



Canada's source for
HIV and hepatitis C
information

La source canadienne
de renseignements sur
le VIH et l'hépatite C

Reaching The Undiagnosed

HIV and HCV Point-of-Care Testing in Canada: Technologies and Community Programs



National Collaborating Centre
for Infectious Diseases
Centre de collaboration nationale
des maladies infectieuses



- **Geneviève Boily-Larouche**, NCCID
- **Lesley Gallagher**, Hepatitis C Nurse Clinician Vancouver Coastal Health
- **Christine Hughes**, Professor, Faculty of Pharmacy & Pharmaceutical Sciences, University of Alberta
- **Jason Kielly**, Assistant Professor, School of Pharmacy, Memorial University of Newfoundland
- **Wangari Tharao**, Women's Health in Women's Hands



Please make sure you access the audio
portion:

Toll-free access number: 1-866-500-7712

Access code: 4949626

**The webinar will commence
shortly.**

**All participants will be muted
until the question period.**

Webinar Series 2017-2018

Reaching the Undiagnosed

Innovative approaches for HIV, HCV and
other Sexually Transmitted Infection (STIs) Testing

Presented by: Geneviève Boily-Larouche



Canada's source for
HIV and hepatitis C
information

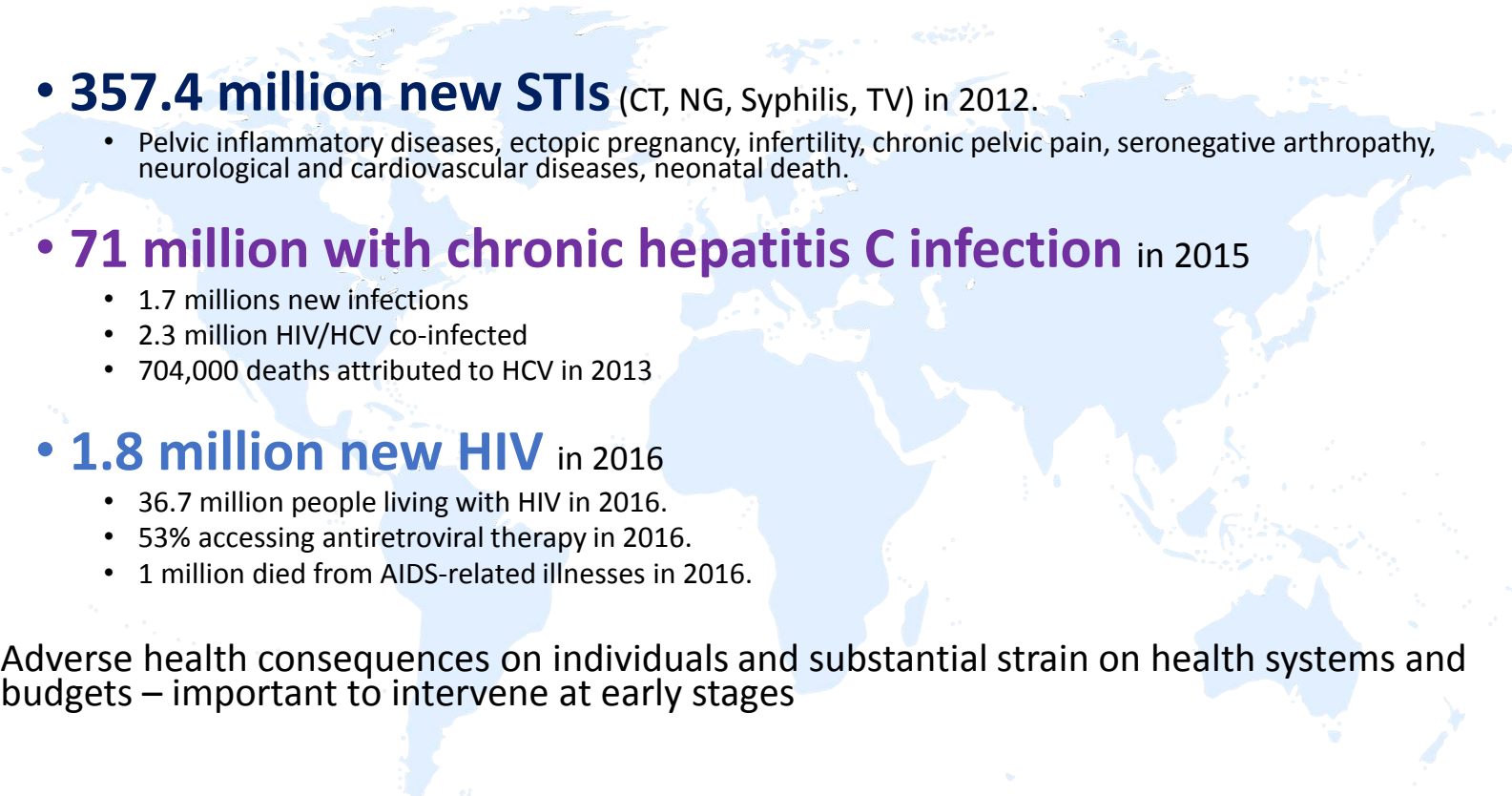


National Collaborating Centre
for Infectious Diseases

Centre de collaboration nationale
des maladies infectieuses



HIV, HVC and STIs: why is this a global issue?

- 
- **357.4 million new STIs** (CT, NG, Syphilis, TV) in 2012.
 - Pelvic inflammatory diseases, ectopic pregnancy, infertility, chronic pelvic pain, seronegative arthropathy, neurological and cardiovascular diseases, neonatal death.
 - **71 million with chronic hepatitis C infection** in 2015
 - 1.7 millions new infections
 - 2.3 million HIV/HCV co-infected
 - 704,000 deaths attributed to HCV in 2013
 - **1.8 million new HIV** in 2016
 - 36.7 million people living with HIV in 2016.
 - 53% accessing antiretroviral therapy in 2016.
 - 1 million died from AIDS-related illnesses in 2016.
 - Adverse health consequences on individuals and substantial strain on health systems and budgets – important to intervene at early stages

HIV, HCV and STIs: why is this a national issue?

