Expanding access to hepatitis C prevention, testing, and treatment in prisons:

Recommendations from the **INHSU 2022 Prisons Workshop**

Glasgow, Scotland



Authorship and Acknowledgements

The 2022 workshop upon which this report is based was organized by INHSU Prisons, a Special Interest Group of the International Network on Health and Hepatitis in Substance Users (INHSU), and the Coalition for Global Hepatitis Elimination (CGHE), a program of the Task Force for Global Health. INHSU Prisons and CGHE thank the presenters, "speed geeks," facilitators, and attendees for their participation and support in producing a dynamic and engaging workshop. Presenters in Session 1 included: Sharon Hutchinson, Sarah Larney, and Niklas Luhmann. Speed geeks for Session 2 included: Sofia Bartlett, Chris Byrne, Andrew Lloyd, Tony McClure, Fadi Meroueh, Julia Sheehan, and Yumi Sheehan. Facilitators in Session 3 included: Matthew Akiyama, Joaquin Cabezas, Lee Christensen, Oluwaseun Falade-Nwulia, Kanudeep Kaur, Nadine Kronfli, Andrew Lloyd, and Natasha Martin. CGHE and INHSU Prisons also thank those participants who shared their lived experience.

Following the workshop, this report was authored by the Coalition for Global Hepatitis Elimination and INHSU Prisons with review by workshop facilitators and speakers. Lead authors from CGHE included Lindsey Hiebert and John Ward, with review from Monica Fambrough. Authors from INHSU included the INHSU Prisons Executive Committee: Andrew Lloyd, Yumi Sheehan, Nadine Kronfli, Matthew Akiyama, Nonso Maduka, Julia Sheehan and Joaquin Cabezas, and INHSU staff, including Olivia Dawson.

All photos credited to Conor Ashleigh/INHSU.

Funding

This event was sponsored by AbbVie and Gilead Sciences. Sponsorship is governed by INHSU's Sponsorship Policy, and the sponsors have no control over content, tone, emphasis, allocation of funds or selection of recipients. INHSU or CGHE do not endorse or promote any sponsor's product or services.

Suggested Citation

Coalition for Global Hepatitis Elimination and INHSU Prisons. Expanding access to hepatitis C prevention, testing, and treatment in prisons: Recommendations from the INHSU 2022 Prisons Workshop. Atlanta, United States: The Task Force for Global Health; 2023.

Acronyms

DAAs Direct acting antivirals

DBS Dried blood spot

GFTAM Global Fund for TB, AIDS, and Malaria

GRADE Grading quality of evidence and strength

of recommendations

HCV Hepatitis C virus

HITT High Intensity Test & Treat program

HREC Human research ethics committee

IDU Injection drug use

IRB Institutional review board

MSM Men who have sex with men

NGO Non-governmental organization

NHS National Health Service (United Kingdom)

NSP Needle-syringe exchange program

OAT Opioid agonist therapy

OST Opioid substitution therapy

PWID Persons who inject drugs

REB Research ethics board

RDT Rapid diagnostic test

STIs Sexually transmitted infections

TCTU Tayside Clinical Trials Unit

UNODC United Nations Office on Drugs and Crime

US United States of America

WHO World Health Organization

Table of Contents

EXECUTIVE SUMMARY	4
Policy Barriers and Recommendations	5
Implementation Barriers and Recommendations	6
Financing Barriers and Recommendations	7
Awareness Barriers and Recommendations	8
WORKSHOP ATTENDANCE	9
SESSION 1. LAYING THE GROUNDWORK: WHERE ARE WE NOW?	10
Epidemiology of hepatitis C in incarcerated populations: Do we still need it?	10
Prison health and viral hepatitis elimination: A global perspective	11
Access to hepatitis C testing and treatment services and harm reduction services in prisons across Europe: Models of care	13
Session 1 Question and Answer Session	14
SESSION 2. SPEED-GEEKING	15
Topic 1. Changing political will	15
Topic 2. Ensuring access to HCV diagnostics and testing	16
Topic 3. Promoting optimal models of care and treatment	17
Topic 4. Improving surveillance and monitoring of the care cascade	18
Topic 5. Reducing stigma and tackling the social determinants of health	20
Topic 6. Implementing HCV prevention and harm reduction programs	21
Topic 7. Advancing prison-based research	22
SESSION 3. ADVOCACY NEEDS	23
Case study 1 Implementation: Improving uptake of HCV screening in prisons	24
Case study 2 Financing: No budget for HCV program in prisons exists	25
Case study 3 Implementation: Closing gaps in coverage of HCV screening and treatment	26
Case study 4 Policy: High cost of RNA testing	28
Case study 5 Policy: Lack of treatment access	29
Case study 6 Policy: Delays in specialist consultation for treatment initiation	31
Case study 7 Implementation: Poor HCV confirmation testing coverage	32
Case study 8 Implementation: No system to link to community treatment and care after release	34
REFERENCES	36

Executive Summary



In October 2022, INHSU Prisons and the Coalition for Global Hepatitis Elimination (CGHE), Task Force for Global Health convened a workshop on the strategies for expanding access to hepatitis C virus (HCV) prevention, testing, and treatment in prison settings. The workshop was held as a satellite meeting of the 10th International Conference on Health and Hepatitis Care in Substance Users (INHSU) in Glasgow, Scotland. The workshop highlighted the barriers to care for persons who are incarcerated, created a forum for sharing strategies to improve access to HCV care for persons who are incarcerated across the world and put forward a call to action with recommendations on how to practically overcome barriers to HCV care and accelerate progress toward HCV elimination for those who are incarcerated.

During the workshop, barriers and recommendations to accelerating HCV elimination in prison settings were examined in four areas: 1) Policy, 2) Implementation, 3) Financing, and 4) Awareness. The workshop takeaways are summarized below.

In 2016, the World Health Organization set global goals for elimination of HCV by 2030. Despite signs of progress, with 9.4 million persons treated globally as of 2019 (13% of all persons living with HCV globally) (WHO, 2022), elimination can only be achieved when all persons have equitable access to HCV prevention, testing, and treatment. Persons who are incarcerated experience among the highest burdens of HCV globally, with an anti-HCV prevalence estimated between 13-26% (Larney et al., 2013; Dolan et al., 2016; Moradi et al., 2018; Salari et al., 2022) compared to approximately a 1% prevalence for the general population (WHO, 2022). Persons who are incarcerated should have the right to access HCV services, but they too often face systematic discrimination.





Policy Barriers and Recommendations

1

KEY BARRIER:

Poor surveillance of HCV prevalence/incidence and HCV care services in prison settings

The majority of countries are not rigorously tracking HCV prevalence, incidence, or other key data to understand the epidemiology of HCV in prisons. Therefore, most countries do not have an accurate picture of how many persons are living with HCV infection while incarcerated, **HCV** transmission risks among persons who are incarcerated, or how many persons who are incarcerated have been screened and treated for HCV. Improved data collection via hepatitis surveillance systems, or an addition of hepatitis data elements into integrated disease surveillance systems, are needed to prompt development and guide implementation of prison-based HCV testing and treatment programs.

RECOMMENDATION:

Invest in strong surveillance systems that track the number of HCV infections, persons screened, and persons treated for HCV in prison settings 2

KEY BARRIER:

Lack of HCV screening policies and programs for persons who are incarcerated

When robust prisonbased screening policies and protocols are absent, persons who are incarcerated may never be offered an HCV test. The most effective policy is a "universal opt out" screening approach where HCV testing is routinely offered to all persons arriving in a prison setting. Opt-out testing is optimal when staff are trained in person-centered language and tone to create an inclusive healthcare experience where persons who are incarcerated feel empowered to accept HCV testing and treatment.

RECOMMENDATION:

Adopt routine, opt-out HCV screening policies upon entry to prison settings and invest in person-centered training for staff 3

KEY BARRIER:

Limited access to harm reduction services in prison settings

HCV transmission can be high in prison settings given the closed environment. Few countries have adopted prison needle and syringe programs (NSP), opioid agonist therapy (OAT), or take-home naloxone programs in prisons. Of the countries that have NSP programs, few are prison-based. OAT coverage remains suboptimal at less than 10% among the prison population in most European countries. Continuity of care when entering and leaving prison is another critical issue for those receiving OAT because of the high risk of overdose following release. Limited access to harm reduction services increases the risk of HCV transmission.

RECOMMENDATION:

Expand NSP and OAT within prison settings to reduce transmission of HCV and other blood-borne infections

4

KEY BARRIER:

No accountability for implementing HCV testing and treatment in prisons

There is currently no global target for testing and treatment in prison settings, and most settings lack local or national targets. Setting achievable targets, and monitoring progress against them, has the potential to spur political commitment and encourage governments to expand access. In particular, clear metrics at the local level for HCV screening and treatment initiation can motivate prison staff to encourage screening uptake.

