Canadian Symposium on Hepatitis C Virus

Implications for frontline workers

25 June 2019

CanHepC
Canadian Network on Hepatitis C
Réseau Canadien sur l'Hépatite C

CATIE
Canada's source for HIV and hepatitis C information

Webinar Agenda (1.5 hours)

Moderator: Chris Hoy, Knowledge Specialist, Hepatitis C Community Health Programming, CATIE

- Overview of key themes and research presented at the 8th Canadian Symposium on Hepatitis C Virus and Canadian Liver Meeting

  Rivka Kushner, Knowledge Specialist, Hepatitis C, CATIE
- Reflections and future priorities

  Alison Marshall, CanHepC postdoctorial fellow

  Gillian Kolla, CanHepC trainee
- Reflections and implications for frontline practice

  Anne Drost, Clinical Nurse Leader, Cool Aid Community Health Centre

  Margo Pearce, Postdoctoral fellow, Cedar Project, BCCDC, University of British Columbia
- Q & A

CANADIAN LIVER MEETING

May 24 - 26, 2019
Hôtel Bonaventure
Montréal

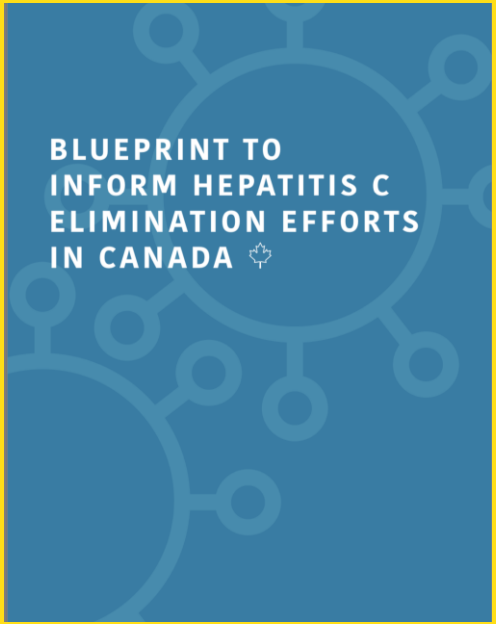
8th Canadian Symposium on Hepatitis C Virus

