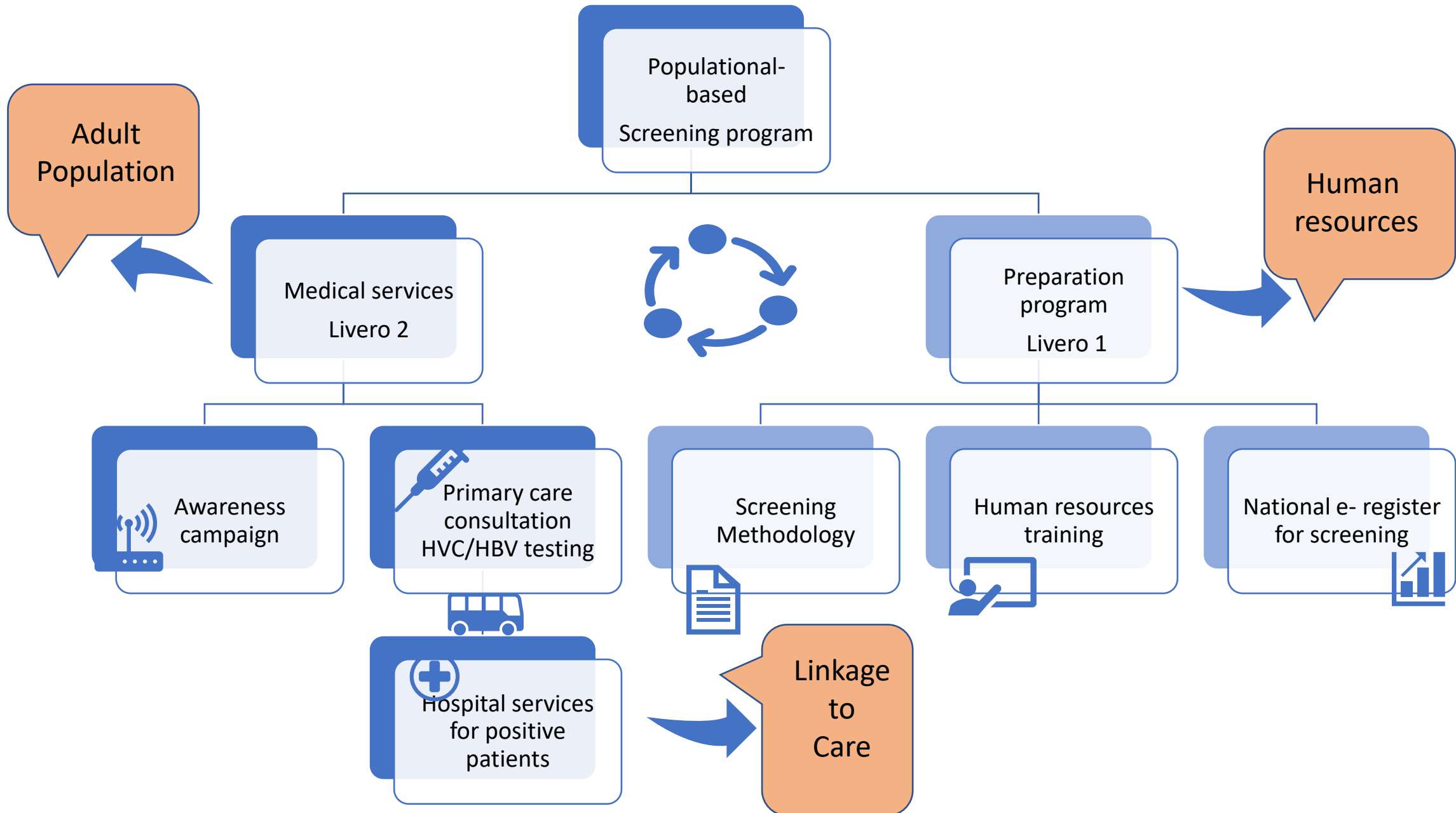
- ✓ National screening methodology
- ✓ Train 8,000 health professionals
- ✓ Test all health professionals
- ✓ Test 50% of risk groups population
- ✓ Diagnose 75% of patients with cirrhosis and HCC