- **118,280 new STIs** (87% CT, NG, Syphilis) in 2012
 - On the rise (2005-2014) ↑ **49%** CT; ↑ **61%** NG, ↑ **95%** infectious syphilis
 - 25 to 50% co-infection with HIV
- **Up to 245,987 with chronic hepatitis C infection** in 2011
- **2,570 new HIV infections** in 2014
 - 65,040 Canadians were living with HIV in 2014 .
- **Important inequality** in health and economic burden, for women, for First Nations and Inuit, for the chronically poor

HIV, HCV and STIs: Towards elimination by 2030



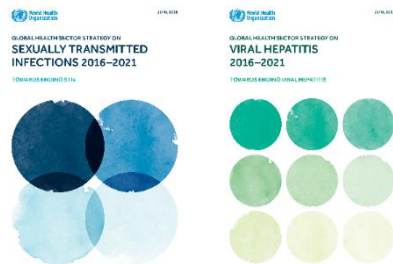
Global vision



Country strategies



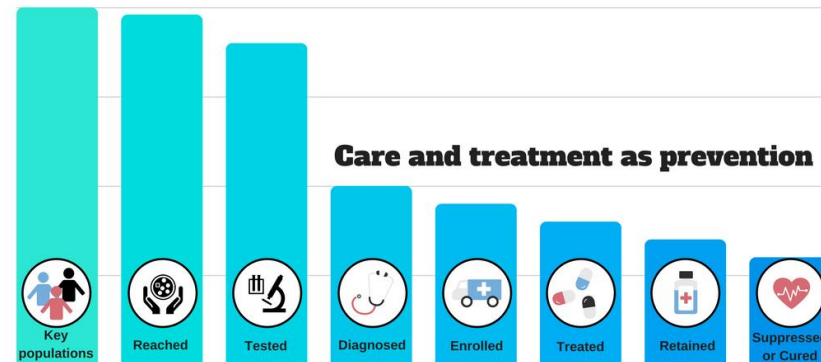
Local actions



90-90-90
An ambitious treatment target
to help end the AIDS epidemic

UNAIDS

Prevention



Global Targets : How are we doing in Canada?

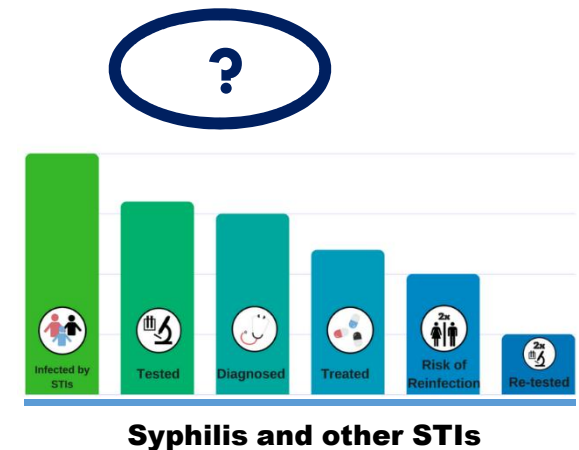
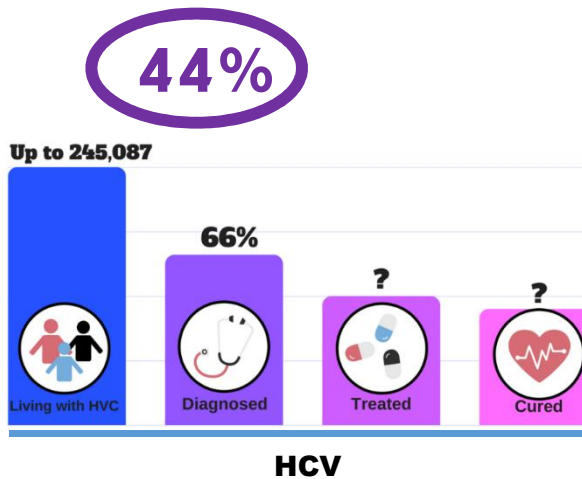
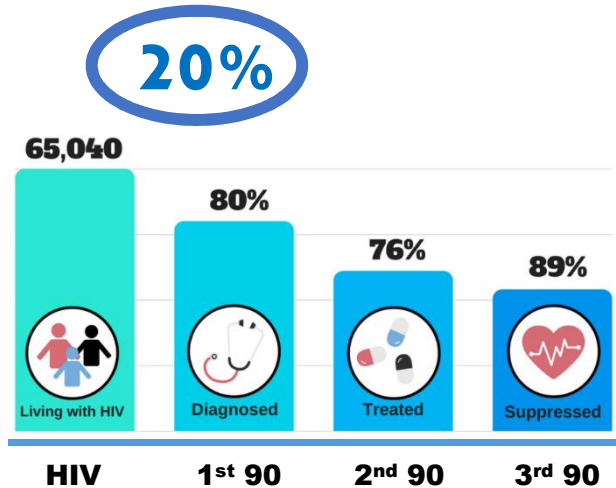
By 2020



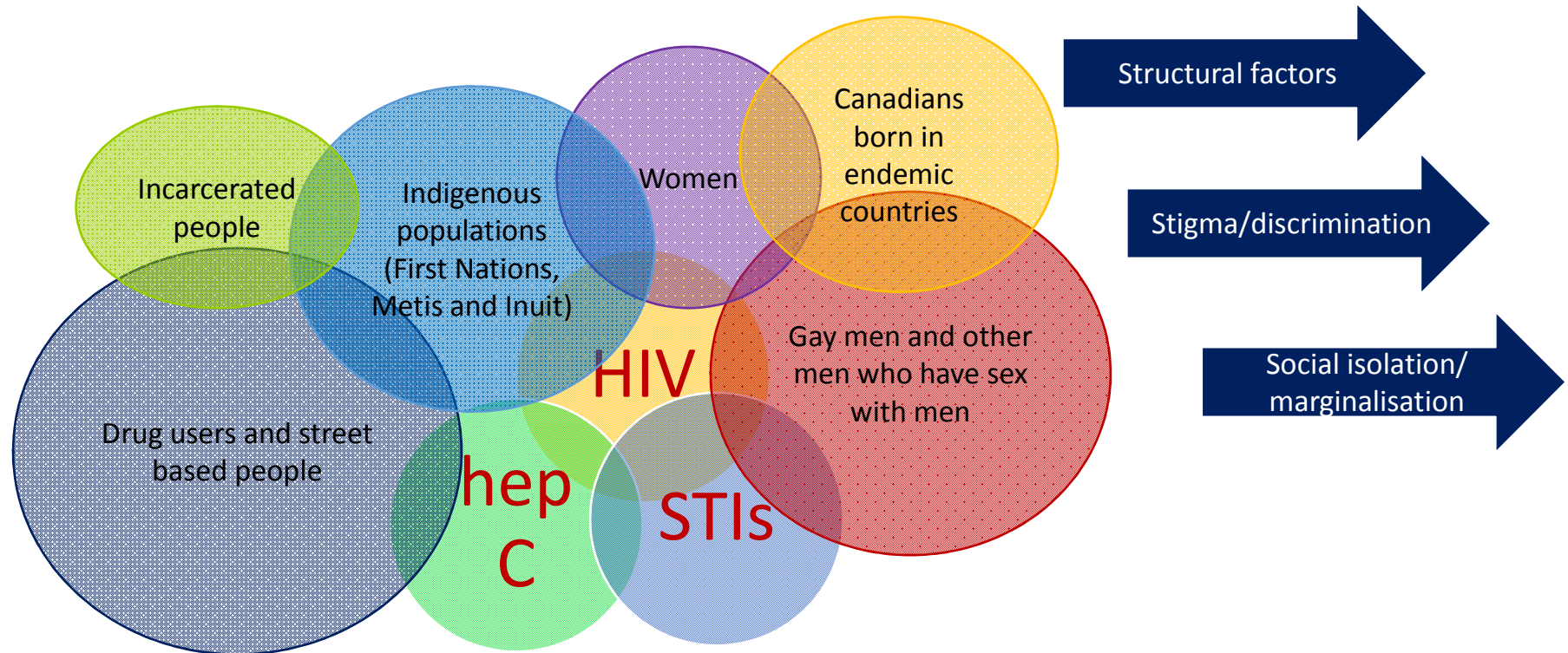
- Reducing by 30% new chronic HCV infections
- Reducing HCV mortality by 10%