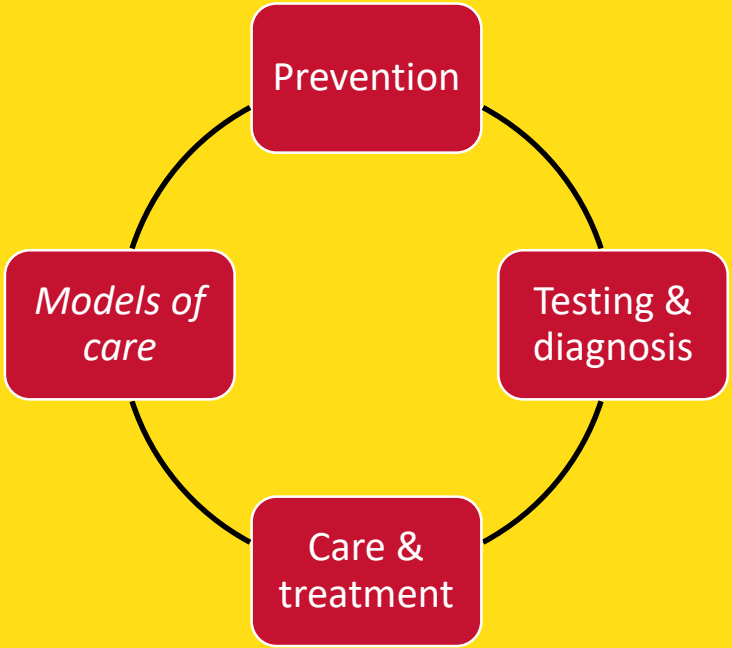
Friday, May 24th

Improving diagnosis: how to reach the undiagnosed population

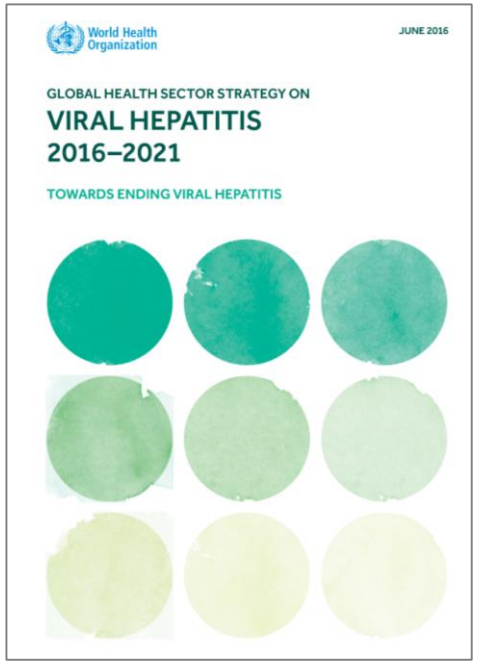
May 24-26, 2019
Hôtel Bonaventure, Montréal

Overview of webinar synthesis

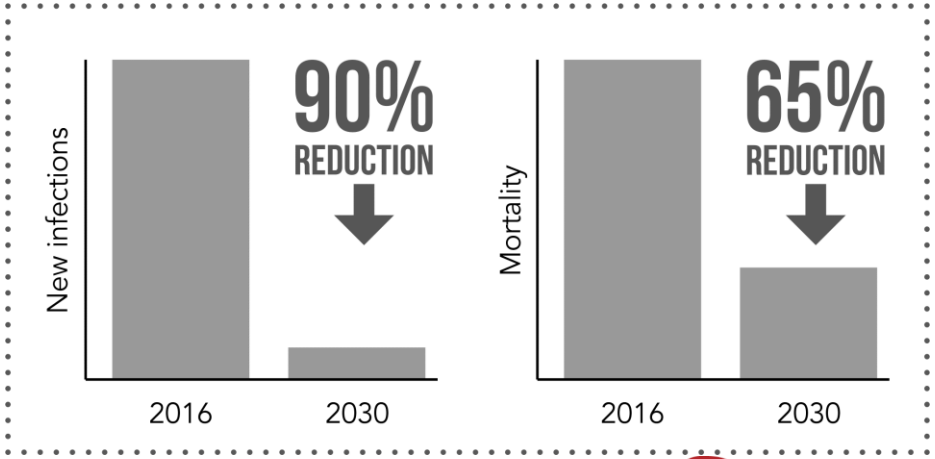




Global commitments
Canada is a signatory



- Eliminate viral hepatitis as a major public health threat by 2030
- Calling on all countries to develop national action plans



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What do we mean by elimination?

Eradication

- Decrease ***global*** prevalence to 0 cases
- No ongoing surveillance or control efforts required

Likely impossible without a vaccine (among other things!)

Elimination

- Decrease in ***regional/national*** prevalence to below a threshold to ***limit impact as a public health problem***
- **Ongoing surveillance and control required**

Challenging but feasible with the right tools

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Why talk about elimination?

We now have the tools

Prevention Strategies

- Harm reduction
- Needle/syringe programs
- Opiate agonist therapy

Simple Diagnosis

- Available blood tests
- Point-of-care tests
- Reflex testing

Effective Treatment

- 1-3 pills/day for 2-3 months
- Cure rates over 95%
- Few or no side effects

Combined these tools can be used to eliminate hepatitis C as a public health problem