RECOMMENDATION:

Set global, national, and local targets for HCV screening and treatment in prison settings and track progress



Implementation Barriers and Recommendations

5

KEY BARRIER:

Poor linkage to HCV confirmatory testing and treatment for persons who are incarcerated

Unfortunately, even when HCV screening is available in prison settings, gaps prevent persons with positive anti-HCV tests from receiving HCV RNA testing and HCV treatment, as appropriate. These gaps may be caused by limited point-of-care testing options, few trained providers, delays due to turnaround time of results, or a lack of registries and systems to track patients. Strategies to improve progression along the care cascade and reduce the time between steps must be introduced, such as point-of-care screening tests, reflex testing, peer navigation, and rapid treatment initiation following diagnosis. Moreover, to ensure continuity of care, prisons should establish linkage to care programs that refer persons on treatment to community-based treatment centers for those released prior to cure.

RECOMMENDATION:

Implement point-of-care HCV testing, reflex HCV RNA testing, peer navigation programs, rapid treatment initiation initiatives, and linkage to care programs post-release to ensure all persons progress along the cascade of care to cure

6

KEY BARRIER:

Lack of trained staff to implement prison HCV testing and treatment programs in prison settings

Most prison systems do not have access to liver specialists on a routine basis, but other healthcare practitioners, including general practitioners and nurse practitioners, achieve comparable HCV cure rates with high levels of safety. HCV guidelines recommend decentralization of HCV care to include prescribers beyond liver specialists. However, in prison settings, general practitioners and mid-level providers (i.e. nurses, pharmacists) are often not authorized or trained to prescribe HCV treatment. All systems should authorize prescribing to include prescribers beyond specialists and should explore the feasibility of nurse-led treatment programs. Moreover, peer-support programs that engage persons with lived experience can further expand the capacity and effectiveness of screening and awareness initiatives.

RECOMMENDATION:

Expand HCV prescribing beyond specialists in prison settings



Financing Barriers and Recommendations

7

KEY BARRIER:

Limited prison healthcare budgets for HCV prevention, testing, and treatment

Innovative models of financing can mobilize new funding. In Australia, a subscription model approach to DAA funding (the "Netflix" model) was undertaken where persons who were incarcerated were offered treatment alongside persons in the community. Since the overall treatment expenditure was capped the cost per person treated was reduced as more persons were treated. In addition, identifying funding from philanthropic or private sources can facilitate securing matching funding from government.

RECOMMENDATION:

Explore innovative financing approaches to ensure access to HCV treatment in prison settings

8

KEY BARRIER:

HCV treatment not a funding priority for prison officials and policymakers

To overcome hesitancy from prison officials and policymakers, evidence on the cost-effectiveness and future health savings to the prison and overall health system should be combined with an appeal to human rights to make a comprehensive case for a HCV testing and treatment program. This cost-effectiveness data can be established through pilot projects, or modeling studies. Advocacy also has a key role. A person, who is either incarcerated or not, that is unable to access HCV treatment experiences an infringement on their human rights. The denial of life-saving HCV therapy for persons who are incarcerated is unethical, and, depending on local laws or regulations, possibly unlawful.

RECOMMENDATION:

Present economic, public health, human rights, and legal cases to policymakers and prison officials for financing HCV care for persons who are incarcerated







Awareness Barriers and Recommendations

g

KEY BARRIER:

Pervasive HCV-related stigma and discrimination among both persons who are incarcerated and prison staff

Stigma is still pervasive when discussing HCV infection with persons who are incarcerated and prison staff, especially among those with limited HCV knowledge. Stigma can lead to low acceptance of HCV screening, poorer treatment adherence, and transmission. Greater awareness and dialogue through education is needed to address myths and misconceptions in prison settings. Peer navigator programs, such as the Hepatitis C Trust program in the United Kingdom, can be introduced to further improve screening rates and awareness among persons who are incarcerated. Education and training programs for prison-based health professionals and correctional officers should also be implemented to encourage referrals and improve testing and treatment of people who are incarcerated.

RECOMMENDATION:

Address stigma and discrimination through investing in strong patient advocacy, peer navigators, and prison staff education and training

10

KEY BARRIER:

Poor public support for prison health initiatives

The message "prison health is community health" should be amplified. Persons who are incarcerated deserve access to HCV screening and treatment. Moreover, because HCV is an infectious disease, curing HCV in someone who is incarcerated ultimately reduces the prevalence of HCV in the community as well. Countries cannot achieve HCV elimination without eliminating HCV from prison settings.

RECOMMENDATION:

Spread the message that "prison health is community health" and prison-based HCV testing and treatment is a key determinant of national HCV elimination

Workshop Attendance

In October 2022, 58 participants—international researchers, clinicians, community activists, individuals with lived experiences, and other partners—came together in Glasgow, Scotland for a satellite meeting of the 10th International Conference on Health and Hepatitis Care in Substance Users (INHSU). The majority of participants were from Europe, United Kingdom, Canada, the United States, and Australia. About 4% of participants were from the African region and 2% from South Asia. About 27% of attendees were affiliated with academic institutions, 24% with community organizations, 13% with government, 13% with clinical organizations, and 13% with industry. Other affiliations included funding organizations, international NGOs, and WHO.





Session 1. Laying the groundwork: Where are we now?

The first session of this Prisons Workshop aimed to set the stage for following sessions by providing the latest data on the epidemiology, the most current policy guidance, and an update on models of care for HCV in prisons. Presenters on these topics included: Dr. Sarah Larney, Dr. Niklas Luhmann, and Dr. Sharon Hutchinson, respectively. A summary of each talk is provided below.

Epidemiology of hepatitis C in incarcerated populations: Do we still need it?

Speaker: Sarah Larney, University of Montreal, Research Center of the University of Montreal Hospital Center (CRCHUM)

Epidemiological data on HCV in prisons is abundant, but these data often lack nuance, and are repetitive and outdated. Based on systematic reviews, the global anti-HCV prevalence for persons who are incarcerated is between 13-26% (Larney et al., 2013; Dolan et al., 2016; Moradi et al., 2018; Salari et al., 2022) and for persons who inject drugs (PWID) 8-64% (Larney et al., 2013; Dolan et al., 2016; Moradi et al., 2018; Salari et al., 2022). However, studies often lack detailed estimates of HCV prevalence for PWID who inject regularly, occasionally, or are only past injectors. Estimates of HCV prevalence are also not often stratified by age or sex, or for other key populations beyond PWID. The same studies are included in the systematic reviews. Across the board, most current evidence reflects data collected several years ago, which quickly becomes less relevant as the HCV prevalence changes and transmission shifts to new population groups. Published prevalence estimates from prison settings are also usually only for anti-HCV rather than current HCV infection (i.e. positive virologic tests). As anti-HCV is indicative of an exposure to HCV, virologic tests are needed to detect current infection, particularly for persons treated and cured of HCV infection who remain at risk of new HCV infections.

WHAT TYPE OF DATA ARE NEEDED?

- 1. Strong surveillance systems are needed to track prevalence and incidence. Surveillance data supports national planning and guides development of HCV testing and treatment programs. Ideally, these systems should compile data (i.e. case registries) including outcomes for persons with incident HCV infections and persons with current HCV infection, such as virologic cure, disease progression, and mortality. This data should be stratified for key populations (PWID, currently or previously incarcerated) and provide detailed information on injecting practices and other transmission risks.
- Gender dimensions for HCV transmission and access to prevention and care services among populations must be studied. Stratification by sex and/or gender can be complex in surveillance systems and cohort studies, so consistent methodological approaches are needed.
- Data elements for HCV should be integrated into existing strategic information systems (i.e. HIV) to enhance HCV-related epidemiologic data for key populations, such as amongst men who have sex with men (MSM).
- 4. Expanded data regarding social determinants of health (e.g., race ethnicity, homelessness) are needed. These data will improve our understanding of intersections with injecting drug use and differing impacts of treatment on community prevalence and incidence.

5. National and sub-national data on custodial parameters will enhance design of HCV testing and treatment programs. These parameters include unsentenced (remandees) versus sentenced incarcerated populations, anticipated duration of incarceration, and the expected length of parole after release from incarceration.

FUTURE GOALS:

- The ultimate goal is to establish national prison-based blood-borne surveillance systems. To share lessons learned, national systems could ultimately forward data into an international system creating a repository of harmonized data
- National systems can set prison-specific targets for HCV elimination. "Because what gets measured, gets done"

Prison health and viral hepatitis elimination: A global perspective

Speaker: Niklas Luhmann, Technical Officer, World Health Organization- Switzerland

In 2015, WHO established goals for the elimination of HBV and HCV as public health threats by 2030. The latest WHO Global Progress Report from 2021 included new estimates on the burden of HBV and HCV, estimating there are 296 million persons living with chronic HBV and 58 million persons living with chronic or current HCV. Moreover, in 2019 there were 3.0 million new HBV and HCV infections, and 1.1 million HBV and HCV deaths. Only 21% of persons living with chronic HCV were estimated to have been diagnosed.

In 2022, WHO released a new global strategy, Global health sector strategies on, respectively, HIV, viral hepatitis, and sexually transmitted infections for the period 2022-2030 (GHSS) (WHO, 2022b). The updated strategy is person-centered, addressing unique priorities for each disease area and taking a shared approach towards strengthening health and community systems. The strategy responds to a swiftly changing health and development context and emphasizes the need to eliminate stigma, discrimination, and other structural barriers.

The new GHSS set updated targets for viral hepatitis elimination, including the achievement of certain rates of HCV infections and HCV-related deaths annually for 2025 and 2030 and the rate of new HCV infections among persons who inject drugs for 2025 and 2030. Notably, there are no global targets for HCV infection among persons who are incarcerated.