T. Pallidum with the elimination of congenital syphilis, which implies that **strong systems** are in place to ensure **screening and treatment** of all pregnant women and control of syphilis in **specific populations**.



Reaching to Key Populations



No one-size-fits-all model for testing



Reaching the right people, at the right time,
at the right place, with the most effective
programs



POCT with lay testers integrated in
community program



DBS in remote communities

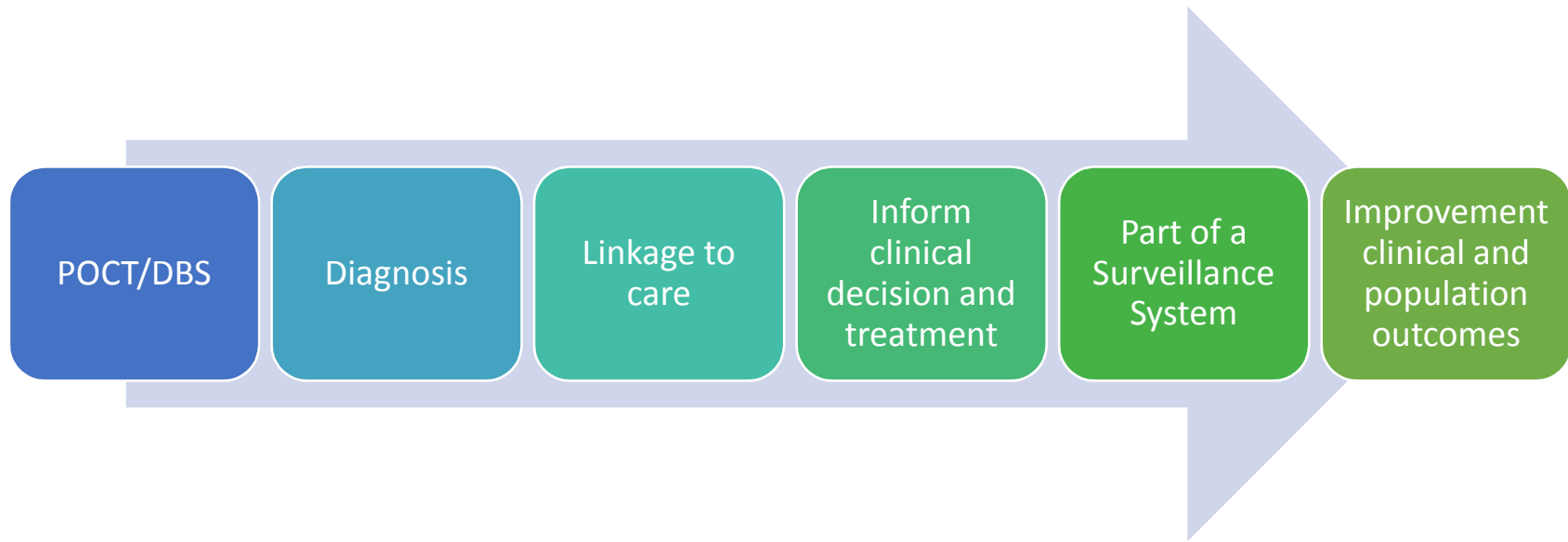


POCT Duo Test in Gay men's Clinic



Self-testing at home

Policy decisions matter more than individual behaviours....



About this series....

- To explore new ways to reach the undiagnosed.
 - Focus on what has been done in Canada, and could be scaled-up for the benefits of all Canadians.
 - Create a space to understand and discuss barriers and opportunities for the scale-up of these new approaches, recognizing specificities and difference in contexts that exist in this country.
- Webinar #1
 - POCT in non-traditional settings
 - Examples of how and where they are or could be used in programs in Canada



Centre de collaboration nationale
des maladies infectieuses
National Collaborating Centre
for Infectious Diseases



HCV POINT-OF-CARE TESTING IN COMMUNITY CLINICS (POCT)

LESLEY GALLAGHER - HEPATITIS C NURSE CLINICIAN
VANCOUVER COASTAL HEALTH
SASKATCHEWAN INFECTIOUS DISEASE CARE NETWORK

NOVEMBER 20, 2017

POCT

- SCREEN
- EDUCATE
- CONFIRM
- ENGAGE
- PATHWAY
- ADVOCATE

Up to **3** out of **4** People with
Hepatitis C Don't Know
They're Infected^{1,2}



Test it. Find it. Fight it. Today!

~ 5.2 million people in the U.S. have been EXPOSED to or are **INFECTED** with HCV.^{1,2}

Both the CDC and AASLD have issued new screening guidelines in an effort to identify these HCV positive people before it's too late.³

OraQuick® HCV Rapid Antibody Test -

The only FDA-approved, point-of-care test for hepatitis C (HCV) antibodies that meets the new guidelines.

- **Accurate.** Reliable results with >98% accuracy.
- **Simple.** 3-easy steps; CLIA-waived.
- **Fast.** Test and result delivery in 20 minutes for immediate linkage to care.