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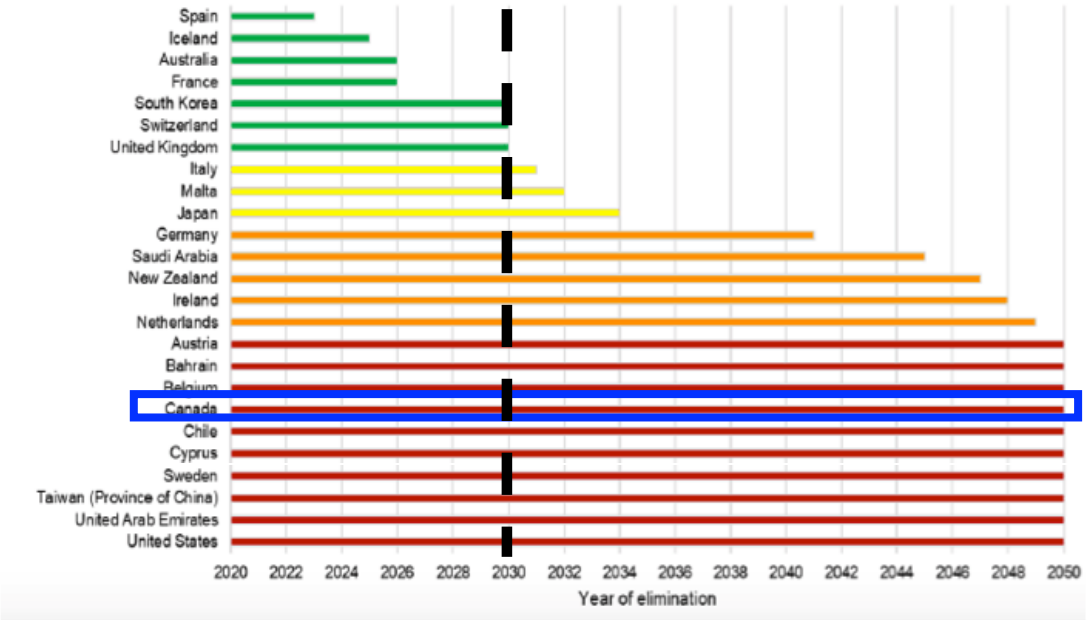
Progress toward elimination

Expected year of elimination by country



- Some countries on track to elimination before 2030
- Key factors
  - **National Action Plans**
  - **Political will**
  - **Strong public health systems**
- Many countries, including Canada, may not be on track for elimination at all

Razavi EASL 2019

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Blueprint to inform hepatitis C elimination efforts in Canada launches at Canadian Liver Meeting

- Developed through a consultative process to define what needs to be done to achieve the elimination of hepatitis C as a public health treat by 2030 in Canada
- Identifies objectives and targets to achieve elimination
- Offers a menu of activities and recommended good practices to help provinces and territories develop their own hepatitis C action plans