# Human resources in Population-based Screening Program for Viral Hepatitis



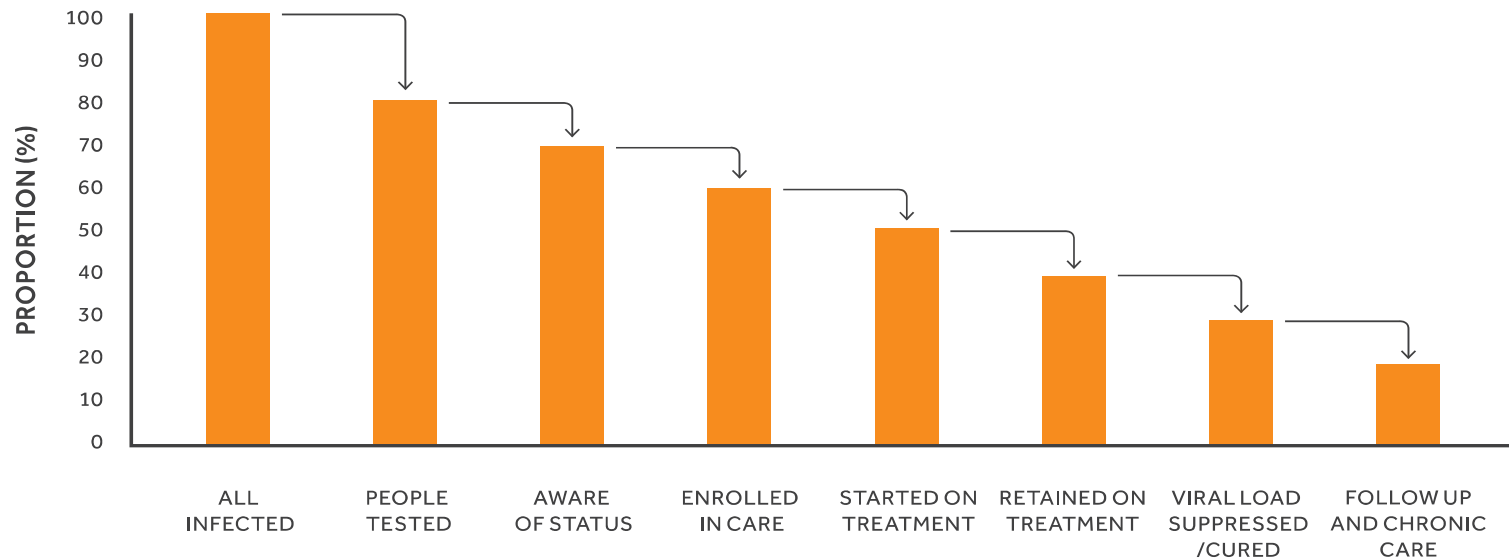
# Screening program for viral hepatitis



# Conclusion

## Complex interventions to eliminate chronic hepatitis

*Before and after pandemic state*



### CONTINUUM OF SERVICES – CASCADE OF CARE



- Continue to work towards the WHO goal of eliminating viral hepatitis by 2030

- Trying to adapt the cascade-of-care to the COVID-19 situation

- Make modifications for safe delivery of services according to pandemic requirements

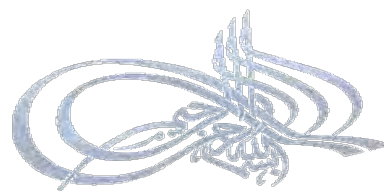


# Prof Gamal Esmat

## University of Cairo, Egypt



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# The Success Story of HCV management in Egypt



**Prof. Gamal Esmat**

**Prof. Hepatology & Ex. Vice President of Cairo University, Egypt**

**Member of WHO Strategic Committee for Viral Hepatitis**

**[www.gamalesmat.com](http://www.gamalesmat.com)**



# Magnitude of the problem

- Hepatitis C virus (HCV) is a major **global health** challenge with more burden in some countries like **Egypt**.
- Egypt **was** always considered to have the **world's highest prevalence rates for HCV**
- This extraordinary prevalence of HCV in Egypt is mostly due to the long lasted treatment campaigns against **schistosomiasis** conducted by the Egyptian Ministry of Health (MOH) during the period from 1950–1980.
- To combat such an epidemic, the Egyptian MOH launched on **2006** the National Committee for Control of Viral Hepatitis (**NCCVH**), to take the responsibility of managing the HCV epidemic in the country.
- The prevalent genotype in Egypt (**genotype 4**), was always one of the obstacles that prevent securing an effective therapy for HCV in the era of interferon.

