National Collaborating Centre for Infectious Diseases

Centre de collaboration nationale des maladies infectieuses

Exploring Alternative Methods for HIV Testing to meet Canada's Obligations to UNAIDS 90-90-90 targets

Session Report

April 26, 2018

Presented by The National HIV/AIDS Laboratories, National Microbiology Laboratory and the Public Health Agency of Canada

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Exploring Alternative Methods for HIV Testing to meet Canada's Obligations to UNAIDS 90-90-90 targets

Meeting Proceedings

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This is NCCID Project number 425
Production of this document has been made possible through a financial contribution from the Public Health Agency of Canada through funding for the National Collaborating Centre for Infectious Diseases. The views expressed herein do not necessarily represent the views of the Public Health Agency of Canada.

Exploring alternative methods to HIV testing to meet Canada's obligation to UNAIDS 90-90-90 targets

Contents

1. Introduction

Across Canada and globally, it is clear that the standard methods for HIV screening are insufficient and have poor uptake among marginalized populations. Novel approaches to HIV testing are needed in Canada as part of its obligation to meet the Joint United Nations Programme on HIV and AIDS (UNAIDS) 90-90-90 targets by 2020.

On April 26, 2018, The National HIV/AIDS Laboratories, National Microbiology Laboratory, and the Public Health Agency of Canada (PHAC), together with the Saskatchewan HIV/AIDS Research Endeavour (SHARE) and the National Collaborating Centre for Infectious Diseases (NCCID) brought together partners and participants to foster a reflection on alternative methods for HIV testing. The session featured new testing technologies and approaches that have the potential to expand HIV testing options in Canada if scaled-up and in order to reach people where they are.

The learning objectives of this session were:

1. To introduce participants to four alternative testing approaches for HIV, by reviewing evidence on technology performance and reach of these innovative service delivery models.

2. To analyze barriers and enablers to implementation of new testing approaches in different settings.

3. To discuss strategies to increase HIV testing in Canada, as it relates to identifying and addressing research, implementation and policy needs.

2. Agenda & Proceedings

Opening remarks

To set the context, the session began with an opening remark from Dr. John Kim, Chief at PHAC. Dr. Kim reminded the audience that in 2015, the Canadian Minister of Health endorsed the UNAIDS 90-90-90 targets, and the first sets of national estimates were released in 2016. The targets were defined as: by 2020, 90% of all people living with HIV will know their status, 90% of those diagnosed will receive antiretroviral treatment, and 90% of those on treatment will have achieved viral suppression. From the estimated 65,040 people living with HIV in 2014 in Canada (plausible range: 53,980 to 76,100), 80% (76% to 87%) were diagnosed for HIV, 76% (70% to 82%) of persons diagnosed with HIV were on treatment, and 89% (84% to 93%) of persons on treatment had suppressed viral loads.

This exercise brought to light the testing gaps that exist in Canada. Nation-wide, 20% of people living with HIV are unaware of their status. Testing is the gateway to care and treatment – it offers an opportunity to enter into broader health discussions, facilitate connections to health services (including addictions and mental health) and build trust among people who may not otherwise access health services. Canada's efforts to reach 90-90-90 targets will be surpassed by increasing the availability of, and access to, patient-centered and integrated testing services. Greater coordination of multi-sectoral efforts are needed to ensure that we are reaching people where they are, at the right time, and with the most effective programs. No one-size-fits-all model exists; a variety of approaches must be combined to meet the needs of all people living in Canada.

Exploring new testing approaches – 4 technologies; 4 service delivery models

Four panelists were invited to present on a specific initiative featuring a new testing option. All panelists provided a brief summary of the testing technology they used and how it works; described the service delivery model they implemented for their testing approach, reflecting on which populations they were trying to reach, and discussed the goodness of fit between the technology they used and the service delivery model they developed.

The four approaches featured during the session were: self-testing, pharmacy-delivered point of care testing (POCT), multiplex testing and dry blood spot testing (DBS). A detailed agenda can be found in Annex I.