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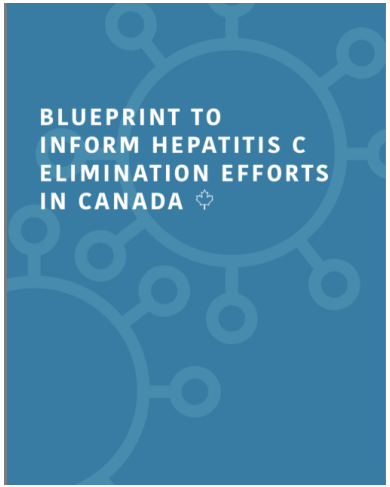
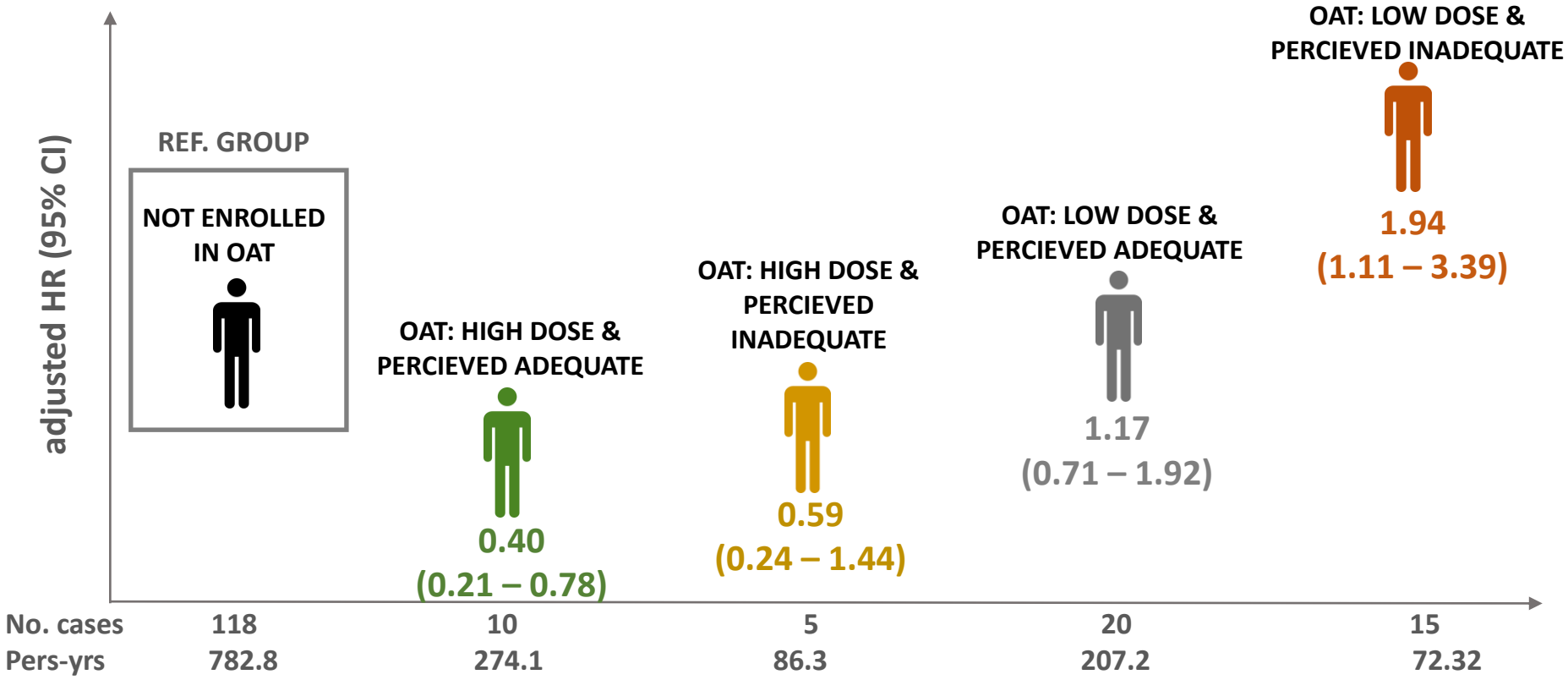


Prevention

Figure 1. The *Blueprint*'s objectives and targets (p. 10)

OBJECTIVES	2025 TARGETS	2030 TARGETS
HCV Prevention		
Reduce new HCV infections	**80%** ↓ incidence*	**80%** ↓ incidence*
Increase the number of sterile needles and syringes provided per person who injects drugs (PWID) per year	**500** sterile needles/syringes	**750** sterile needles/syringes
Increase the number of PWID accessing opioid agonist therapy (OAT)	**40%** of PWID receive OAT	**≥40%** of PWID receive OAT**

Association between OAT dosage adequacy and risk of HCV infection among people who inject drugs



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Blueprint recommendations for preventing hepatitis C

- Decrease hepatitis C-related stigma including through drug policy reform
- Governments should fund and implement harm reduction interventions including supervised consumption services

Testing & Diagnosis

Figure 1. The *Blueprint*'s objectives and targets (p. 10)

HCV Testing and diagnosis	2025 TARGETS	2030 TARGETS
Increase the number of people living with HCV who have been diagnosed	**70%** of people living with HCV have been diagnosed, all with confirmation of active infection	**90%** of people living with HCV have been diagnosed, all with confirmation of active infection
Increase the number of people with a positive HCV antibody test who receive testing for active HCV infection (e.g. HCV RNA)	**90%** of people with a positive antibody test have received HCV RNA testing	**100%** of people with positive antibody test have received HCV RNA testing

Testing is a big hurdle to achieving elimination

- We need to be looking at the number of people screened in order to reach elimination– this is a very high proportion of the population
- Does the current process for testing still make the most sense?

Testing for hepatitis C

1. 

The **antibody test** checks whether you have ever come in contact with the hepatitis C virus.

2. 

The **RNA/ confirmatory test** confirms if you currently have a hepatitis C infection.