# Steps on the path of HCV elimination

Establishment of  
NCCVH

Introduction of:

- Sofosbuvir/RBV  
(SVR 82.7%)
- Sofosbuvir/PegIFN/RBV  
(SVR 93.9%)
- Prioritization of advanced  
fibrosis and cirrhosis patients.

- Introduction of generic drugs.
- Main line of treatment is  
Sofosbuvir/Daclatasvir with  
without RBV  
(SVR 94.7–95.4%).

2006

2006 –  
2014

OCTOBER  
2014

MAY  
2015

DECEMBER  
2015

October  
2018

- In Sep
- In Dec

ombitasvir  
asoplasvir

with ribavirin  
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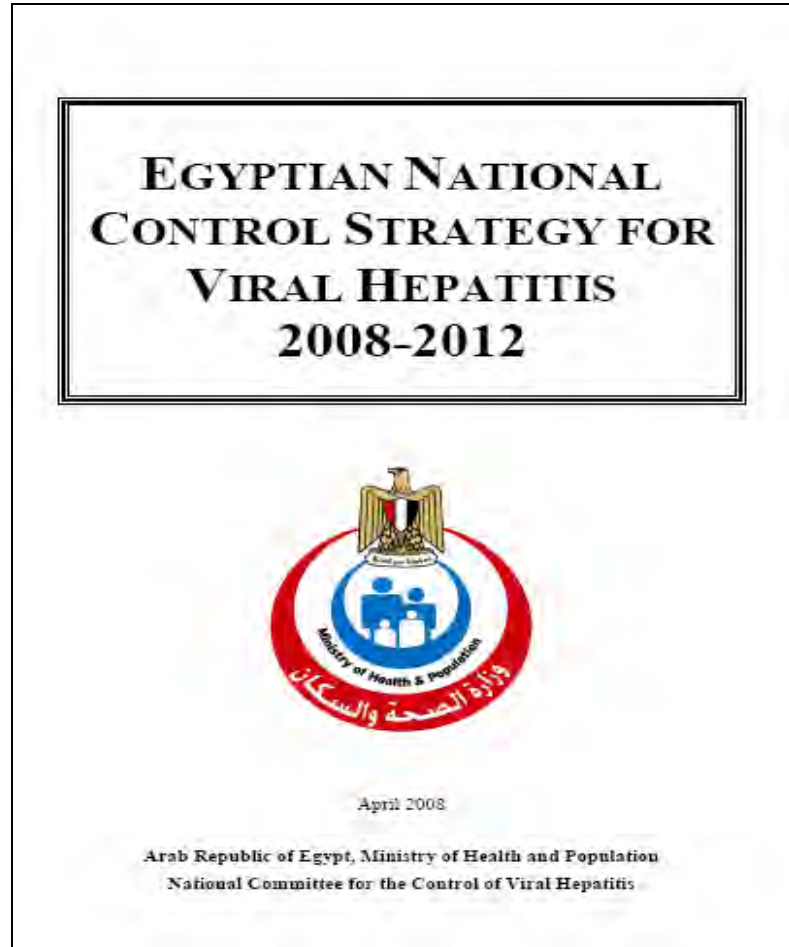
ed (SVR 93.9%)  
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was prioritized  
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firmment patie

## Phase 1 Interferon Treatment for some

## Phase 2 DAA Treatment for All



- Increase policymakers' commitment to supporting the policy change necessary to prevent viral hepatitis transmission.
- Educate healthcare workers to prevent transmission of viral hepatitis in Egypt.
- Increase public awareness of viral hepatitis prevention.
- Promote safe injection practices in the community.
- Annual treatment of 200-350.000 patients by DAA.in 46 centers in 2015 aiming to reach 100 centers by the end of 2016

## Phase 3 Targeted screening for HCV in Egypt

- Families of HCV patients
- Healthcare providers
- Prisoners
- Students admitted to universities
- Patients attending intervention procedures in hospitals

## Phase 4 Screening for All



١٠٠ مليون  
صحة

مبادرة رئيس الجمهورية  
للقضاء على فيروس سي  
و الكشف عن الأمراض غير السارية

# Screening and Treatment Program to Eliminate Hepatitis C in Egypt

- Although participation in screening was voluntary, turnout was very high, with **49.6 million** persons participating over a 7-month period.
- This is one of **the largest disease screening campaigns in history**.
- the present results show that the HCV seroprevalence among untreated persons is lower than that reported in the **2015 DHS (7.5% vs 4.5%)**
- The **economic burden** of HCV infection in Egypt has been calculated previously, and it was estimated that the lifetime direct medical cost and indirect cost of disability and early death for **a patient with HCV infection was in excess of \$100,000 (in U.S. dollars)**.
- The **cost of identifying and curing** a patient in the current campaign was **\$131**, which clearly shows the magnitude of cost saving by population screening.