OraQuick® Rapid
Antibody
Test
HCV

>98%
EFFICACY



Quick Reference Guide

OraQuick® HCV Rapid Antibody Test

Step 1. Collect Sample

Fingerstick Whole Blood

Cleanse finger. Air dry.
Puncture with lancet.



Wipe away first drop of blood.
Fill the Collection Loop.



Venous Whole Blood

Validated for EDTA, sodium heparin, lithium heparin and sodium citrate

Collect blood using standard
phlebotomy procedures.

- Whole blood may be stored at 2-8°C (36-46°F) for up to 7 days or 15-30°C (59-86°F) for up to 3 days.
- Insert the tube several times to mix.

Fill the Collection Loop.



Mix Sample

Immediately insert the Loop into the
Developer Solution Mix.



Go to Step 2

Step 2. Perform the Test

Insert device into buffer.



Start the timer.



Pink fluid travels through the Result Window.



- DO NOT remove the device from the Developer Solution while the test is running.

ORAL OR FINGER STICK POCT




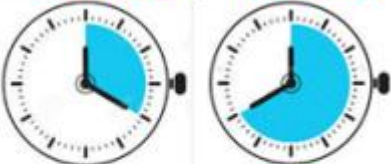




OraQuick® Rapid Antibody Test
HCV





Simple Fingertstick Testing Procedure

<p>STEP 1 <i>Collect sample</i></p>	
<p>STEP 1B <i>Mix sample in buffer</i></p>	
<p>STEP 2 <i>Insert the device into the buffer</i></p>	
<p>STEP 3 <i>read between 20 and 40 minutes</i></p>	<div> <div>20 MINUTES</div> <div>40 MINUTES</div> </div> 
<p>NON-REACTIVE <i>Line in the C Zone</i></p>	
<p>REACTIVE <i>Line in the C and T Zones</i></p>	

ACCESS



PENDER COMMUNITY HEALTH CENTRE



**Vancouver
CoastalHealth**
Promoting wellness. Ensuring care.





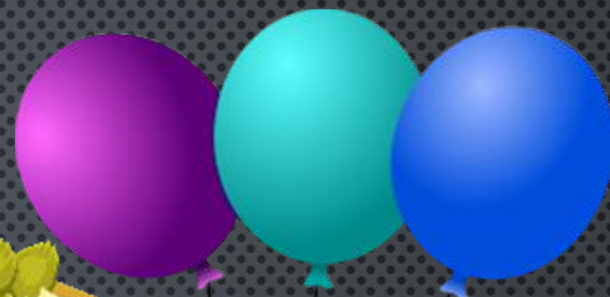
Jane Philpott 🐦 @janephilpott · 1h
I volunteered today to be a demo patient for an oral swab for hepatitis C rapid test at Ahtahkakoop First Nation Health Centre



KNOW YOUR STA+US?
Get tested - Learn your options
WORLD
HEPATITIS DAY
JULY 28 WWW.CSIH.ORG/WHD



LIVER HEALTH EVENTS



HIV Point of Care Testing in Community Pharmacies: the APPROACH study

Webinar 1: HIV and HCV Point-of-Care in Community Settings
November 20, 2017

Jason Kielly, BScPharm, PharmD

Assistant Professor, School of Pharmacy, Memorial University of Newfoundland
Co-Principle Investigator

Christine Hughes, BScPharm, PharmD, FCSHP

Professor, Faculty of Pharmacy & Pharmaceutical Sciences, University of Alberta
Co-Investigator (Lead for Alberta)

On behalf of the APPROACH study Team



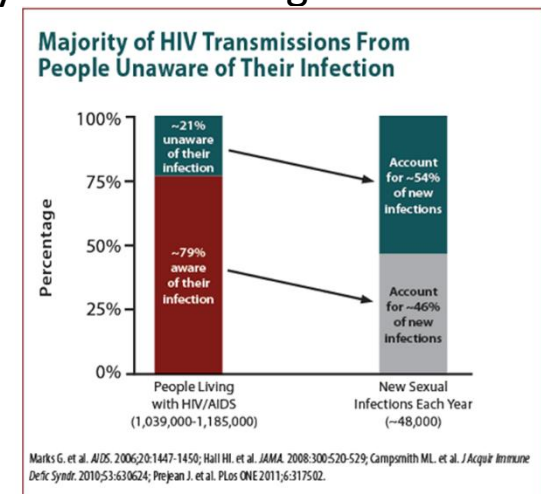
Outline

- Rationale for Study
- Point-of-care-HIV testing
- Study Purpose and Objectives
- Overview of Study Design
- Methodology and Data Collection
- Linkage to Care Examples
- Results and next steps



Rationale

- Rates of new HIV infections in Canada have decreased slightly but are still significant¹
- About 1 in 5 people do not know they are infected with HIV¹
- **Barriers to testing:**^{2,3}
 - Concerns about privacy
 - Low perceived risk
 - Delays for appointment times
 - Waiting for tests
 - Lack of testing outside of business hours
 - Inability/reluctance to access traditional clinic settings
- Innovative approaches that make testing more accessible may help identify infections earlier



¹Public Health Agency of Canada. Summary: Estimates of HIV Incidence, Prevalence and Proportion Undiagnosed in Canada, 2014.

²Spielberg F, et al. J Acquir Immune Defic Syndr 2003;32:318-27.

³Thornton AC, et al. HIV Med 2012;13:416-26.



Why Community Pharmacies?

- Offering HIV POCT through community pharmacies may improve access to testing and provide linkages to care

HIV POCT is ideal
for community
pharmacies

Pharmacists work
closely with other
healthcare
professionals in
the community

Evidence



May be the only
healthcare provider
in rural areas

Scope of pharmacy
practice has
expanded

Pharmacists offer client
focused services in
private consultation
rooms



Point-of-care HIV testing (POCT)

- Only Health Canada approved test: INSTI® HIV-1/HIV-2 antibody test
 - Results available in 1 minute (must be read within 5 minutes)
 - Uses fingerstick blood sample – very easy to use
 - Equivalent to 3rd generation standard tests used by PHL (>99% sensitivity & specificity)
- Considered an HIV “screening test”
 - *A reactive test result requires a standard test to confirm HIV diagnosis*
 - False positive results are uncommon, but are more likely in a setting with a low prevalence of HIV (ie. low risk people/areas)
 - A negative result can be considered a true negative, unless the person is in the window period of infectivity