The antibody and confirmatory tests

- Why do we do the antibody test?
  - It is less expensive than the confirmatory test
- We need a more affordable test for hepatitis C infection
  - 99.8% of people with chronic hepatitis C have levels of the virus above 1000 IU/mL – perhaps the tests can have a higher limit of detection

Stuart Ray, Johns Hopkins University School of Medicine

Re-thinking testing

- The first challenge is that we send people away for their test (Stuart Ray, Johns Hopkins University School of Medicine)
- Dried blood spot testing (John Kim, Public Health Agency of Canada):
  - We need to de-centralize and stop waiting for people to come to labs to get tested
  - If you don’t have access to phlebotomy, dried blood spot testing is good enough

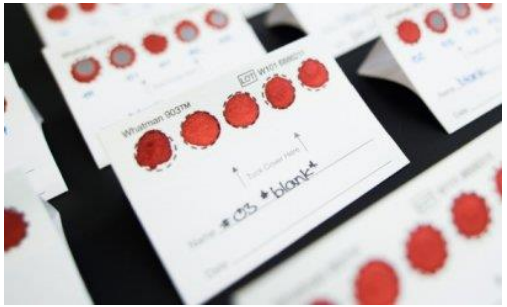


Image credit: Don Erhardt, Science Daily

Point-of-care tests

- OraQuick Antibody test is available in Canada and used in numerous programs
- Cepheid fingerstick RNA test is used in a number of research projects, including in a supervised consumption service (SCS) in Toronto (Bernadette Lettner, South Riverdale Community Health Centre)

Bringing testing to where people already are

Research to evaluate hepatitis C screening strategies in emergency departments, medical walk-in clinics and community outreach with dried blood spot and point-of-care tests (Camelia Capraru, Toronto Centre for Liver Disease/VIRCAN, University Health Network):

- Used a paging system when a patient born between 1945-1975 was registered in the emergency department
- Some patients didn’t wait for their antibody test result, so could be more effective to skip to the confirmatory test
- 1.8% hepatitis C prevalence in the emergency department

Challenges to scaling-up testing and treatment

- Who do we screen?
  - Universal one time testing in the US, without any restrictions on treatment, results in 62% population cured by 2030
- It is very expensive to roll out testing and treatment however it is cost-saving the long term
  - Innovative drug financing: ‘Netflix’ model to pay a fixed amount and have unlimited access to treatment for a set duration of time

Care & Treatment

Figure 1. The *Blueprint*'s objectives and targets (p. 10)

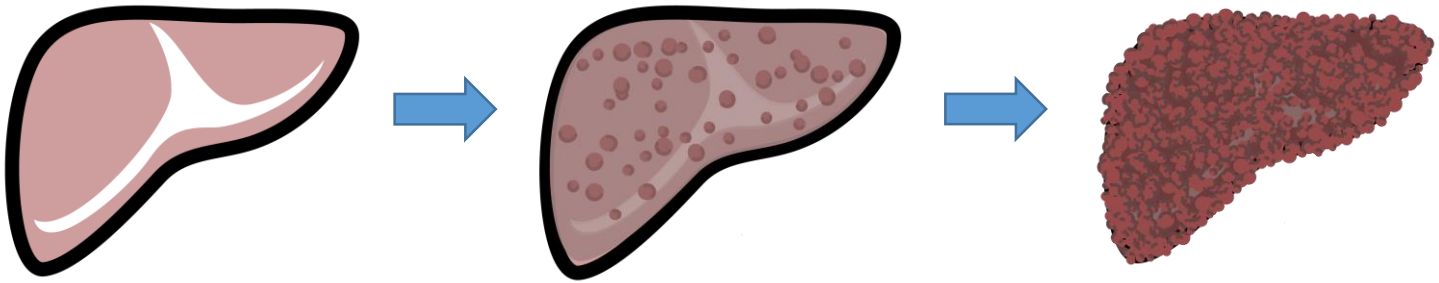
HCV Care and treatment	2025 TARGETS	2030 TARGETS
Increase the number of people diagnosed with HCV who are linked to care, treatment and ongoing support	**50%** linked to a provider who is familiar with HCV	**90%** linked to a provider who is familiar with HCV
Increase the number of people with HCV who are initiating DAA treatment	**50%** of those living with HCV have initiated DAA treatment	**80%** of those living with HCV have initiated DAA treatment
Ensure high treatment completion rates and documentation of sustained virologic response (SVR)	**95%** treatment completion with 85% documentation of SVR	**95%** treatment completion with 85% documentation of SVR
Reduce HCV prevalence	**50%** ↓ *	**90%** ↓ *
Reduce HCV-related liver transplantation	**30%** ↓ *	**65%** ↓ *
Reduce HCV-related mortality	**30%** ↓ *	**65%** ↓ *