# Hepatitis C virus elimination: laying the foundation for achieving 2030 targets

➤ 2020 should also be remembered as a major milestone on the pathway towards elimination of hepatitis C virus (HCV) as a global public health threat

➤ *The World Health Organization (WHO)'s 2030 global elimination targets* for HCV are 80% of those eligible treated, 90% reduction in incidence of new infections and 65% reduction in liver-related mortality

➤ (October 2018 to April 2019) a remarkable 49.6 million (79.4%) people were screened

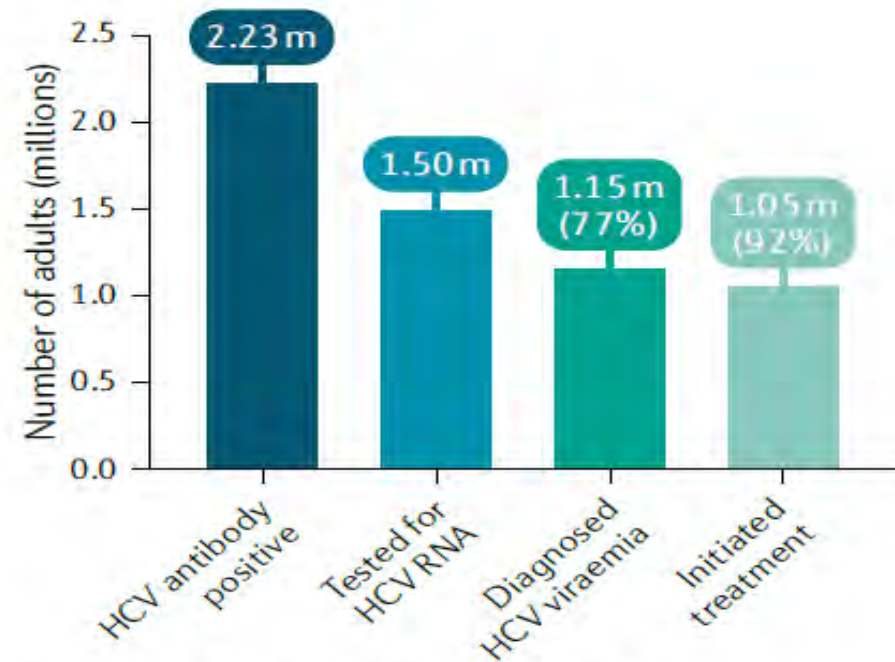
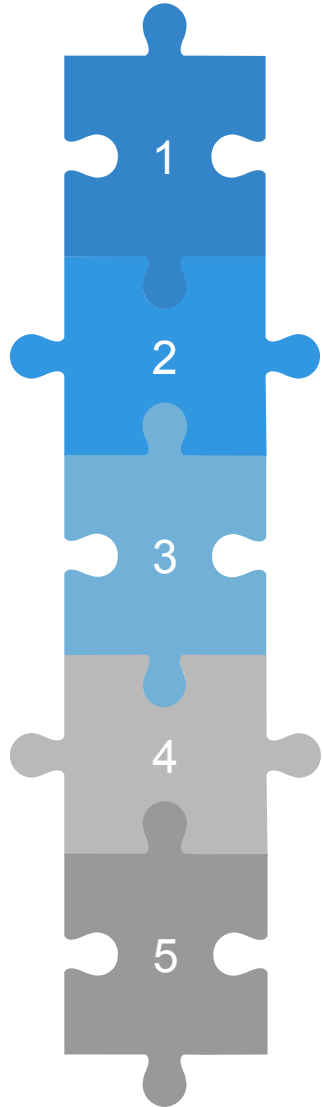


Fig. 1 | **Cascade of HCV care in Egypt.** Oct 2018–Sep 2019. HCV, hepatitis C virus. Data from REF.<sup>6</sup>.