Self-testing: Dr. Nitika Pant Pai reviewed the body of international evidence that currently exists on self-testing. Dr. Pai described the implementation of supervised and unsupervised self-testing initiatives conducted among students from McGill University in Montreal, Clinique l'Actuel's clients, a gay men's health clinic located in Montreal, and health care workers in South Africa.

Pharmacy delivered HIV POCT: Dr. Deborah Kelly, from Memorial University, presented two pilot studies implementing the INSTI™ HIV point of care test in pharmacy settings in Alberta and Newfoundland. Dr. Kelly spoke to the process of engaging and training pharmacists to provide testing and deliver results to their clients on site. Dr. Kelly summarized clients' and pharmacists' experiences with the project and reviewed the lessons learned from that experience.

Multiplex testing: Dr. Pai returned to speak about the multiplex test, which can simultaneously screen for multiple infections including HIV, hepatitis B and C, and syphilis. Dr. Pai reviewed the performance of the device and its potential for improving integration of HIV testing to other STBBI testing, and HIV co-infection management.

Dry Blood Spot: Dr John Kim and Geri Bailey, from the Saskatoon Tribal Council (STC), spoke to the DBS testing initiative implemented in several STC communities in Saskatchewan. The use of DBS represents an innovative way to collect and store blood samples for HIV testing. Once the sample is blotted and dried on a filter paper, it can be sent through regular mail to the national laboratory for testing using conventional laboratory methods. Geri Bailey spoke of the strong leadership of the Tribal Chiefs and community leaders, walking the audience through the implementation steps for operationalizing DBS testing.

Digging deeper into implementation and policy considerations

Following the panel, attendees were invited to identify - using a 'dotmocracy exercise' - which questions they would like the panelists to address.

Nine themes were submitted to the audience, and the three questions with the highest number of dots were selected for discussion (# dots placed next to each question).

- **What were your strategies to address stigma and confidentiality issues? (13)**
- **How did you engage local communities? Who were your partners? (12)**
- **What was your advertisement strategy to bring people for testing? (10)**

- How were the results reported to participants? (13)
- What were the mechanisms in place for linkage to care, training, counselling, and quality assurance? (14)
- Who were the testers? Were they trained? By whom? (10)
- Were the results shared with the provincial Public Health and surveillance system? (6)
- How will testing be sustained in these communities/settings? What would need to happen for it to be sustained? (4)
- How/was the provincial Public Health lab engaged? (1)
- What has changed since this project in the community/population was targeted? (1)

Stigma/confidentiality and advertisement strategy

First, panelists and attendees had the opportunity to share experiences about approaches in place to address stigma and confidentiality. Several points emerged from that discussion.

- Avoid creating social visibility around HIV testing initiatives in small communities. People may be scared of being associated with 'risk behaviors' for HIV when presenting to STI clinics or testing venues. Positive advertisement strategy and holistic approach to testing were discussed.
- Use positive advertisement strategy. In the case of the DBS initiative, the campaigning for Testing Day was framed around Liver Health Day, which was perceived as a more positively-focused message.
- Digital strategies, such as HIVSmart!, were also identified as a way to provide pre and post counseling in a manner that would respect individuals' privacy. Self-testing was seen as a solution to provide testing options to individuals who might not otherwise present to a conventional testing venue by fear of being associated with HIV.
- Create a supportive and safe environment for testing. In all approaches discussed, a supportive environment (respectful, non-judgmental, and culturally safe) was paramount to support and maintain people's engagement in testing and care. Dr. Kelly reported how the venues for the pharmacy testing approaches were cherry-picked to ensure that only highly motivated and engaged pharmacists would be part of the project. Panelists spoke to the importance of investing time at the beginning of the project to engage and train all staff to provide a sensitive and respectful experience to clients. Among Indigenous communities, testing initiatives that used a holistic approach and included culturally appropriate perspectives, such as the Medicine Wheel, had the most success.
- Frame the message appropriately, in a manner that is adapted to the community and respects the level of knowledge of that community. Not everyone is at the same level of knowledge and it is important to be mindful of the way the message is received by the community.