Limited Availability of HIV POCT

- Not available in Newfoundland
- Currently available in Alberta at emergency departments of select hospitals (rural and urban settings)
- Rapid testing available twice weekly at a community site (Men having Sex with Men outreach office) in Edmonton

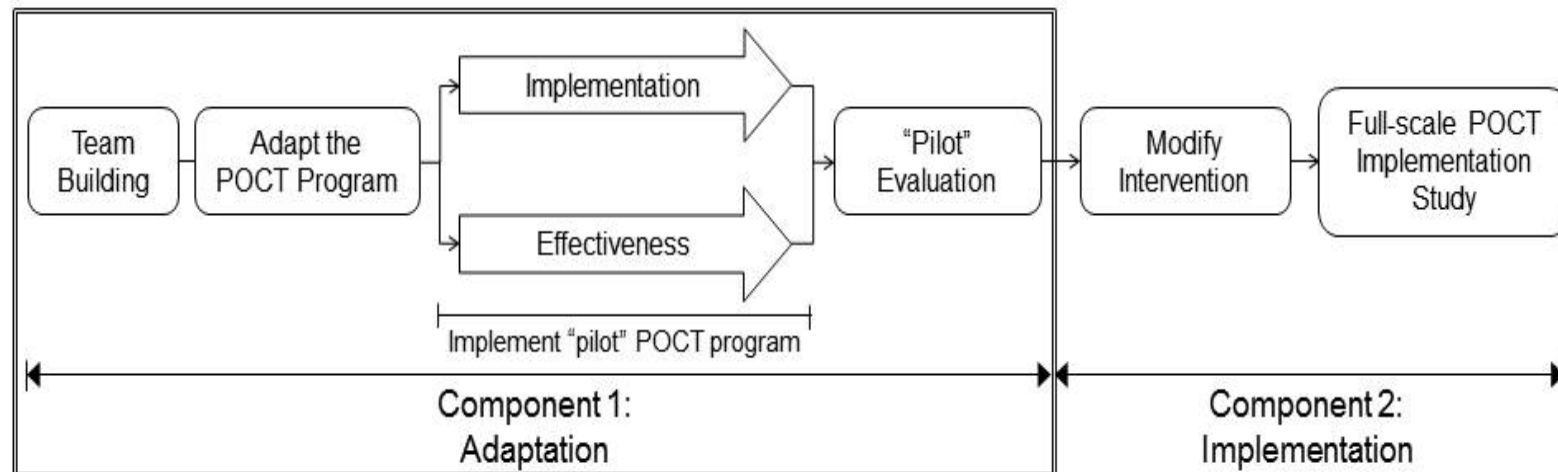


APPROACH study: Objectives

- To develop and implement an effective community-pharmacy based HIV POCT program.
- To gauge the acceptability, feasibility, and effectiveness of the program in reaching target populations.
- To assess the implementation and effectiveness of the pharmacy model of HIV POCT in urban and rural communities within Newfoundland and Alberta.



APPROACH Study Design



Newfoundland sites:

Shoppers Drug Mart, Lemarchant Road, St. John's
Shoppers Drug Mart, West Street, Corner brook
McMurray

Alberta sites:

Mint Health & Drugs (CMP), Edmonton
Shoppers Drug Mart, Franklin Avenue, Fort



Testing Process



My Convenient & private counselling room is right this way

Study Advertising

Client decides to get tested

Pharmacy

Client requests HIV test

Client is taken to private counselling room in pharmacy

Pharmacist:

Assesses client's testing eligibility

Obtains consent

Asks client to complete the demographics questionnaire

Provides pre-test counseling

Pharmacist:

Administers INSTI® HIV POCT

Provides and explains test results

Pharmacist:

Provides post-test counselling

Linkage to Care Plan

- offers supports
- additional STBBI testing
- follow up

Asks client to complete satisfaction questionnaire +/- telephone survey



You're invited to participate in a research study.....



Example of Linkage To Care Plan – Alberta (Reactive or Indeterminate Results)

Pharmacist provides client with requisition for confirmatory HIV test



Notifies Medical Director (STI), Public Health nurse, and Provincial Lab virologist on call



Public Health nurse notifies Partner Notification Nurses (PNN) of reactive result



PNN notifies client of confirmatory HIV test results and arranges referral to Northern Alberta Program



Example of Linkage To Care Plan – NL (Reactive or Indeterminate Results)

Pharmacist provides client with requisition for confirmatory HIV test



Notifies Provincial HIV Program Nurse Practitioner



NP contacts the patient to confirm blood work completed



NP arranges appointment to provide patient with confirmatory results and arranges follow-up care and appointments.



Linkage to other services

- Participants counselled to receive testing for other STIs and referred to additional support services
 - cards developed for each site/region with input from stakeholders
 - contact information for STI testing and other support services

Further testing for STIs available at:

St. John's

- Your family doctor's office
- Eastern Health Sexual Health Clinic: 752-4882
- Planned Parenthood – Newfoundland and Labrador Sexual Health Centre: 579-1009

Corner Brook

- Your family doctor's office
- Western Memorial Regional Hospital – Fast Track Clinic
- Ellisa Sinnicks-House, Nurse Practitioner: 388-0487

Support services available at:

St. John's & Corner Brook

- NL Mental Health Crisis Line: 1-888-737-4668
- AIDS Committee of NL provincial counselling line for HIV/HCV: 1-800-563-1575
- Kimberley Burt, Provincial HIV Nurse Practitioner: 1-709-777-5556

Testing and Support Services

Fort McMurray

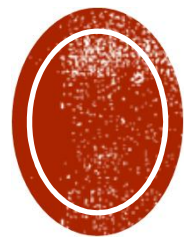
Further testing for STIs available at:

- Your family doctor's office
- Fort McMurray Community Health Services (113 Thickwood Boulevard): 780-791-6182

Support services available at:

- Mental Health Help Line (24/7): 1-877-303-2642
- STI/HIV Information Line (24/7 STI and Health Advice): 811