WHO has released new guidance documents in recent years. WHO published the *Interim guidance for country validation of viral hepatitis elimination* in 2021 (WHO, 2021). This guidance includes the previously mentioned target of less than 2 new infections per 100 PWID as one of the key indicators for achievement of HCV elimination. In developing this guidance, WHO heard from some countries that it might be feasible to validate elimination targets in prisons given the confined sampling frame, but establishing baseline estimates to compare over time has proved challenging.

Another new policy is the <u>Consolidated guidelines on HIV, viral hepatitis, and STIs prevention, diagnosis, treatment, and care for key populations</u> (WHO, 2022a). These guidelines emphasize the importance of enabling interventions, specifically: 1) removing punitive laws; 2) reducing stigma; 3) enabling community empowerment, especially persons with lived experience; and 4) addressing violence.

The WHO guidance for prison health under the framework of the *Consolidated guidelines on HIV, viral hepatitis, and STIs prevention, diagnosis, treatment, and care for key populations* (WHO, 2022a) emphasizes harm reduction, HBV vaccination, prevention of vertical transmission, HBV and HCV testing, and HBV and HCV treatment as essential interventions in the prison setting. New recommendations in this guidance include:

- Persons at ongoing risk and with a history of treatment-induced or spontaneous clearance of HCV infection may be offered 3-6-monthly testing for presence of HCV viremia. The recommendation promotes regular testing for previously infected individuals to detect re-infection. Testing should be offered alongside prevention services that are evidencebased and reduce transmission risks, including access to HCV treatment.
- 2. Pan-genotypic therapies for HCV should be offered immediately to persons with recently acquired HCV infection and who are at ongoing risk.
- Peer navigators are recommended to support persons from key populations to start HIV, viral hepatitis or STI treatment, and to remain in care. Peer navigators require adequate remuneration, recognition, training, and other support to fulfill their role.

The Compendium of good practices in the health sector response to viral hepatitis in the WHO European Region highlights lessons learned from European countries such as Spain, Greece, and Luxembourg with established HCV prevention programs for PWID and persons who are incarcerated (World Health Organization Regional Office for Europe, 2020).

The Global Fund for TB, AIDS, and Malaria (GFTAM) recently released *New guidance on inclusion of hepatitis funding requests in country applications* (The Global Fund, 2022a). These changes now include harm reduction as a "program essential" for applicants—all applicants must describe the status of progress in implementing harm reduction interventions, and certain countries must articulate a plan to implement harm reduction in their applications. Harm reduction interventions include:

- Needle and syringe programs
- Opioid substitution therapy (OST)
- Overdose prevention/response (e.g. naloxone)
- Other WHO recommended services:
 - Hepatitis B vaccination
 - HBV and HCV screening, diagnosis, and treatment

There is now a <u>Special module on harm reduction in prisons and other closed settings</u> to help applicants plan for and scale up effective HIV and HCV programming for persons who use drugs, particularly those who inject drugs (The Global Fund, 2022b).

There is also instruction to expand coverage of combination HIV prevention for key populations and their sexual partners in all epidemic settings:

- Remove human rights- and gender-related barriers to HIV services
- Provide HIV, HBV, HCV and STI testing and treatment in a manner that is voluntary, confidential, and links people who use drugs to services that are acceptable, accessible (including affordable), of adequate quality, and easy to start
- Understand the HIV and related needs of people who use drugs, including through bio-behavioral surveillance or rapid assessment to determine which people are at highest risk based on their injecting and sexual practices
- Design a mix of harm reduction interventions that strengthen each other, including in prisons and other closed settings
- Sustain services by creating mechanisms and providing national/municipal funding for service continuation during and after the Global Fund grant

Access to hepatitis C testing and treatment services and harm reduction services in prisons across Europe: Models of care

Speaker: Sharon Hutchinson, Glasgow Caledonian University, Public Health Scotland, United Kingdom

BACKGROUND ON EUROPEAN PRISONS:

Of the 11 million persons in prisons worldwide, 1.5 million persons are in the WHO European region. There are 2,000 prison establishments in EU counties, Norway, Turkey, and the United Kingdom. Women represent only 5% of the incarcerated population. The main offenses are theft/ robbery (32%), drug offenses (18%), and homicide (12%). Monitoring data are patchy, which makes it difficult to draw comparisons between countries (EMCDDA, 2022). A systematic review of studies conducted in 12 countries showed that 60% of persons entering prisons had a history of illicit drug use (6-48% history of injection drug use compared to less than 1% of the general population; van de Baan et al., 2021). In another review, the prevalence of HCV among imprisoned persons who inject drugs was found to be high or very high, ranging from 8% to 95% (Dolan et al., 2019).

COVERAGE OF INTERVENTIONS IN EUROPEAN PRISONS:

In most countries, prevention and treatment of drugrelated infectious diseases are available in prison, as a matter of policy, along with opioid substitution treatment (OST) and counseling, information, training, and education. Very few countries have needle and syringe programs (NSP), programs for take-home naloxone, or peer interventions. Luxembourg is one of the few countries with an NSP program in prisons. Most countries in Europe provide OST to less than 10% of the prison population which is inadequate coverage. Continuity of care when entering and leaving prison is a critical issue for those receiving OST because of the high risks of overdose and of HCV transmission when treatment is disrupted (Stone, 2018). For HCV testing and treatment, data are scant with only a few countries reporting on coverage of testing and treatment in prisons. Portugal, Spain, and Sweden have high to full coverage of HCV testing, with Spain between 61-95% coverage and Portugal and Spain at greater than 95%. Belgium, Czechia, Hungary, and Slovenia have high to full coverage of HCV treatment.

CASE STUDIES:

Dr. Hutchinson spotlighted a few examples of successful European HCV prison programs:

- Catalonia, Spain: There are 9 prisons housing 14,000 individuals. The prevalence of anti-HCV is estimated at 40%. Key features of the prison HCV program include: universal screening at admission (84% uptake); rapid HCV treatment and for re-infection; HCV RNA testing twice per year after SVR; harm reduction (OST and NSP); liaison nurses coordinating and supporting treatment after release; and established epidemiological surveillance. Since the initiation of the program, the prevalence of HCV viremia declined from about ~14% in 2014 to 1.6% in 2019 (Marco A et al., 2019; WHO Europe, 2020).
- England: Key features of the prison HCV testing and treatment program include universal opt-out testing implemented upon entry, mass screening, and peer education and navigation. The High Intensity Test & Treat (HITT) program was started in 2019 to ensure every person who is incarcerated receives an HCV test. Those found to have chronic HCV are fast tracked onto treatment within two weeks. Peer involvement is crucial to every stage of the program. All prisons are visited before the HITT program is introduced, and staff are educated on the purpose and operationalization of HITT. The choice of screening method (either dried blood spot or point-of-care) is flexible. In some cases, incentives were also used to encourage participation. To date, 40% of the prisons have been engaged, with 90% testing uptake and 90% of persons with current HCV infection receiving or completing treatment in those prisons.

- Luxembourg: There are 2 prisons in the country with about 700 persons who are incarcerated. The key features of this initiative are nurse-led programs, including nurse-supervised safe tattooing rooms and nurse-coordinated DAA treatment. Luxembourg is one the few countries with harm reduction services in prisons. In addition, they screen all individuals for HCV on admission (>95% uptake) (WHO Europe, 2020).
- Scotland: Scale-up of HCV treatment is part of both national and local coordinated approaches for HCV elimination. At the national level, nurses engage persons in opt-out testing at admission at all prisons. Within the National Health Service (NHS) Tayside region, 76% of PWID living with HCV had been treated by early 2020. At the time of the survey, 36% were treated in the most recent 6 months and 40% prior. Moreover, 72% were treated in the community and 11-12% in prison settings. This scale-up of DAAs in prisons and other community testing has led to a 70% reduction in the anti-HCV prevalence among PWID. One further need identified is regular RNA testing because the risk of HCV reinfection is 3-times higher in the prison setting compared to the community setting.

CONCLUSIONS:

- Monitoring HCV infection and intervention coverage in prisons is central to national surveillance and elimination efforts and needs to be vastly improved across Europe
- Evidence from a number of European countries demonstrate it is feasible to rapidly scale-up DAA treatment among those in prison. Successful strategies to date have included: (i) universal testing (typically opt-out on admission involving DBS or POC), (ii) treatment facilitated by nurses on-site (and on release into the community), (iii) access to harm reduction services (OAT and NSP), and (iv) peer involvement at all stages
- Further, a coordinated program of testing, treatment, and harm reduction across both prisons and other community settings is key to achieving and maintaining HCV elimination among the population of persons who inject drugs

Session 1 Question and Answer Session

Audience questions to the speakers from Session 1 are summarized below.

- Q: How different is the context of HCV transmission between PWID in prisons vs PWID in community?
- A: We can use data from the prison setting to understand what is going on in the community. Differences can depend on how criminalized drug use is. In Canada, during COVID-19, many persons were released from prison. In Australia, very few PWID in prison report using NSP in the community while rates of NSP use are overall high, suggesting PWID in prison settings may be more marginalized.
- Q: Why are imprisonment rates still high in Portugal where decriminalization of drug use is in place?
- **A:** High rates could depend on the threshold for criminalization—'possession' may be decriminalized while 'dealing' may not yet be decriminalized.
- Q: Given the dearth of data on incidence of HCV in prisons, is it possible to develop guidance for standard, pragmatic suggestions on how to systematically collect HCV incidence data?
- **A:** This is an important issue for Ministries of Health, academics, and WHO to explore in the future as incidence reduction is a WHO elimination target, and it is clear in many countries that the prisons are a key venue for HCV transmission.