Just a few pieces to complete the puzzle



### **HCC surveillance in treated patients**

- Accordingly, the targeted population includes ~400 thousand cirrhotic patients. (coverage is still around 10%)
- Cirrhotic patients are requested to perform abdominal ultrasonography and alpha-fetoprotein every four months.
- The program includes 92 screening centers, 63 radiology centers, 20 MRI centers, and 20 HCC multidisciplinary clinics.

### **Management of Treatment failures and difficult to treat populations**

- Introduction of sofosbuvir/velpatasvir/ribavirin and SOF combined with velpatasvir and Voxilaprevir

### **Complimentary screening campaign with more emphasis on drop out cases**

- A possible second check for those who were seropositive with HCV PCR negative results.
- Dropouts from the previous screening campaign could be targeted.
- Retesting of a selected sample from those with previously negative HCV antibodies to detect newly acquired HCV cases.

### **Need to have a new demographic health survey in 2021**

### **Prevention and health education campaigns**

# To summarize...

- Egypt succeeded in establishing a useful **model of care** for HCV management in the country with the highest worldwide disease prevalence that was able to **treat about 4 million patients**.
- The sizeable Egyptian program relied on **establishing a network of specialized viral hepatitis treatment** facilities that provide **integrated care** for HCV patients.
- A sizeable nationwide screening program '100 Million Health campaign' was conducted in Egypt over six months **to screen more than 57 million citizens for HCV** serology.
- One of the significant challenges facing Egypt after the successful HCV screening and treatment programs is the need to **maintain this success by making more efforts towards prevention**.



# Discussion and Q&A



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**Please wait. Session 5 will  
begin shortly.**



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# Session 5: What political response / leadership?

**Chairs:**

**Dr Ricardo Baptista-Leite MP, UNITE, Global Network Parliamentarians Network to End Infectious Diseases**

**Dr Manuel Carballo, International Centre for Migration, Health and Development, Switzerland**

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# Mr Cristian-Silviu Buşoi

**Member of the European Parliament  
(MEP), Romania**



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# Mr Kostas Bakoyannis

## Mayor of Athens, Greece



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# Municipality of Athens tackles HCV and viral diseases



CITY OF ATHENS

# The city of Athens in the 21<sup>st</sup> Century

- Multicultural, similar to any other modern European metropolis
  - Total Population: 650.000 people
  - Total Population of Attica: 3.700.000 people
- Expresses the acceptance of diversity and equal recognition of each ethnic group
- Gives an opportunity for new ideas and opinions to rise via collaborations and dialogue
- This multicultural character consists the very essence of democracy



# Challenges and latest data

- 10-year severe financial crisis that drove a dagger to the heart of many groups
- Protracted HIV crisis in the PWID groups during 2010 - 2011
- Create and bridge a wide range of different needs for each social group, while ensuring that the latter is performed smoothly and with respect for the human personality
- This bridging must be implemented by two main entities of each urban center
  - The health systems
  - The local government
- The key to success: holistic interventions from both sides, collaboration, tailor made solutions for each group
- Results from the “ARISTOTLE HCV HIV” program
  - 75% HCV prevalence among PWID
  - 1 out of 4 lives with HIV

National Hepatitis plan





# Municipality of Athens

- At the forefront of defending and addressing these tailor made needs before COVID-19 pandemic
- Main field of actions
  - Harm reduction regarding the use of intravenous or psychoactive substances
  - Eradication of infectious diseases that arise from opioid use
- Main challenges
  - Facilitate the everyday needs of PWID
  - Reduce the infectious diseases to other groups or PWID



# Our actions

- 16<sup>th</sup> of March 2020: Emergency Plan for PWID and marginalized groups against COVID-19
- Temporary Accommodation Hostel “IONIS” for PWID who lack shelter
  - In collaboration with OKANA, KETHEA and KYADA
  - Organizations in the harm reduction field
  - Maximum capacity: 70 people
- Memorandum of Collaboration against HCV | Rapid tests for the Temporary Accommodation Hostel “IONIS”
  - “ARISTOTLE HCV HIV program”
  - Hellenic Liver Patients Association “Prometheus”
  - Association for HIV Positive People “Positive Voice”
  - Multipurpose Homeless Center (Maximum capacity: 400 people)