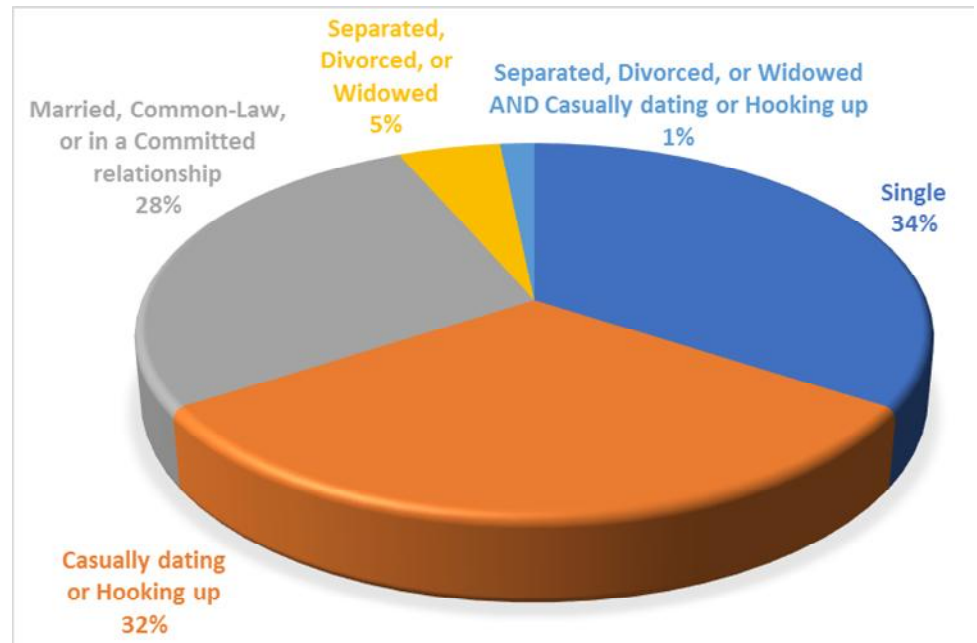
RESULTS



Demographic & Behavioural Information

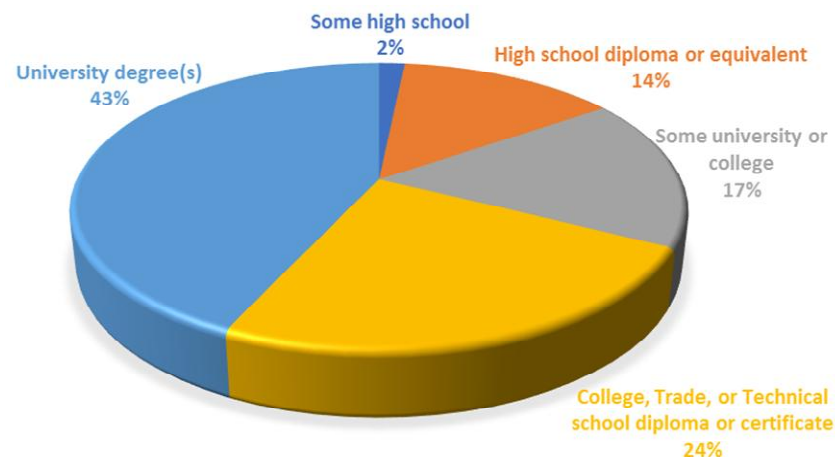
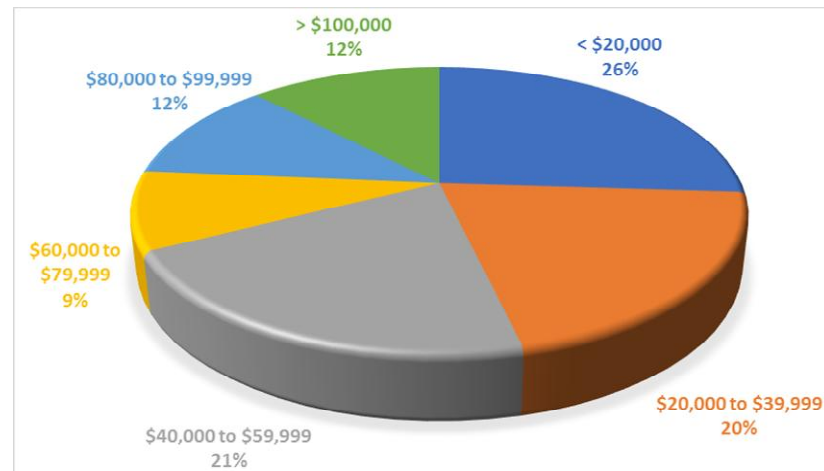
pre-testing questionnaire responses

- 123 tests completed
- 93 Males ; 28 Females ; 2 Other
- Age range: 18–97 years old ($M = 34.8$)
- Majority Caucasian (79.7%)
- Most clients casually dating/single



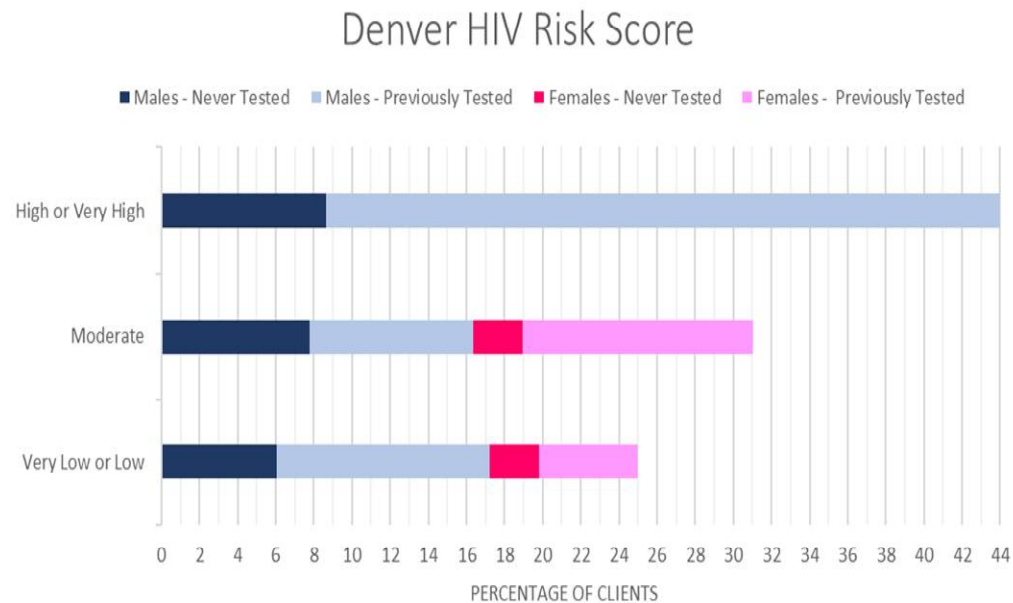
Demographic information

- Majority of clients are well-educated, employed full-time, and earning good income
- Most clients have private insurance (59.5%) for prescriptions
- 86 (71%) of clients have been previously tested for HIV



Demographic information

- The large majority of male & female clients having sex with males report having engaged in condomless sex
 - 86% of MSM clients and 90% of SFSM*
 - Rates of other high-risk activities are low
- 17 female clients and 70 male clients (75%) have Denver HIV Risk Scores ≥ 30 (moderate risk or higher)



*Straight Females who have sex with men



Testing Experience

post-testing questionnaire response:

- High praise for our pharmacists!!!