Session 2. Speed-geeking

"Speed-geeking" is a high speed, interactive, knowledge sharing activity. For this activity, attendees were placed at one of seven tables. 'Geeks' were selected prior to the workshop to provide a 5-minute snapshot of their topic of expertise and then to lead a 5-minute interactive discussion. **The goal of this session was to expose attendees to a wide range of initiatives related to HCV testing and treatment services in prisons.** Topics were selected to align with the challenges and recommendations from the recent *Lancet Gastroenterology Hepatology* review, "Hepatitis C elimination among people incarcerated in prisons: challenges and recommendations for action within a health systems framework."

TOPIC 1

Changing political will

Geek: Prof. Andrew Lloyd, INHSU Prisons Chair, Kirby Institute UNSW Sydney, Australia



KEY TAKEAWAYS:

Changing political will—the case of ensuring universal access to DAAs for persons who are incarcerated in Australia:

- Recognition of enabling factors: pre-existing elements that accelerated access included the universal healthcare system (Medicare) (although persons who are incarcerated lose access); partnerships, such as community-academia-health services, national HCV strategy designating persons who are incarcerated as a priority population, and a strong evidence base for high HCV prevalence and incidence amongst persons who are incarcerated
- Advocacy: advocacy by partners with a strong public health track record was a key factor
- Innovative financing: an opportunity with the 'Netflix' funding model for DAAs created a unique opening (committed 5 year purchase; discounted cost; cap on total cost after which no additional cost per payment, providing a strong incentive to maximize treatment numbers)

OVERVIEW:

Professor Andrew Lloyd is a physician-researcher who has led hepatitis service development in the Australian prisons for more than two decades. He discussed his experience in working with government officials to change their stance on a particular policy issue. In 2016, Australia negotiated a deal when DAAs were first introduced into the government funded pharmaceutical supply system. However, because prison healthcare is not funded by the Commonwealth-funded socialized health system, the cost of the healthcare is then absorbed by the states.

The issue at hand was to ensure persons who are incarcerated were included in Commonwealth-funded DAA access. A coalition of partners working in prisons heard that the government was going to create a deal for DAA purchase, which has become known as a 'Netflix' or subscription model, where there is guaranteed purchase accompanied by a cap on how much the government pays pharmaceutical companies for an unlimited supply of DAAs. This arrangement meant that the more persons treated, the lower the effective costs of treating each patient for HCV. The basis of this model was used to convince the government that inclusion of provision of free DAAs to persons who are incarcerated would overall lower the cost per patient treated by increasing national treatment numbers. Supporting evidence presented to the government included the high HCV incidence (10% per annum) and chronic HCV prevalence (20%) in prisons, and that there were existing hepatitis services in every prison to build on. Even though providing free treatment to persons in prison may not have been the most politically attractive initiative, these arguments resonated, and the government agreed to move forward with providing DAAs to persons who are incarcerated. Key contributing factors to the successful outcome were mature partnerships between healthcare organizations, academia, and civil society to see through negotiations with government.

These partnerships were established during the HIV era. As a result of this breakthrough, Australia treated three times the anticipated number in the first three years. Now, almost half of all HCV treatments initiated across Australia occur in the prisons.

EXAMPLES OF DISCUSSION WITH WORKSHOP PARTICIPANTS:

- Another example of changing political will occurred in Portugal, where self-advocacy using the call to action "don't let us die" led Portugal to make an agreement with pharmaceutical companies to provide DAAs for free in prisons
- In England, in 2016/17, where you live determined if you had access to DAAs. After an advocacy campaign, DAAs were made available everywhere
- In meeting with the Health Minister in Australia, representatives from national PWID organizations told stories about the feelings of inevitability of acquiring HCV infection as a PWID when in prison, which helped strike a chord with the Minister
- One of largest weaknesses in the HCV sector overall is that there is limited patient advocacy compared to conditions like HIV

TOPIC 2

Ensuring access to HCV diagnostics and testing

Geek: Chris Byrne, Tayside Clinical Trials Unit (TCTU), Ninewells Hospital and Medical School, Dundee, Scotland



KEY TAKEAWAYS:

- Choice of testing: Choice of testing method was seen as helpful to implementing HCV screening in prison settings (e.g. conventional phlebotomy or finger-stick sampling for RNA; conventional phlebotomy or oral swabs for antibody screening) to make screening equitable (e.g. some individuals may not want conventional phlebotomy due to concerns regarding relapse, choice means they can access testing which would otherwise not have been feasible)
- Peer engagement: involving peers was valuable both in developing awareness materials/ literature and wider awareness raising activities. Peers can also play important role in conducting testing as part of high-intensity testing initiatives, where this is feasible
- Incentives: these can increase engagement with testing. Simple incentives, such as phone credits or food items (e.g. chocolate bar) are cheap and work well to increase testing rates in the experience of some workshop participants

OVERVIEW:

Dr. Chris Byrne is a clinical trials coordinator and researcher working in the prisons in Scotland. He discussed how the research team has evaluated different models of HCV treatment in the prisons in Tayside, Scotland. HCV testing and treatment used to be run by the prison service with on-site health assessments that started with a hepatologist consultation and phlebotomy. Over time, phlebotomy transitioned to dried blood spot (DBS) testing and then to rapid diagnostic testing (RDT) and reflex venous blood draws for lab-based RNA testing. Eventually the program switched to rapid RNA testing because of the high anti-HCV prevalence as more patients were cured (making antibody screening less efficient). Each of these models was led by nurses and healthcare assistants. Rapid RNA testing compared to DBS/traditional phlebotomy led to higher treatment rates but was more expensive. Cost-effectiveness results have not yet been finalized. There were some challenges implementing rapid RNA testing with Cepheid machines because interpreting results can be quite complicated and there were sometimes challenges with sample acquisition. Overall, the optimal model of care has not vet been determined in Tayside. Healthcare staff prefer to package blood and send off for testing while patients like getting results on the spot. The key questions to answer in each setting are: who needs to lead on testing and who needs to lead on prescribing?

EXAMPLES OF DISCUSSION WITH WORKSHOP PARTICIPANTS:

- In England: led by healthcare teams, DBS testing is performed at reception. Peer navigators also perform testing with DBS on the wings
- In Scotland: peer navigators also perform HCV tests, which can reduce stigma. Cepheid machines are used by nurses; treatment starts within 7 days
- A challenge in Tayside is that healthcare staff have to use runners (prison staff) to go over to the residential side of the prison to request persons who are incarcerated visit the health clinic. Runners tell persons they are going to the "gastro clinic," which can cause confusion and non-attendance
- In using peer navigators, there has not been a challenge in England to date with a sense of hierarchy between peers (who are external) and persons who are still incarcerated
- In New York City, phlebotomy is still being used for anti-HCV testing. Testing recommendations were previously based on risk factors and birth cohort. Now there is universal screening, but they are still doing phlebotomy. This is a challenge because persons who inject drugs often have damaged veins. Runners are required to bring people to the prison clinic, which can also be a challenge

TOPIC 3

Promoting optimal models of care and treatment

Geek: Julia Sheehan, Hepatitis C Trust, United Kingdom



KEY TAKEAWAYS:

- **Collaboration:** strong working relationships with partnership organizations and key stakeholders is critical to effective programs. Collaborative working is key
- Point-of-care testing: improving access to point-of-care testing and fibroscan in prisons to increase uptake and shorten pathways, reducing patients that are lost upon release or with poor venous access
- **Rapid treatment initiation:** seizing opportunities to test and treat whilst incarcerated regardless of the length of sentence is of high importance to reach elimination

OVERVIEW:

Julia Sheehan is the Women's Criminal Justice Manager with the Hepatitis C Trust. She oversees the peer program in the 12 female prisons in England. She discussed the HCV testing and treatment model of care in the largest female prison in England (average stay = 7 days). In this prison, when a woman comes in, she is offered an HCV test at reception along with HIV, syphilis, and HBV screening. Some women say yes immediately, but others do not. If someone refuses at reception, it is offered again at the next reception. If a woman says no a second time, then Julia engages with them and discusses their fears. Julia uses her lived experience and often has more time than nurses do to talk through any concerns.

In any of these scenarios, HCV screening is performed via DBS. Cepheid machines are used as first line for HCV RNA testing, meaning that everyone is offered this alongside DBS at reception. If there is a positive result, a woman is referred to the local hospital. Specialists come every Monday for clinic, where they can conduct a fibroscan. The goal is to begin HCV treatment within 2 days.

This model requires buy-in from all partner organizations. Support is needed from officers, prison healthcare staff, hospital staff, and peer leads. There are also prison volunteer peers in every prison that offer support. The peer leads also work to connect HCV treatment to any persons who are released in the community, ensuring continuity of care.