Never too old to be DAA treated for hepatitis C

Treatment is highly effective for people over the age of 75 years (Curtis Cooper, University of Ottawa)

- 93.6% (73/78) patients achieved SVR
- 98% patients achieved SVR with DAA-only treatment
- 69% patients achieved SVR with DAAs plus ribavirin (17% patients received ribavirin)
- No virological failures

Hepatitis C infection can cause fibrosis and cirrhosis



Fibrosis

Cirrhosis

Pre-treatment fibrosis assessment

- Assessing liver fibrosis before treatment is essential to determine if a person has cirrhosis
- There are multiple non-invasive liver fibrosis staging tests – they are all pretty good and there is no one recommended test

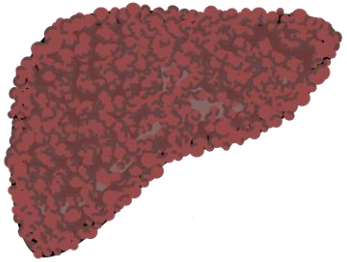
FibroScan®

Post-treatment fibrosis assessment

- More research to be done to assess cirrhosis regression after cure

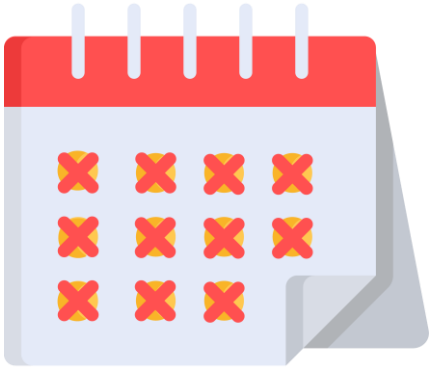
Keyur Patel, University Health Network

Risk of liver cancer after cure



- There is almost no risk of hepatocellular carcinoma (HCC) if a person does not have cirrhosis
- There is a significant risk of liver cancer if a person has cirrhosis
  - Getting cured results in a significant reduction in the risk of liver cancer over a short period of time, though a long-term risk remains

Hashem B. El-Serag, Baylor College of Medicine



Hepatitis C treatment for a person with liver cancer

- It is generally recommended to wait six months after liver cancer treatment to make sure the cancer is fully cured, before treatment with DAAs

Models of Care

Canada's Priority Populations

INTERSECTIONALITY

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Meaningful engagement of people with lived experience in programming and research design and implementation

- Lived experienced is expertise
- Involvement can help to create safe, stigma-free, accessible environments
- People with lived experience should be offered fair and reasonable payment for their work, with flexibility based on their preference (through hourly wage, stipend, gift cards)
- People with lived experience should be offered support to prevent burnout

Chris Hoy, Magali Boudon, Martin Pagé, Nicole Ballantyne, Barb Bowditch, Jennifer Broad, Kate Mason

Models of care: Overall key themes

- Nurse-led models of care are highly effective in multiple, diverse settings to deliver hepatitis C care
- Recognize structural barriers and structural violence. Build programs to address/work in recognition of these challenges
- Bring services to where people are at and reduce the number of steps/appointments a person needs to get tested and treated
- Address other (non-hepatitis C) health and healthcare needs

Models of care: Decreasing the time from diagnosis to cure

- People who use injection drugs were tested with an RNA point-of-care test with Cepheid, completed a liver injury assessment with FibroScan, and had a treatment conversation at the first appointment. At the second visit, treatment started (Valerie Martel-Laferriere, Université de Montréal).

- Prince Edward Island Elimination Program found rapid treatment starts are effective and safe. This involved a pre-treatment assessment before the initial hepatitis C appointment so that they can start treatment immediately (Shawn Greenan, Health PEI).