- Peers are among the best allies to bridge health care providers and communities and promote engagement to testing and care, especially for populations that have a history of oppression and lack trust in the system. “Peers are the eyes and the ears of the community.”

Local community engagement and local partnerships

The second theme of interest identified was in relation to community engagement and creation of local partnerships.

- Community buy-in and engagement of elders are absolutely necessary for successful implementation and project sustainability. A panelist reminded the audience that the engagement process often advance with baby steps, and it is of great importance to respect that process.

- Respect community readiness and provide education that aligns with community needs. In First Nation communities where the testing initiative used DBS, receiving test results on site on the same day, was seen as a barrier to testing because of confidentiality concerns. DBS was an adapted method in that context as the process to return results respected community needs.

- Invest time to engage with policy makers, community and community-based organizations, practitioners and government to establish adequate process for linkage to care, and create options that are adapted to community needs.

- Measuring the right indicators to understand the value of an initiative. Participants and panelists highlighted the importance of measuring the right set of indicators to evaluate the success of an initiative. An attendee made the point that self-determination and supportive testing environment are factors for success. Gather data that can assess the quality of the relationship between clients and providers would be important to really evaluate the quality of an initiative.

Facilitators for implementation of new testing strategies

Overall, three main points emerged from that discussion. Panelists and participants agreed that successful testing initiatives would need to include the following characteristics.

- Supportive, culturally sensitive and safe – trust and relationships are the major factors for success.

- Spend time upstream to engage stakeholders and strategically reflect on the best ways to offer education and linkage options that are adapted to community/client needs. Respect where people are and what they want.

- Work with peers and communities – they are the best assets to provide support, to navigate systems, and to engage with people.

3. Results of the evaluation

We counted over 50 participants in the session, likely more as people arrived for the second half of the session. Eighteen participants filled their evaluation forms. All participants (100%, 18/18) felt they had learned about new technologies/service delivery models during this session. When asked if they learned more about barriers and enablers to implementation of new testing approaches in different settings, 89% (16/18) of the participants reported having learned new information. Regarding the third objective of the session, 89% (16/18) of the participants felt they had been engaged to reflect on strategies to increased HIV testing in Canada, as it relates to identifying and addressing research, implementation and policy needs.

Seven participants reported that the open discussion after the presentations was the most valuable part of this session. While a participant reported appreciating the layout of the agenda and the flow of the session, another reported appreciating learning about the four different options. Two others highlighted the value of the breadth of knowledge of the panelists and the richness of their anecdotes. Finally, two participants demonstrated interest to implement DBS testing in their communities.

When asked what could have worked better, participants suggested to shorten the presentations to allow for more time for questions and discussion, to make better use of the AV equipment, to hold a full day session rather than a half-day session and to conclude the session with actionable recommendations.

When asked what they would bring back from this session, five participants reported that they would now advocate for integrating different testing approaches in their region, with one participant reporting that phlebotomy was the only option currently available in their jurisdiction. Other answers included:

- strategies to promote linkage to care and continuous engagement with care
- how to tackle stigma
- challenges associated with each approach and how we need to think about how to overcome it
- self-testing initiation
- implementation of DBS in remote and rural communities. Benefits of tester not providing results
- new ways to engage and retain people
- all of the lessons!

Finally, one participant noted that the focus is often on alternative approaches to testing – arguably, to fix gaps found in standard testing, but efforts to improve standard phlebotomy testing are often lacking from the discussion.

4. Conclusion

The session was successful and, as noted by anecdotally and in the evaluation forms, the presentations and discussions were well-received by the audience. This audience - delegates at the Canadian Association for HIV research (CAHR) conference - indicated greater interest in implementation and program science than broader policy considerations (such as regulatory issues, scope of practice barriers, sustainable funding, integration of results to surveillance system, etc.).