EXAMPLE OF DISCUSSION WITH WORKSHOP PARTICIPANTS:

A participant asked whether it is hard to recruit peers. Julia explained it can be difficult to integrate people with lived experience of prison into the program, as their national clearance can be delayed. Special clearance with a risk assessment is conducted by the governor every 12 months. A peer lead would need clearance from the governor of each prison they cover (peer leads cover multiple prisons). Every prison works slightly differently, and some are more challenging in the length of time this process can take

TOPIC 4

Improving surveillance and monitoring of the care cascade

Geek: Yumi Sheehan, INHSU Prisons Executive Committee member; Kirby Institute, UNSW Sydney, Australia



KEY TAKEAWAYS:

- Point-of-care testing: utilizing an entirely point-of-care testing strategy allowed for same visit (or day) provision of results to participants, which has been extremely well received by participants
- Partnerships with administration: established relationships with key stakeholders from both justice health and corrections in each jurisdiction (state) facilitated initial conversations and gained high-level support for the study. Getting buy-in from the prison governor and building rapport with on-the-ground staff (in particular, correctional officers) was critical to successful implementation
- Flexible planning: having a flexible and adaptable implementation plan is key to ongoing success in a challenging and constantly changing environment

OVERVIEW:

Yumi Sheehan is the coordinator of the Australian National Prisons Hepatitis Network and a PhD candidate at the Kirby Institute studying prison-based HCV interventions. She spoke about a project she is coordinating to improve the data available to track progress towards HCV elimination in Australia in the prison sector. WHO has established targets for elimination, but measuring national progress requires reliable surveillance data. Currently, there is not a country globally with a reliable surveillance system for prisons. In Australian prison settings, data must be representative of the jurisdiction (state) level, as the prisons are run by the states, but existing prevalence data are available only within some states, are patchy, and often outdated.

The Australian Hepatitis and Risk survey in Prisons (AusHep) is a national prisons surveillance study that aims to bring Australian prisons into modern surveillance systems for blood borne virus infections (HBV, HCV, and HIV). Australia has been doing quite well towards HCV elimination, but progress has stalled somewhat, and the prisons are key to restoring the progress. Previous surveillance studies in prisons in Australia have only looked at prevalence amongst those newly incarcerated. Data was not representative of all states and was inadequately representative of the entire prison population. AusHep is a nationally representative study which is currently in progress and that will include random sampling of 2500 individuals at 25 representative prisons (out of 110). The study is being implemented through point-ofcare BBV testing and interview-style questionnaires on a tablet, administered by research nurses. The survey is recording demographics, incarceration data, risk behavior, previous history of treatment and engagement with the care cascade in prisons. The goal is to conduct this surveillance study bi-annually.

- A participant asked who is funding the study. Yumi answered that the study is funded by the Commonwealth Department of Health, as the individual prison jurisdictions (i.e. the states) generally don't want, or can't afford, to pay for this type of data collection
- The greatest challenge is getting everyone on board and the number of stakeholders involved, including the Commonwealth Department of Health, and the statebased Departments of Justice Health and Corrections. There are at least different 8 organizational systems with more than one per state. Additionally, there is prison-level buy-in, which requires negotiation and flexibility. The Australian National Prisons Hepatitis Network (NPHN) helps facilitate initial conversations
- In the future, the goal would be to have all the systems share data and information. Ideally, the criminal and court systems would connect with the prison health data systems. If a person were to transfer to another prison, their information would accompany them
- This is a research project but will help establish sustainable surveillance systems
- Another questioner asked why participants were motivated to participate. Yumi responded that as not all persons were routinely screened upon arrival, they welcomed the opportunity to get tested. In addition, since the surveillance study is research, a \$10 incentive is provided

TOPIC 5

Reducing stigma and tackling the social determinants of health

Geek: Tony McClure, The Hepatitis C Trust, United Kingdom



KEY TAKEAWAYS:

- Language and tone: when offering HCV testing to persons who are incarcerated, language and tone are critical factors to encouraging uptake
- Empowering individuals: persons must feel empowered to say yes in accepting HCV testing, and not coerced
- **Second chances:** when someone declines testing, developing strategies for peers to offer testing a second time can increase uptake rates

OVERVIEW:

Tony McClure is a Peer Volunteer Coordinator for the London Male Prison Estate with the Hepatitis C Trust. His experience has taught him the importance of thinking about language and tone when offering someone testing for HCV. He has observed some prison staff members have preconceived notions about people who are in prison. Staff training is needed on how to communicate better. People in prison don't get to say 'no' often, so testing may be the one thing they can choose to say 'no' to. Empowering persons to choose to say 'yes' is the key to the success of a prison testing program.

In English prisons, offering testing is mandatory. However, in some prisons, 50% of people offered a test decline testing. Tony often receives emails from clinicians and case workers saying that they believe clients might have an IDU history and be at higher risk of HCV infection. When this happens, Tony speaks with them and encourages them to get tested. Tony aims to have these conversations quickly since some people might not be in prison for long. This approach emphasizes that a second opportunity to offer testing can be successful. As further evidence of the success of the secondary approach program, at one prison in London, Tony is emailed immediately when persons who are incarcerated refuse and there is currently 96% testing coverage.

- When persons are incarcerated and the first thing they are asked to do is medical, it can be expected that they will be hesitant or not interested. Levels of trust might be poor. Building trust is about being open and sharing lived experience. One way that Tony builds trust is by letting the person know that he is employed by a charity and not the prison. He also shares with them that he loves what he is doing
- First impressions in prison are very important. Nurses' and other staff interactions with persons arriving to prison may not be as welcoming as you would hope. Sometimes Hepatitis C Trust will pull staff aside to encourage them to change their tone
- If a person refuses testing, they may also refuse other healthcare needs

TOPIC 6

Implementing HCV prevention and harm reduction programs

Geek: Dr. Fadi Meroueh, Unite Sanitaire de la Maison d'Arrêt de Villeneuve-les-Maguelone USMAV



KEY TAKEAWAYS:

- Harm reduction is healthcare: it is feasible to provide condoms, safe injection kits, running a syringe exchange program, and distributing clean smoking and sniffing equipment in prisons
- **Prison health is public health:** people who are incarcerated should not be excluded from care. They should receive the same care as they would in the community

OVERVIEW:

Dr. Fadi Meroueh is a general practitioner who has worked in the prisons in France for 25 years and with PWID for 30 years. He has supported HCV programs in prisons since 2003. In France, health care in prisons falls under the Ministry of Health rather than Corrections, who are not always supportive of prison-based harm reduction and hepatitis services. He is in the prison clinic every day and has introduced a diverse array of prevention initiatives, including offering condoms, safe injection kits, running a syringe exchange program, and distributing clean smoking and sniffing equipment. He has ensured that these services are provided to all patients. In addition, the prison also now has naloxone and the prison officers have been trained on using naloxone. Over 400-500 needles are distributed per year. Dr. Meroueh is motivated by ensuring that there is equivalence of care inside and outside of prison. This "sanitary" program is in place despite the opposition of the prison administration. He suggests that caregivers should have independence in guiding the implementation of health programs, and ideally healthcare decision-making would be separate from the prison administration.

- In Portugal, the government covers a similar set of services. Some NGOs will purchase crack pipes to distribute independently
- Officers do not really engage with these prevention activities
- A broader global movement is needed to expand access to clean equipment in all prisons



TOPIC 7

Advancing prison-based research

Geek: Dr. Sofia Bartlett, British Columbia Centre for Disease Control, Provincial Health Service Authority, BC, Canada



KEY TAKEAWAYS:

- Participation and representation is key: participants in the discussed prison project universally recognized the benefits of including people with lived experience of incarceration in all stages of prison-based research
- Bureaucracy is greatest barrier:
 - Human research ethics boards or committees (REB / HRECs or IRBs) often automatically determine that research being conducted in prisons is "high risk", due to people who are incarcerated being deemed a "vulnerable" group. The organisations often restrict how much engagement/participation can feasibly be employed in a study with "vulnerable" groups. More representation of people with lived experience of incarceration on REB/HREC's may help address this, or at least ensure they have more balanced decisions about perceived risks from prison-based research
 - There are some systemic barriers inherent to prisons, such as policies that prohibit researchers to come into prisons or access people who are incarcerated, or that prohibit compensating people who are incarcerated for their contributions to research
- Advocacy and sharing of strategies can be used to overcome these barriers to increase implementation of engagement or participatory methods in prison-based research

OVERVIEW:

Dr. Sofia Bartlett is a post-doctoral researcher focused on infectious diseases epidemiology. She discussed two opportunities to advance participatory research methods and engagement in prison settings in British Columbia, Canada. The inclusion of participants in research design supported the eventual translation of research into practice.

The first project example was a COVID-19 survey in 2021. Before the survey protocol went to the ethics review process, the research team hosted a focus group of persons currently incarcerated to advise on the methodology. The participants were paid as consultants for their time, not as 'study subjects', which avoided this portion needing ethical approval. The focus group illuminated how COVID-19 guidance was being interpreted differently from what was intended on the ground. As a result, the survey questions would not have made sense (i.e. do you have access to handwashing?). When the recruitment for the survey eventually got underway, there was very high participation.