Models of care: Provincial/territorial prisons

- People with experience in the prison system are 40 time more likely to have hepatitis C than the general population
- Canada will fail to reach elimination if we don’t address the provincial and territorial prisons

Nadine Kronfli, McGill University

Challenges along the HCV cascade of care for provincial prisons

Screening
(HCV antibody)

- On-demand
- Venipuncture ($); venous access
- TAT: 24-48 hours
- +/- dedicated STBBI nursing support

Confirmation
(HCV RNA)

- 2nd visit necessary
- Venipuncture ($); venous access
- TAT: 14-28 jours
- 3rd visit required for results

Linkage to care

- Rare on-site HCV-trained physicians
- Liver disease assessments must be made off-site
- Absence of post-release follow-up

Treatment

- Limited budgets
- PCPA prices
- $$$
- Reserved for >12 week sentences
- Absence of post-release follow-up

- Median sentences: 28 days
- High transfer and turn-over rates
- Unscheduled releases

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Models of care: Provincial/territorial prisons

Provinces where the health system pays for treatment (versus corrections) may have better treatment uptake:

- Prince Edward Island: hepatitis C treatment provided from 2012-2015 and in 2019 (Lisa Barrett, Dalhousie University)
- Nova Scotia: no access to treatment for people in provincial prisons (Lisa Barrett, Dalhousie University)

Models of care: Provincial/territorial prisons

Regina Provincial Corrections Centre, Saskatchewan (Dennaye Fuchs, Saskatchewan Health Authority):

- On-site nurse-led hepatitis C clinics are offered
- Collaboration with corrections healthcare staff
- Treatment covered by provincial drug plan
- Support is provided for linkage to care post-release

Models of care: Supervised consumption sites

KeepSIX supervised consumption service (SCS), Toronto (Bernadette Lettner & Kate Mason, South Riverdale Community Health Centre)

- Offered the Cephied RNA fingerstick point-of-care test and warm referral to the hepatitis C group
- Advantage is that people tend to come back to the SCS everyday
- Supported relationships and education on safer use between nurse and clients

Models of care: Reaching homeless and under-housed people

Cool Aid shelters and housing facilities, Victoria (Tamara Barnett, Cool Aid):

- Micro-elimination project to test and treat everyone in the housing unit and social sharing networks
- Nurse-led model with strong peer support
- Treated everyone with the same treatment regimen because people were sharing their medication and started treatment on the same day
- Addressed other health issues through this process

Models of care: Reaching homeless and under-housed people

Mobile health street outreach in Halifax (Jacqueline Atkinson, Mobile Outreach Street Health):

- Mobile van provides primary healthcare broadly through nurse-led model, with some specified time for hepatitis C care
- Goes to soup kitchens, crack houses, shelters, tents, harm reduction programs
- Challenges to get medication to people when they are put in jail

Models of care: Reaching newcomers and immigrants

- About 35% of people with hepatitis C in Canada were born in hepatitis C endemic countries
- Specific barriers and challenges to hepatitis C testing and care for newcomers and immigrants

Barriers to Screening/Treatment Uptake

Patient	Provider	Health System
• Language barriers • Health system navigation • Competing responsibilities • Not able to leave work to attend clinic visits • Stigma of disease-related consequences • Fear of discrimination • Lack of disease knowledge • Financial • Legal	• Lack of knowledge which migrants at risk who should be screened or what tests to order • Lack of time • Lack of awareness of which migrants are entitled to health care	• Lack of interpreters • Multiple steps for screening test • Complex screening /testing process (multiple MDs/settings) • Lack of appropriate confidential space • Funding

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Seedat Lancet Infect Dis 2018;3099(18)30117-8, Ahmed. J Imm Minor Heath 2015,

Models of care: newcomers and immigrants

- Aagahi (awareness) project, Montreal Pakistani community (Christina Greenaway, McGill University):
  - Provides culturally and linguistically adapted hepatitis C educational outreach
  - Point-of-care testing and support for linkage to care

- Community-based testing with Progressive Intercultural Society (PICS), BC (Jeanette Feizi Farivar, GI Research Institute):
  - Trained PICS support workers in hepatitis C
  - Held screening events linked with other activities, offered point-of-care testing, FibroScan, linkage to care, treatment discussions

“

The key point here is that the **Blueprint** [launch is not] the ending. This is meant to be a **guide for each province, territory** and ideally **the federal government** to develop a specific action plan for addressing hepatitis C elimination within their jurisdiction. **This is where the work just begins**.