Support and engagement of community are key elements for success and efforts at expanding testing options should begin by ensuring that the strategies considered fit the needs of the community. The success of a new approach highly depend on the environment created for screening and testing, as it relates to delivering culturally-appropriate messages and services, respecting community level of knowledge, offering sensitive and safe care with linkage to care mechanisms adapted to community needs. This further emphasizes the need to invest time in upstream planning process and conduct appropriate background work with stakeholders before implementing new testing options

Annex I - Agenda

CAHR 2018 - Ancillary Event

Exploring alternative methods to HIV testing to meet Canada's obligation to UNAIDS 90-90-90 targets

Thursday, April 26, 2018
Time: 9:00 – 12:00
Mackenzie Room, lobby level Westin Bayshore Hotel

Description

Across Canada and elsewhere it is clear that the standard methods for HIV screening are insufficient and have poor uptake in vulnerable populations. Novel approaches to HIV testing are needed in Canada as part of its obligation to meet the UNAIDS 90-90-90 targets by 2020.

Learning objectives

1. Introduce participants to four alternative testing approaches for HIV, by reviewing evidence on technology performance and reach of these innovative service delivery models.

2. Analyse barriers and enablers to implementation of new testing approaches in different settings.

3. Discuss strategies to increase HIV testing in Canada, as it relates to identifying and addressing research, implementation and policy needs.

Program

9:00 – 9:10 a.m. **Welcome and introductions**

Moderator: *Sugandhi del Canto, SHARE, and Geneviève Boily-Larouche, NCCID*

9:10 – 9:15 a.m. **Setting the context**

John Kim, The National HIV/AIDS Laboratories, National Microbiology Laboratory – Public Health Agency of Canada (PHAC)

9:15 – 10:45 a.m. **Exploring new testing approaches – 4 technologies, 4 service delivery models**

HIV Self-testing – *Nitika Pant Pai, McGill University*

Pharmacy delivered HIV POCT testing – *Deborah Kelly, Memorial University*

Multiplex testing - *Nitika Pant Pai, McGill University*

Dry Blood Spot - *John Kim, PHAC, and Geri Bailey, Saskatoon Tribal Council*

10:45 – 11:00 a.m. **Break – Prize for those who come back!**

11:00- 11:20 a.m. **Digging deeper into implementation and policy considerations**

Panel Discussion – Ask your questions

11:20 – 11:35 a.m. **What need to change to move forward?**

Research, implementation and policy needs

Group discussion

11:35 – 11:40 a.m. **Wrap-up and conclusions** *John Kim, PHAC*

Annex II – Panelists Bios

Dr. John Kim is Chief of the NML's National HIV/AIDS Laboratories located at the JC Wilt Infectious Diseases Center in Winnipeg, MB. Their work involves national reference testing for HIV and HTLV, quality management, and novel technologies to expand access to testing such as DBS in Indigenous communities.

Dr. Nitika Pant Pai, is an Associate Professor at McGill University in the Department of Medicine and a Research Scientist at the McGill University Health Centre Research Institute. She is a trained physician with a doctorate in Epidemiology from the University of California, Berkeley, and fellowship from McGill University. In addition to having a decade of experience in implementation research with rapid point-of-care (POC) technologies for HIV and related co-infections (i.e., Hepatitis C, Hepatitis B, Syphilis), she is an expert in the area of HIV self- and multiplex-testing.

Dr. Debbie Kelly is an Associate Professor in the School of Pharmacy, at the Memorial University of Newfoundland (NL). She is also the Special Advisor on Practice Innovation and the Director of the Medication Therapy Services Clinic. Dr. Kelly has been providing care to patients with HIV infection since 1999, as the Clinical Pharmacotherapy Specialist to the provincial HIV program in NL. She maintains an active research practice in pharmacist scope of practice and in HIV. As the principal investigator along with other colleagues, she was the first to research community pharmacist-offered POCT for HIV (the APPROACH study), and the Canadian Observational Cohort study in HIV (CANOC) for the NL site.

Geri Bailey*. At the time of this meeting Ms. Bailey was the HIV Programs Manager with the Saskatoon Tribal Council. She has worked in the field of HIV for many years. Before joining STC, she worked as a Manager at the First Nations and Inuit Health Branch with Health Canada and a Manager of Health Policy & Programs at Pauktuutit Inuit Women of Canada.