The second example was a project that launched STI and blood-borne infection (HIV, HCV, HBV) testing guidelines in British Columbia correctional settings. The guidelines were co-designed with persons who were incarcerated, healthcare staff, and correctional staff. For this process, surveys and workshops with stakeholders were held. First,

participants helped identify needs for the guidelines. The possible models of care were then created. These options were then presented back to those participated in the codesign process. The models were changed until consensus was found. This approach led to strong buy-in for the final guidelines, because the process created opportunities for persons to feel like they were being heard. Persons from all groups mentioned it was the first time they felt being heard in decision-making that would ultimately affect their lives.

- The Hepatitis C Trust asked peer navigators about how to excite persons who are incarcerated for World Hepatitis Day. One person designed a toothbrush with the Hepatitis C Trust phone number on it. This was secondary education on how HCV can be spread through sharing toothbrushes. There was also a contest to rewrite the lyrics to a song to spread awareness about HCV
- In British Columbia, Canada, a competition was also held to name a prison activity book. A comic strip was developed based on suggestions from people on how to overcome fear of needles. Persons also assisted in redesigning an educational pamphlet as playing cards that were more convenient to carry and share

Session 3. Advocacy needs

The objectives of this last session were:

- To identify advocacy solutions to particular challenges inhibiting access to HCV prevention, screening, and treatment services in prison settings; and
- To share advocacy ideas across partners with diverse experience from varying country contexts.

Facilitators presented brief case studies related to roadblocks in policy, financing, implementation, or general awareness to scaling up access to HCV prevention, testing, or treatment services in prisons. Facilitators led a group discussion on possible advocacy strategies to unlock action, including policy change, behavior change, or other types of buy-in. Facilitators or other appointed scribes captured key discussion points on the provided worksheet.

QUESTIONS DISCUSSED IN EACH GROUP INCLUDED:

- What are greatest enabling factors and roadblocks associated with addressing this need?
- Is a policy change needed to address this issue?
- Are there lessons learned from other countries that could be applied here?
- Is public or policymaker awareness on this issue important? If so, what are possible avenues to improve this?
- What is a compelling message that will capture the attention of key stakeholders to overcome this challenge (research data, personal stories)?
- Are they any stakeholders that are not currently engaged but should be?
- What funding is needed? Where could it come from?
- What key data would help drive acceptance/policy change? If the data are not available, how could it be produced?
- What actions or platforms could target the decision-makers (i.e. public demonstrations, letter writing, lobbying, editorials, academic papers, etc.)?
- What is a realistic timeline for addressing this need? Are there key dates or cyclical processes to be aware of?
- How can international or regional partners support this need?
- Once implemented, how can the impact of this change be monitored?

The summaries of case study discussions are highlighted below. A brief introduction to the case study is presented, followed by key discussion points raised by each discussion group brainstorming strategies and opportunities for addressing each advocacy challenge.



CASE STUDY 1

Implementation: Improving uptake of HCV screening in prisons

KEY ISSUE

Opt-in HCV testing has been the official policy for over 5 years. Unfortunately, this policy is not widely implemented by prison healthcare staff and uptake among persons who are incarcerated remains poor

HYPOTHETICAL SETTING

- High-income country
- The prevalence of HCV among persons who are incarcerated is significantly higher than the general population
- HCV testing and treatment is available in the prison setting
- The current HCV screening policy is opt-in testing where persons are made aware HCV screening is available but are only screened if explicitly requested
- Treatment is provided on-site for persons who test positive

Discussion on strategies to address this issue

ROADBLOCKS ASSOCIATED WITH ADDRESSING THIS NEED

- De-prioritization of HCV testing among healthcare staff and their competing priorities
- No clear HCV screening targets motivating staff
- Poor training of healthcare staff on testing protocols
- Low awareness of HCV within the prison among persons who are incarcerated
- Community organizations not allowed in the prison

KEY ENABLING FACTORS ASSOCIATED WITH ADDRESSING THIS NEED

- Training of persons conducting screening on how to ask "opt-out" question in an affirming way
- Selection of the individual(s) responsible for screening task-shifting to non-medical staff enables more capacity and often makes accepting HCV screening more approachable

LESSONS LEARNED FROM OTHER COUNTRIES

Micro-elimination in English prisons was achieved through engaging peer navigators and offering secondary opportunities for offering HCV screening after reception

POLICY CHANGES TO ADVOCATE FOR

- Set HCV screening as a routine service at time of entry and perhaps exit from the facility ("universal opt-out testing")
- Add HCV screening training for prison staff
- Implement education campaign on HCV for persons who are incarcerated, as well as correctional officers and healthcare providers
- Introduce peer-navigator programs to support peer conversations around HCV screening
- Monitor metrics for HCV screening to motivate prison staff to encourage screening uptake

COMPELLING MESSAGES TO EMPHASIZE IN ADVOCACY DISCUSSIONS

- Universal HCV screening reduces the risk of transmission to others, both inside the prison and in the community upon release
- Universal HCV screening leads to better health outcomes by facilitating earlier access to care
- Universal HCV screening reduces stigma
- Comparing the importance of HCV screening to COVID-19 screening may help illustrate the relevance of encouraging uptake of HCV screening given the higher public health literacy during COVID-19 and policymakers' own lived experience

FUNDING NEEDS FOR CHANGING POLICY

Additional funding may be needed to implement an education campaign and training of healthcare workers or introduction of new initiatives to bring peers into the prison



CASE STUDY 2

Financing: No budget for HCV program in prisons exists

KEY ISSUE

Prisons administrations indicate that they do not have budget to absorb HCV testing and treatment

SETTING

- Low-income country
- The prevalence of HCV among persons who are incarcerated is higher than the general population
- The prevalence of HIV and TB infection amongst persons who are incarcerated is higher than HCV
- No routine HCV testing and treatment currently

Discussion on strategies to address this issue

ROADBLOCKS ASSOCIATED WITH ADDRESSING THIS NEED

- No political will around healthcare for persons who are incarcerated and persons who inject drugs
- Financing of prison healthcare remains fragmented with funding for initiatives coming from different sources
- Prison health budgets are set and monitored by regional prison commissions and face many competing priorities
- Prisons administration sets their budgets on an annual basis with little flexibility to new requests during the fiscal year

KEY ENABLING FACTORS ASSOCIATED WITH ADDRESSING THIS NEED

- Availability of cost-effectiveness data to make the case at the national level
- National-level commitment to HCV elimination that could enable the prison program to be embedded in a broader national approach
- Micro-elimination approaches as examples of success to be modelled

LESSONS LEARNED FROM OTHER COUNTRIES

- The success of the prisons hepatitis service development in Georgia was led by a change in political will within the Ministry of Corrections in 2015. The Georgia experience also highlighted how a national action plan can catalyze focus on most affected populations, such as PWID and persons who are incarcerated
- The human rights argument (healthcare equity comparable to the community) has led to successful legal challenges to force establishment of hepatitis services in prisons in several US states
- The combination of pharmaceutical and NGO support with creative negotiation within the Prison and Health Departments of Punjab, India led to HCV micro-elimination in 19 prisons in northern India
- Prisons can be seen as pilot settings for HCV micro-elimination efforts
- Any wins in this sector can be publicized as broader wins for elimination

POLICY CHANGES TO ADVOCATE FOR

- Securing support from the HIV community for codelivery of HIV and HCV services
- Securing catalytic funding from industry, philanthropy (i.e. Gates Foundation), WHO to launch microelimination program
- If catalytic funding is available, leveraging initial funding for matching funding from government
- Launching campaign to encourage public investment in prison program

COMPELLING MESSAGES TO EMPHASIZE IN ADVOCACY DISCUSSIONS

- HCV screening and treatment in prison settings is a cost-effective investment
- HCV screening and treatment of persons who are incarcerated has a public health benefit at the community level by preventing new infections
- Similar HCV programs in prisons have achieved remarkable success
- Lived experience of persons who are incarcerated who personally were cured of HCV while incarcerated can highlight the human connections

POSSIBLE ROLES OF INTERNATIONAL PARTNERS

- Explore partnership with International Red Cross on service delivery
- Explore partnership with UNODC on advocacy campaign on importance of public financing for HCV prison programs



CASE STUDY 3

Implementation: Closing gaps in coverage of HCV screening and treatment

KEY ISSUE

HCV testing and treatment has been occurring in prisons for over 5 years. Although coverage is high, to reach elimination of HCV in the prisons, more robust scale-up across the care cascade is needed

SETTING

- High-income country
- The prevalence of HCV among persons who are incarcerated is higher than the general population
- HCV screening and treatment is happening in most prisons but not all. Coverage of HCV screening is about 75% among persons who are newly incarcerated but initiation of treatment among those diagnosed as positive is only 25%, largely due to short stays

Discussion on strategies to address this issue

ROADBLOCKS ASSOCIATED WITH ADDRESSING THIS NEED

- Delays in screening and diagnostic work-ups lead to delays in receiving results and progressing persons through the cascade
- Staff have competing priorities, and HCV screening and treatment may not be a top priority
- Staff may not be supportive of investing time and resources into health activities for persons who are incarcerated
- Shortages in prison health staff, especially physicians, can lead to delays in linking persons who are diagnosed to HCV treatment
- Persons who are incarcerated may be unaware of the benefits of HCV treatment
- Persons who are incarcerated may face stigma from other inmates, custodial staff, or healthcare staff, which stops them from coming forward for treatment
- No peer programs are in place to allow persons with lived experience to educate and encourage other persons currently incarcerated
- Only newly sentenced persons may be currently screened and linked to care. More focused efforts for persons who have been in prison long-term and persons who are transferred within prisons are missing
- Community linkages may be missing to facilitate continued HCV treatment when persons are released