[…] I hope that this proves to be a **useful tool** to be able to get us on track to develop action plans and ultimately to **achieve these ambitious goals of [hepatitis C] elimination by 2030**.

- Jordan Feld, University of Toronto, Blueprint Launch

INHSU 2019 Conference in Montreal

Reflections for research and the frontlines

Dr. Alison Marshall

CanHepC Postdoctorial fellow

Alison is a Postdoctoral Fellow co-appointed at the Viral Hepatitis Clinical Research Program (the Kirby Institute) and the Centre for Social Research in Health at UNSW Sydney, Australia. In 2018, Alison received her PhD in clinical epidemiology at the Kirby Institute. Her PhD research utilised a mixed-methods approach (quantitative-qualitative design) with a primary focus on liver disease assessment, hepatitis C treatment uptake, and health policy. Prior to her PhD, Alison's work in Canada involved multidisciplinary collaborations with international and national public health agencies to facilitate the uptake of evidence-based research in the development of hepatitis C policy, programs, and practices in global health settings.

Alison is a current Fellow of the Canadian Institutes for Health Research (CIHR) funded program, the Canadian Network on Hepatitis C (CanHepC). Her most recent research is directed at remaining barriers to hepatitis C care in the interferon-free era for people who inject drugs.

Dr. Alison Marshall

CanHepC Postdoctorial fellow

1. Key reflections from the conference
2. Lessons Canada can learn from Australia
3. Looking ahead – future priorities in hepatitis C research

Gillian Kolla

CanHepC trainee

Gillian is a PhD candidate in Social and Behavioural Health Sciences at the Dalla Lana School of Public Health, University of Toronto. She uses community-based research, ethnographic and qualitative methods to examine how to make health and social services more accessible to people impacted by marginalization. Her PhD research explores the delivery of health and social services within the spaces where people gather to use illicit drugs, with a focus on how the criminalization of drug use impedes the ability of public health programs to respond effectively to drug use.

Gillian Kolla

CanHepC trainee

1. Key reflections from the conference
2. Looking ahead – future priorities in hepatitis C research
3. Closing the gap between practice-based evidence and research-based evidence

Anne Drost

Clinical Nurse Leader, Cool Aid Community Health Centre

Anne graduated from Ryerson University and started her nursing career in Toronto, providing home care to those suffering with AIDs before there was any effective treatment. From Toronto she moved north and worked on remote First Nations Reserves for two years, in Ontario and BC. After relocating to Victoria, BC, she worked as a community health nurse and variety of other roles, before moving into Street Nursing. The last 18 years have been working at Cool Aid Community Health Centre, now in the role of Clinical Nurse Leader. She loves the social justice aspect of her work and also the intersection of mental health, addictions and infectious disease.

Anne Drost

Clinical Nurse Leader, Cool Aid Community Health Centre

1. Key reflections from the conference
2. Major opportunities and challenges for frontline work
3. Closing the gap between practice-based evidence and research-based evidence

Dr. Margo Pearce

Margo Pearce, Postdoctoral fellow, Cedar Project, BCCDC, University of British Columbia

Margo is a CIHR Health Systems Impact Fellowship-supported postdoctoral fellow at BC Centre for Disease Control in partnership with the First Nations Health Authority. Her research interests include Indigenous people's health and wellness; adversity, resilience, and health over the life course; and healing-centred health policies and systems. Her postdoctoral research at BCCDC seeks to understand where the BC health systems can support better access to hepatitis C treatments to First Nations people using a strengths and wellness-based perspective.

Dr. Margo Pearce

Margo Pearce, Postdoctoral fellow, Cedar Project, BCCDC, University of British Columbia

1. Key reflections from the conference
2. Major opportunities and challenges for frontline work
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Questions?

Please type your question or comment into the chat box.

Thank You

PRESENTED BY

Chris Hoy, Rivka Kushner, Gillian Kolla, Alison Marshall, Anne Drost & Margo Pearce

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