7. Do you think that HIV testing should be offered through pharmacies?

☐ Yes

☐ No

121 (99.2%) 1 (0.8%)

Please tell us what you liked about your HIV testing experience at the pharmacy today.

Atmosphere. Confidence in the technician.
Competent, friendly pharmacist, fast results.
confidential
Counselling on STI's other than & in addition to HIV. Results in minutes.
easy breezy
Everything. Susan is very personable and knowledgeable. Very private and fast. 10/10 experience.
Excellent counselling services provided. Felt very respected.
Free & Quick
Friendly service. Quick. Easy. Painless.
Friendly, quick, private
Great pharmacist. Michael was the man!
I liked that it was quick and easy, with no appointment needed
Immediate results & quick. Private room. Knowledgeable staff.
Confidentiality.
Immediate results, reduced anxiety.

Quick, easy, less stress. Definitely will be recommending to friends.
Quick, private, hassle free, pharmacist was comforting and easy to talk to.
Quick. Free. Confidential. Accurate.
Rapid results and great counselling.
Simple & Fast
Speed and immediacy
That it is comfortable. Pharmacist very reassuring. Very easy to have HIV done, very convenient & reassures society.
That it was quick and free. The pharmacist was very helpful. :)
The ability to know straight away
The pharmacist was very nice. It was quick & simple.
The pharmacist was very professional. The extra help/assistance that is available for dealing with test results. no appointment necessary was good for me individually.
The rapid testing procedure & ease of getting an appointment to do it.
Very fast, private area. Pharmacists were very caring and thorough.
Very quick. Accurate.
Very well done and delivered
Was very good and came to know lot of new things.



Client Comments

“Quick, easy, less stress. Definitely will be recommending to friends.”

“I think that you guys have done a bang-up job just getting this on the go here. I think it’s long overdue and I’m so happy to see it.”

“I have been putting off getting this [HIV] test for a long time because the idea of a specialized clinic made me nervous, and I also didn't want to do it at a regular blood collection clinic because I wanted to talk about my fears. This was perfect. Thank you!”

“Excellent counselling services provided. The pretalk was positive in nature and delivery. I felt very respected.”



Next Steps...

- Complete data collection – pharmacist and manager feedback
- Data analysis
- Knowledge Translation

... APPROACH 2.0



Acknowledgements



Research Team Members:

- Dr. Debbie Kelly (Co-Principal Investigator)
- Dr. David Allison
- Dr. Shabnam Asghari
- Keith Bailey
- Kim Burt
- Dr. Jacqueline Gahagan
- Dr. Stephanie Hancock
- Hyungu Kang
- Philip Lundrigan
- Dr. Carlo Marra
- Dr. Sam Ratnam
- Peggy Spies
- Gerard Yetman



ACB Women Know Your Status HIV Prevention Project



Wangari Tharao
Director of Research and Programs
Women's Health in Women's Hands CHC

NCCID-CATIE-REACH Testing Webinar Series: Reaching the Undiagnosed
Date: November 20th, 2017

Introduction (1):

- According to the 2016 Canadian census, African, Caribbean and Black (ACB) people made up 2.9% of the Canadian population - 1.2 million people (Statistics Canada, 2017)
- It is estimated that approximately 13.9% of people living with HIV in Canada are from HIV-endemic countries primarily ACB with an incidence rate 6.3 times higher than the general Canadian population (PHAC, 2014).
- In Ontario, 54% of new diagnoses among all women between 2014-2015 were among ACB women (OHTN, 2016)
- While the number of HIV tests in Ontario in 2011 increased by 33.6% among MSM and 7.0% for low-risk heterosexuals, there was a decrease of 25.3% for IDU, 25.4% for high-risk heterosexuals and 11.3% for the HIV-endemic category that includes ACB persons (Remis, 2013)

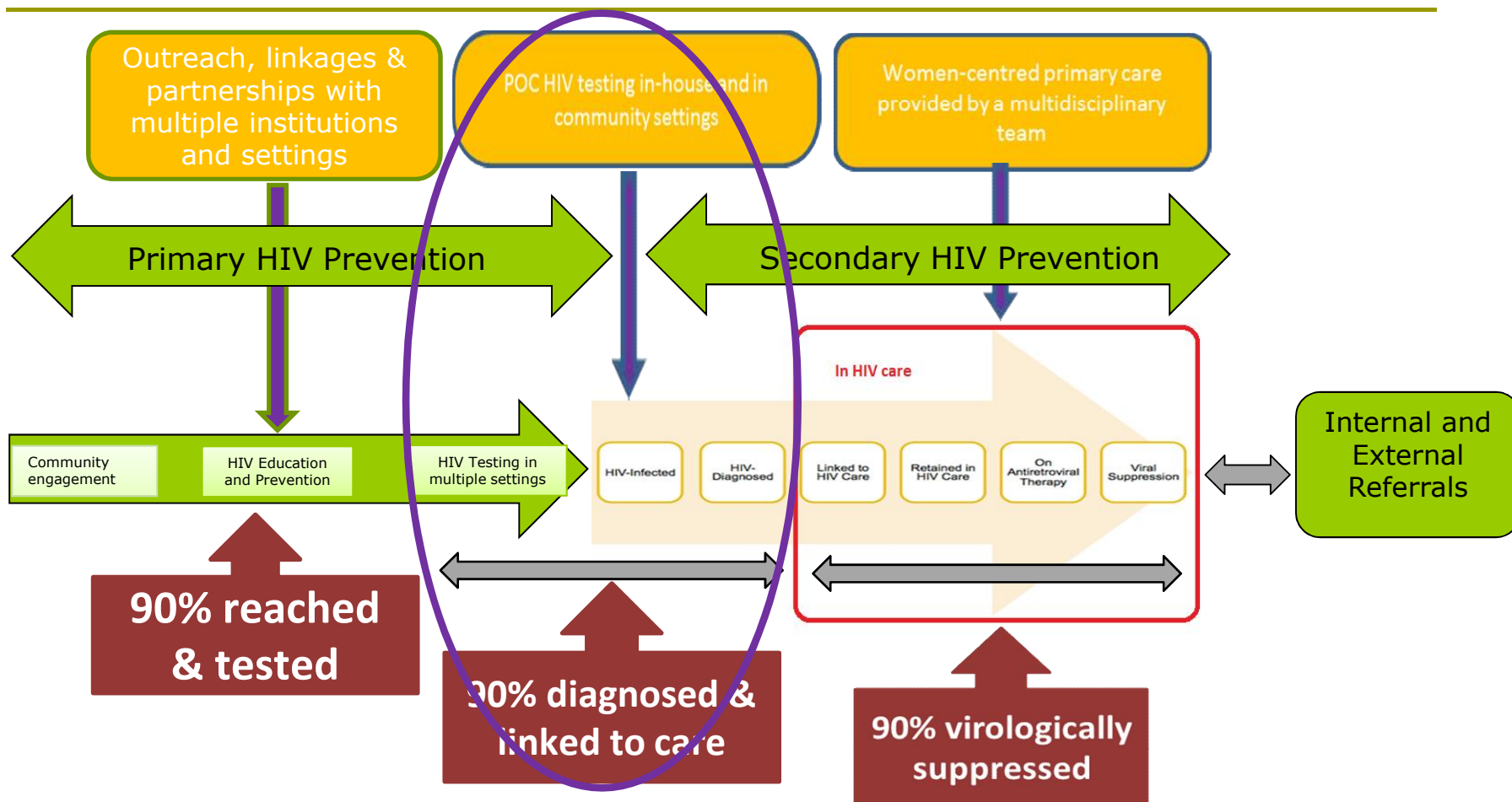
Introduction (2):