POLICY CHANGES TO ADVOCATE FOR

- Testing strategies with rapid return of test results
- Nurse-led HCV treatment in prisons
- Additional training and education for prison staff on HCV testing and treatment
- Incentive program for prison healthcare staff
- Peer-based HCV testing program

STAKEHOLDERS TO ENGAGE ON THE ISSUE

- Correctional service administration
- Ministry of Health
- Prison healthcare providers
- Integrated care/social support services
- Peers/persons with lived experience to inform future policies

KEY DATA TO PRESENT TO POLICYMAKERS

- Care cascade data and current gaps
- Contribution of HCV prison program to overall national HCV elimination goals
- Impact of HCV testing and treatment in prisons on community prevalence and incidence
- The downstream healthcare costs associated with lost to follow-up

FUNDING NEEDS FOR CHANGING POLICY

- Stable funding is required to ensure HCV testing and treatment program is able to perform at peak effectiveness
- Additional funding may be needed to implement additional policy actions



CASE STUDY 4

Policy: High cost of RNA testing

KEY ISSUE

The national program says it cannot afford to scale up the HCV testing and treatment program in prisons until the cost of RNA testing is reduced

SETTING

- Lower-middle-income country
- The prevalence of HCV among persons who are incarcerated is moderate; low general population prevalence
- HCV testing and treatment is ongoing in pilot prison settings. The national government is interested in scaling-up the program, but national funds are limited

Discussion on strategies to address this issue

ROADBLOCKS ASSOCIATED WITH ADDRESSING THIS NEED

- Low RNA test kit procurement volumes
- Constrained government health budgets
- Limited point-of-care technology available
- Lack of national plan with targets for scale up of HCV testing

POSSIBLE POLICY GOALS

- Modeling costs of diagnostics in budget-based planning for HCV elimination
- Launch of national pilot program
- Integration on shared platforms of HCV testing with testing for other blood-borne virus testing (i.e. HIV, HBV, etc.)
- Removal of on-treatment monitoring RNA tests and only require one additional RNA test for SVR after diagnosis, or none at all given the high cure rate
- Exploration of a pooled procurement of RNA tests across the country or with other countries
- Discussion on national financing arrangements, such as subscription models
- Negotiation with diagnostic companies on cost of tests for specific volumes
- Securing support for studies on treatment as prevention and benefits and drawbacks of removing all confirmatory RNA tests before HCV treatment initiation

KEY DATA TO DRIVE CHANGE

- Use pilot data to generate cost-effectiveness estimates of program to-date
- Additional studies could explore the cost and effectiveness implications of testing upon reception vs testing the whole prison during routine blitz campaigns, since blitz campaigns would ensure high throughput on RNA testing machines
- The results could depend on average length of stay
- Cost of RNA testing in other countries

STAKEHOLDERS TO ENGAGE ON THE ISSUE

- Government Ministry of Health
- Justice Health Department
- Industry
- Global Fund Country Coordinating Mechanism representatives



CASE STUDY 5

Policy: Lack of treatment access

KEY ISSUE

Not all prison systems within the country have approved HCV treatment access or removed all restrictions for accessing treatment for persons who are incarcerated

SETTING

- High-income country
- The prevalence of HCV among persons who are incarcerated is high; the prevalence among the general population is highest among persons who inject drugs
- Unequal access to HCV testing and treatment in prison settings exists across states/provinces

Discussion on strategies to address this issue

ROADBLOCKS ASSOCIATED WITH ADDRESSING THIS NEED

- Budget constraints of local prison systems:
 - The prevalence of HCV among the incarcerated is poorly understood
 - Some state prison authorities believe that HCV medicines are too expensive with concerns about frequent reinfection after virologic cure
 - Some state prison authorities believe that it is not their responsibility to cover the costs of testing and treatment
- Some authorities believe testing and treatment algorithms are too complicated to be implemented in their settings
- Stigma

POLICY CHANGES TO ADVOCATE FOR

- Full access to HCV testing and treatment in all prisons
- Full access to harm reduction in all prisons
- Removal of all treatment restrictions

LESSONS LEARNED FROM OTHER COUNTRIES

- Naming is shaming! Action Hepatitis Canada released a report on Prison Health that fostered positive peer pressure on provinces with sub-optimal policies
- "Follow me" program in the United Kingdom increased HCV treatment rates in prisons
- In the Australia Lotus Glen prison, a rapid reduction in HCV viremic prevalence was seen from 12% to 1% in 22 months in a micro-elimination campaign supported by government-funded DAAs (Bartlett SR et al, 2018)

POSSIBLE ADVOCACY ACTIVITIES

- Pressure could be placed on policymakers through:
- Data to measure HCV prevalence and or related mortality
- Fostering a competition environment
- Coordinating a rally or demonstration
- Launching a story campaign
- Development of a report to compare countries and care delivery expectations
- Creation of an ad or movie could spark further grass roots advocacy

COMPELLING MESSAGES TO EMPHASIZE IN ADVOCACY DISCUSSIONS

- Mandela rules: human rights for persons who are incarcerated should be equivalent to everyone else
- Governments are responsible for ensuring persons who are incarcerated have equivalent access to care as those who are not incarcerated
- Access to HCV treatment is a public health concern for community. Providing HCV treatment to persons who are incarcerated reduces the risk of community transmission
- HCV treatment is more than a cure of an infectious disease; it is giving someone's life back
- Prison health impacts population health. Treating people in prison reduces risk in general population

STAKEHOLDERS TO ENGAGE IN ADVOCACY

- Civil society
- Ministry of Health
- Ministry of Justice

KEY DATA TO DRIVE CHANGE

- Stories of lived experience
- Examples from other prison systems (i.e. England, Spain)
- Budget impact analysis and return-on-investment
- Health benefits of access to HCV treatment- deaths prevented, fewer newer infections

FUNDING SOURCES FOR ADVOCACY ACTIVITIES

- Global Fund for TB, AIDS, and Malaria
- Pharmaceutical public-private partnerships
- National and local

ANTICIPATED TIMELINE

Policy change requires at least 3 months

POSSIBLE ROLES OF INTERNATIONAL PARTNERS

Peer pressure for neighboring countries

MONITORING APPROACHES TO ENSURE POLICY CHANGE WAS EFFECTIVE

 Collect monthly data on number of persons treated for HCV to confirm increasing trends following policy change







CASE STUDY 6

Policy: Delays in specialist consultation for treatment initiation

KEY ISSUE

Requirements for specialist consultation for treatment initiation are limiting access

SETTING

- High-income country
- The prevalence of HCV among persons who are incarcerated is high; the prevalence among the general population is highest among persons who inject drugs
- The prison system has adopted universal HCV screening and treatment in all settings
- Simplified HCV treatment algorithms, including allowing non-specialists to prescribe treatment, have not been adopted nationally, either in prison or community settings
- Based on policy, all persons who are incarcerated should have access to HCV treatment. However, with current treatment algorithms, all persons diagnosed with chronic HCV infection must have a consultation with a specialist to initiate treatment

Discussion on strategies to address this issue

ROADBLOCKS ASSOCIATED WITH ADDRESSING THIS NEED

- Law or regulation for clinical regulations requiring specialist consultations
- Financial benefits to specialist and others in referral chain
- Financial benefits to system for lower health costs with limits in numbers treated
- Lack of coordination between corrections and healthcare system lead to delays
- Low medical literacy of policymakers and correctional staff to understand the challenge
- Lack of advocates for the incarcerated, including civil rights lawyers

POLICY CHANGES TO ADVOCATE FOR

- Allowing non-specialists, including general practitioners, to initiate HCV treatment without specialist consultation
- Pilot programs for non-specialist driven care for patients without cirrhosis and/or complicated medical history
- Access to telehealth

LESSONS LEARNED FROM OTHER COUNTRIES

- Many countries, including England, Scotland, France, and Australia, allow non-specialists to manage HCV treatment initiation
- In Spain, they allow specialists to prescribe for patients virtually in prison without needing to physically see them
- In Canada, community organizations released a prison HCV report card which was used to advocate for expanded access to treatment

COMPELLING MESSAGES TO EMPHASIZE IN ADVOCACY DISCUSSIONS

- Benefit for community overall of treating HCV in corrections
- HCV treatment is easy, safe, and effective without the risk of resistance
- General practitioner prescribing is the standard in the majority of countries
- Legal cases in other areas

KEY DATA TO DRIVE CHANGE

- Current length of time from diagnosis to treatment uptake
- Prevalence; percent with moderate to severe liver disease and mortality data
- Modeling on impact on prevalence and incidence of removing specialist requirements

FUNDING NEEDS

Medications coming from corrections budget is a challenge. If more patients will be treated, additional funding may be needed

ANTICIPATED TIMELINE

 Clinical guidelines are usually updated on a periodic basis. Roll-out and training of updated guidelines can take time

MONITORING APPROACHES

Monitoring the number of persons treated for HCV in corrections each year and exploring if numbers increased once specialist consultations in prisons were removed