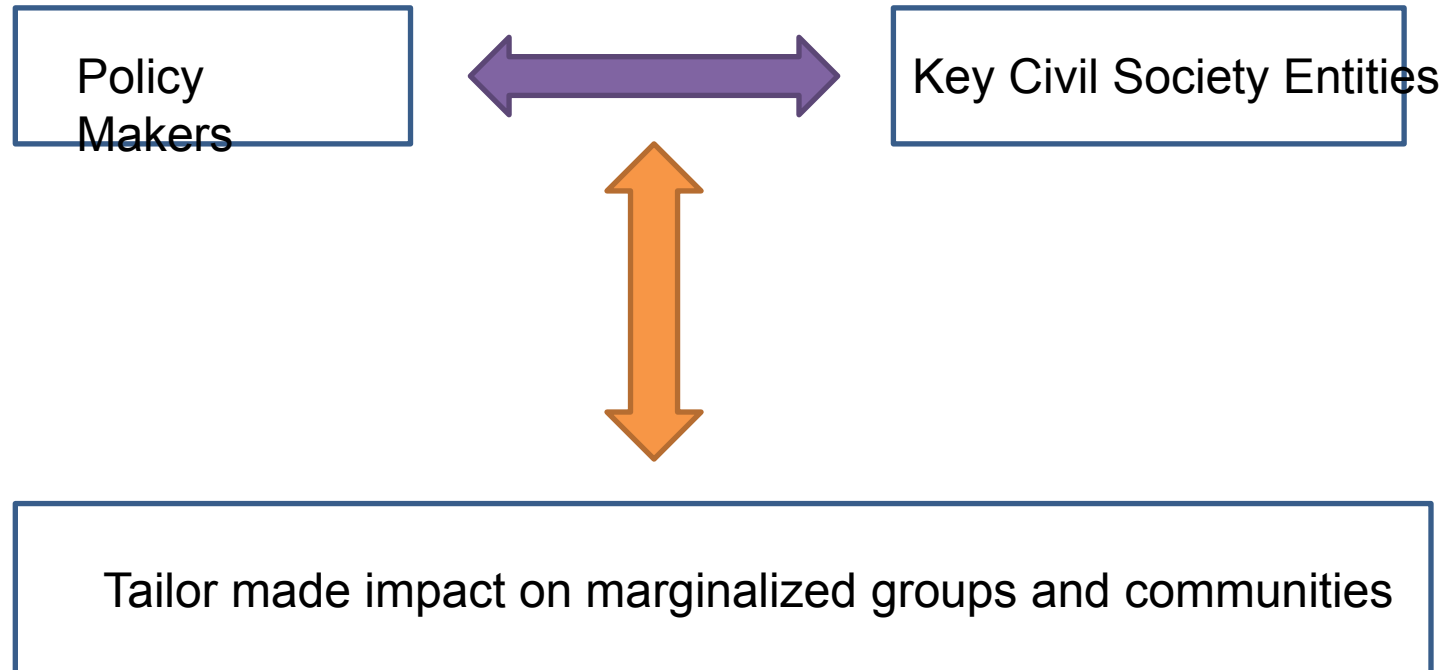
# Our actions

- Auspice in the innovative program “Prevention of Deaths from Opioid Overdose with Naloxone Distribution” for constituting a law of non-prescription in naloxone use.
  - Supported by Partnership of Healthy Cities of Vital Strategies of **Bloomberg Philanthropies** and implemented by:
    - The Hellenic Scientific Research Organization for AIDS and Sexually Transmitted Diseases
    - The Hellenic Liver Patients Association “Prometheus”
    - OKANA and KETHEA
    - Organizations in the harm reduction field
- Participation in the **Fast-Track Cities** Initiative against HCV, HBV, HIV and TB
  - A global partnership between cities and municipalities around the world
- Decisive key pressuring in the creation of a legal framework for Supervised Use Areas
  - Specialized areas where PWID can make safer use under the supervision of experts
- Secured the necessary resources to create new mobile units
  - Streetwork actions
  - Mobile Supervised Use Areas



# The ultimate goal

Facilitate effective communication between



Thank you!



# Mr Aldo Patriciello and Mr Tomislav Sokol

**Member of the European Parliament  
(MEP), Italy (video presentation)  
and MEP, Croatia**

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# Prof Jeffrey Lazarus

## ISGlobal, Barcelona, Spain



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# Panel discussion and Q&A moderated by session chairs



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# Concluding remarks



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# Prof Heiner Wedemeyer

**Co-Chair HepBCPPA and Hannover  
Medical School, Germany**



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# Prof George Papatheodoridis

**Co-chair HepBCPPA and University of Athens Medical School, Greece**



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