- A host of factors are implicated in the reduced/lower rates of HIV testing in ACB communities in Canada including:
 - low risk perception
 - limited knowledge and awareness of community based interventions/programs
 - lower understanding of one's risk of acquiring and transmitting HIV

(Husbands et al., 2013; Baidoboonso, 2013)
- Experiences of intersectional stigma and discrimination based HIV status, race, gender and other dimensions of stigma act as barriers to access

(Braun and Clark, 2006; Daly et al., 1997; Peter et al., 2008; Logie et al., 2011)
- Aim of the ACB Women Know Your status project is meant to alleviate some of these issues and optimize HIV testing

Location of HIV Testing within Framework of WHIWH HIV Program



Project Objectives:

- To increase uptake of HIV testing among African, Caribbean, and Black (ACB) women in Toronto through development of a community-based situated HIV testing intervention/program
- To increase capacity of community-based organizations working with ACB people to support/offer HIV testing within their locales.

~~Intervention development Process:~~

- ❑ Explored existing literature to identify evidence-based interventions, programs, and strategies that:
 - locate HIV testing in community-based settings
 - Efficacious/promising in increasing uptake of HIV testing primarily for ACB women.
- ❑ Consulted with:
 - ACB women who have tested and those who have never been tested for HIV
 - community leaders
 - service providers where women access testing services
 - ACB women living with HIV.
- ❑ Adapted identified intervention to fit testing needs of ACB women
- ❑ Currently piloting intervention

Piloted Intervention Strategies

□ **Strategy #1: “The Girlfriends Project” (Hawk, 2012)**

- Recruit women to host home party and invite their social network
- Provide informal 2-hour educational session + Pre-test Counseling + Offer Testing + POC Testing + Post-test Counseling

□ **Strategy #2: “The Girlfriends Project” with Community Partnerships**

- Work with community organizations and faith groups that serve the ACB population to host gathering for ACB women.
- Provide formal educational sessions with *pre-existing* women’s groups + Pre-test Counseling + Offer Testing + POC Testing + Post-test Counseling

□ **Strategy #3: Outreach Events**

- Provide Pre-test Counseling + POC Testing + Post-test Counseling at community/cultural events (i.e. Pride, Afrofest, etc.)

Testing Venues:

- Data collection started in June 2017
- We offered Point-of-Care (POC) HIV testing in events such as:
 - ▣ PRIDE's Dyke March & Blockorama
 - ▣ AfroFest
 - ▣ Rastafest
 - ▣ BrAIDS for AIDS – Braid-a-thon
 - ▣ Scarborough Afro-Carib Fest
- We have facilitated HIV prevention workshops and onsite POC testing for:
 - ▣ Black Physicians of Tomorrow (UOIT Student Organization)
 - ▣ Toronto Community Housing Corporation (TCHC)
 - ▣ Girlfriend Home Session (Home Party)

Preliminary Results (1):

- 157 participated in pilot so far:
 - 26% had never been tested before
 - Over 98% got tested
 - 96% of those who tested strongly agreed and agreed that they would get tested again
 - 94% of those who tested strongly agreed and agreed that they were satisfied with their experience
 - 96% of those who tested strongly agreed and agreed that they felt that their confidentiality was protected

Qualitative Feedback:

- *"There was great participation from everyone, it was engaging and they got the crowd involved. I like the fact that we got to participate! I learned that HIV is not a death sentence, people with the virus are having children and living healthy lives."*
- *"It was fun! Fun! I learned a lot and was happy to get tested after. I learned so much!"*
- *"It was humorous, the facilitators were very knowledgeable. I learned that people who have AIDS could go back to having HIV. I was happy to get tested, I felt relieved after."*
- *"Overall it was very interactive, very engaging and there was great participation. I was also extremely happy that out of the eleven people that attended, nine decided to 'Know there Status!' I am looking forward to doing another workshop with you again and would strongly recommend other communities to participate in the 'ACB Women Know Your Status HIV Prevention Project' as well."*

Challenges:

- ❑ More requests from community organizations than we can meet (strategy #2):
 - We have turned down 7-8 requests due to lack of testers
- ❑ Long testing line-ups at outreach events (strategy #3):
 - Potential participants getting frustrated and leaving
- ❑ Space in private residences (strategy #1):
 - Limited space to have two testers at the same time
 - Potential issue if test is reactive – how to keep others knowing due to emotional reaction, shock, etc.
- ❑ Not enough testers:
 - Testers linked to time limited projects leaving
 - Clinical staff usually not free when needed.

Conclusion:

- ▣ Pilot is showing feasibility for optimizing HIV testing amongst ACB women if challenges can be resolved
- ▣ Piloting will continue until March 2018
- ▣ We've brought a national team together to develop a national HIV testing intervention using pilot as the basis:
 - Submitted to CIHR intervention call in the summer
 - Exploring other sources of funding





National Collaborating Centre
for Infectious Diseases
Centre de collaboration nationale
des maladies infectieuses



Questions?

Please evaluate this webinar.

Thank you!