CASE STUDY 7

Implementation: Poor HCV confirmation testing coverage

KEY ISSUE

The national program will not consider scaling up the HCV testing and treatment program in prisons until great efficiency is achieved

SETTING

- Lower-middle-income country
- The prevalence of HCV among persons who are incarcerated is moderate; low general population prevalence
- HCV testing and treatment is ongoing in pilot settings. The national government is interested in scaling-up the program, but national funds are limited
- HCV screening policies currently require a two-step process. Anti-HCV testing is completed with a venous whole-blood sample sent to the laboratory. Once a positive anti-HCV test is returned to patients, then a second sample is collected and sent to the laboratory for HCV RNA testing to confirm active infection. Most patients that test positive after an anti-HCV test do not receive confirmation testing

Discussion on strategies to address this issue

ROADBLOCKS ASSOCIATED WITH ADDRESSING THIS NEED

- The time for follow-up results is too lengthy
- There is no system in place for tracking patients that test positive
- Cost of requiring two venous blood samples is high
- Lack of POC options for testing

POSSIBLE POLICY GOALS

- Change in screening algorithm/legal framework to allow for laboratory-based reflex testing, where both venous samples for testing are taken during first visit, or pointof-care testing
- Anti-HCV POC testing; if positive collection of DBS or venous specimen for transfer to lab for testing
- Launch of campaign to link persons lost to follow-up (i.e. could be integrated with HIV campaign)
- Establishment of a metric on the length of time for persons to receive their testing results and time between screening and initiation on treatment
- Development of new information system to better track individuals along the care cascade
- Implementation of SMS text message program to communicate with persons who test positive and need to be further linked to care

STAKEHOLDERS TO ENGAGE

- Prison healthcare staff
- State healthcare system
- Laboratory staff
- Civil society

POSSIBLE ADVOCACY ACTIVITIES

- Lobbying 1:1 with policymakers and or correctional clinicians, healthcare administrators to establish a targeted campaign to simplify HCV care algorithm
- Roundtable meetings to bring together diverse stakeholders across the care cascade to discuss shared challenges and possible solutions

COMPELLING MESSAGES TO EMPHASIZE IN ADVOCACY DISCUSSIONS

- Examples of successful programs from other countries (i.e. Reflex testing in Spain, United States)
- Good news story about persons with lived experience who have been cured of HCV

ANTICIPATED TIMELINE

Depends on country

MONITORING APPROACHES

 Develop system for tracking the HCV care cascade and linkage from anti-HCV to confirmatory testing after any policy changes with ability to compare to previous data



CASE STUDY 8

Implementation: No system to link to community treatment and care after release

KEY ISSUE

Many patients who are diagnosed with HCV or initiate treatment are lost to follow-up when released on bail or released after completing their sentence

SETTING

- High-middle-income country
- The prevalence of HCV among persons who are incarcerated is moderate; the prevalence among the general population is moderate among persons who inject drugs, varying by province
- Unequal access to HCV testing and treatment in prison settings exists across states/provinces

Discussion on strategies to address this issue

ROADBLOCKS ASSOCIATED WITH ADDRESSING THIS NEED

- Poor data on phone numbers of persons or poor collaboration between prisons and parole officials to communicate with persons once released from prison
- Poor collaborations with community service providers
- Lack of community services to transition persons into
- Far distances from prison and homes
- People leaving the country
- People having to collect their own medicine at the pharmacy
- Other social determinants return to drug use; unstable housing

KEY ENABLING FACTORS ASSOCIATED WITH ADDRESSING THIS NEED

- Connection to pre-prison primary care provider or other medical provider
- Relationships with community providers
- Data sharing between prison and community healthcare
- Relationships between different parts of the judicial system and coordination on HCV testing and treatment programs

POSSIBLE POLICY GOALS

- Establishment of a national HCV treatment registry including prisons and those on parole
- Create accountability by setting targets for testing and treatment prior to release
- Development of new initiative focused on linking persons released from prison to local HCV treatment programs and harm reduction
- Introduction of peer navigator program
- Seek to initiate treatment early in incarceration for completion prior to release

LESSONS LEARNED FROM OTHER COUNTRIES

- England: "Follow me" peer navigator program includes peer navigators connecting with persons once back in the community
- Germany: prisons doctor who also works in the community around the prison
- British Columbia, Canada: Community transitions team which started as a mental health model and has since expanded to HCV
- Montpellier, France: the remainder of the HCV treatment course is given to the person before release to ensure the full course can be completed

POSSIBLE ADVOCACY ACTIVITIES

- Publishing general media and academic papers
- Engage community service providers to join advocacy in the effort
- Lobbying 1:1 meetings
- Educate family members
- Presentation of data through a report release and dissemination

COMPELLING MESSAGES

- Data on cost-effectiveness and returns on investment from linking persons to treatment in the community
- Personal stories—persons in prisons are entitled to same healthcare as all. Use stories of good care and its impact
- If persons are connected to community services, they are less likely to re-offend

STAKEHOLDERS TO ENGAGE

- Community/civil society
- Prison staff
- Academics to evaluate

KEY DATA TO DRIVE CHANGE

- Current loss to follow-up rates
- Incidence of HCV in prison and the community, especially among persons who inject drugs
- Treatment failure results and cost of retreating

FUNDING SOURCES

Likely government health department

POSSIBLE ROLES OF INTERNATIONAL PARTNERS

 Specific elimination goal for prisons from WHO could help further motivate action

ANTICIPATED TIMELINE

 Lengthy timeline since policy needs to be designed and written from scratch

MONITORING APPROACH

 Over-time, HCV loss to follow-up numbers and treatment completions can be tracked for any person entering prison system, including linkages to community settings





References

Akiyama MJ, Kronfli N, Cabezas J, et al. Hepatitis C elimination among people incarcerated in prisons: challenges and recommendations for action within a health systems framework. Lancet Gastroenterol Hepatol. 2021;6(5):391-400.

Bartlett SR, Fox P, Cabatingan H, et al. Demonstration of Near-Elimination of Hepatitis C Virus Among a Prison Population: The Lotus Glen Correctional Centre Hepatitis C Treatment Project. Clin Infect Dis. 2018;67(3):460-463.

Byrne CJ, Beer L, Inglis SK, et al. Real-world outcomes of rapid regional hepatitis C virus treatment scale-up among people who inject drugs in Tayside, Scotland. Aliment Pharmacol Ther. 2022;55(5):568-579.

Dolan K, Wirtz AL, Moazen B, et al. Global burden of HIV, viral hepatitis, and tuberculosis in prisoners and detainees. Lancet. 2016;388(10049):1089-1102.

The Global Fund. HIV Information Note. Geneva: The Global Fund; 2022a.

The Global Fund. Harm Reduction for People Who Use Drugs: Priorities for Investment and Increased Impact in HIV Programming. Geneva: The Global Fund; 2022b.

Hickman M, Dillon JF, Elliott L, et al. Evaluating the population impact of hepatitis C direct acting antiviral treatment as prevention for people who inject drugs (EPIToPe) – a natural experiment (protocol)BMJ Open 2019;9:e029538.

European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Statistical Bulletin 2022; 2022. Last accessed 12 January 2022. https://www.emcdda.europa.eu/data/stats2022_en

Larney S, Kopinski H, Beckwith CG, et al. Incidence and prevalence of hepatitis C in prisons and other closed settings: results of a systematic review and meta-analysis. Hepatology. 2013;58(4):1215-1224. doi:10.1002/hep.26387

Marco A, Guerrero RA, Turu E, et al. Is it possible to eliminate hepatitis C from the prisons of Catalonia, Spain, in 2021. Rev Esp Sanid Penit. 2019;21(1):38-41.

Moradi G, Goodarzi E, Khazaei Z. Prevalence of hepatitis B and C in prisons worldwide: A meta-analyses during the years 2005-2015. Biomedical Research and Therapy. 2018; 5(4): 2235-2251.

Salari N, Darvishi N, Hemmati M, et al. Global prevalence of hepatitis C in prisoners: a comprehensive systematic review and meta-analysis. Arch Virol. 2022;167(4):1025-1039.

UK Health Security Agency. Hepatitis C in England 2022: Working to eliminate hepatitis C as a public health threat.

World Health Organization. Compendium of good practices in the health sector response to viral hepatitis in the WHO European Region, Copenhagen: WHO Regional Office for Europe; 2020.

World Health Organization. Consolidated guidelines on HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2022a.

World Health Organization. Global health sector strategies on, respectively, HIV, viral hepatitis and sexually transmitted infections for the period 2022-2030. Geneva: World Health Organization; 2022b.

World Health Organization. Hepatitis C; 2022. Last accessed 11 January 2022. https://www.who.int/newsroom/fact-sheets/detail/hepatitis-c

World Health Organization. Interim guidance for country validation of viral hepatitis elimination. Geneva: World Health Organization; 2021.

World Health Organization Regional Office for Europe. Compendium of good practices in the health sector response to viral hepatitis in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2020.





To learn more about the Coalition for Global Hepatitis Elimination, visit www.globalhep.org | Contact: globalhep@taskforce.org

To learn more about INHSU and INHSU Prisons, visit www.inhsu.org/the-network/inhsu-prisons | Contact: info@inhsu.org

