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# **NATIONAL DELIBERATIVE DIALOGUE ON REACHING THE HIV UNDIAGNOSED:**

SCALING UP EFFECTIVE PROGRAMMING  
APPROACHES TO HIV TESTING AND  
LINKAGE TO PREVENTION AND CARE

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Thursday, October 13 and Friday, October 14, 2016



## **MEETING REPORT**



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# SUMMARY OF PRIORITY DIRECTIONS

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## **PRIORITY DIRECTIONS: CROSS-CUTTING**

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**Priority direction 1:** Address system-level barriers to HIV testing and linkage to care.

**Priority direction 2:** Address provider-level barriers to HIV testing and linkage to care.

**Priority direction 3:** Address barriers to HIV testing and linkage to care through culturally safe and competent services.

**Priority direction 4:** Support organizations and institutions to review and be held accountable to the Truth and Reconciliation Calls to Action to address barriers to HIV testing and linkage to care for Indigenous people.

**Priority direction 5:** Create multiple pathways to testing, tailored to the needs of each person.

**Priority direction 6:** Use local data to choose a strategic mix of HIV programming approaches to reach the undiagnosed and link them to care.

**Priority direction 7:** Define the threshold at which testing should be offered and the frequency of testing for different populations.

**Priority direction 8:** Make resources available to innovate and try new things. When the evidence does not exist, pilot approaches.

**Priority direction 9:** Use health equity impact assessments to assess impact and relevance of different interventions.

**Priority direction 10:** Use evaluation data to assess how effective the strategic mix of HIV

testing and linkage interventions are in reaching the undiagnosed and linking them to care.

**Priority direction 11:** Ensure that HIV testing is provided alongside STBBIs testing when appropriate.

**Priority direction 12:** Ensure that HIV testing is provided within a holistic programming approach that allows for comprehensive health promotion and disease prevention efforts.

**Priority direction 13:** Reframe our conceptualization of partner notification to “partner care”.

## **PRIORITY DIRECTIONS: REACHING THE UNDIAGNOSED THROUGH CLINICAL SETTINGS**

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**Priority direction 1:** Consider and reflect upon the ethical and human rights implications of routine HIV testing, and create an implementation plan that ensures human rights are upheld.

**Priority direction 2:** When implementing routine testing, a full implementation plan needs to be developed and policies and procedures revised.

**Priority direction 3:** When implementing routine testing, provide training for the individuals offering the test, including physicians, nurses, counsellors and outreach workers. This can include training on cultural competency, HIV 101, counselling, etc.

**Priority direction 4:** Create a referral plan for the patient that includes all the necessary service providers (individualised)—mental health, housing, food security, etc.

**Priority direction 5:** Continue the use of targeted risk-based HIV testing in clinical settings in Canada; prioritize implementation in specific geographical areas and clinical settings according to epidemiology and current levels of HIV testing coverage.

**Priority direction 6:** Support primary care physicians to engage more in HIV testing, including updating their messaging to reflect benefits of HIV testing.

### **PRIORITY DIRECTIONS: REACHING THE UNDIAGNOSED THROUGH COMMUNITY-BASED SETTINGS AND PARTNERSHIPS**

**Priority direction 1:** Support community-based organizations to update and enhance their messaging about the benefits of HIV testing.

**Priority direction 2:** Strengthen collaboration and partnership between community agencies and clinical providers to expand opportunities for testing.

**Priority direction 3:** Consider how point-of-care testing can be used to increase HIV diagnoses among those hard-to-reach in a feasible and cost-effective way.

**Priority direction 4:** Enhance the role of peers and other non-regulated and allied health care professionals as testers.

**Priority direction 5:** Enhance the role of people living with HIV in testing and linkage service planning and delivery.

### **PRIORITY DIRECTIONS: REACHING THE UNDIAGNOSED THROUGH SELF-DIRECTED APPROACHES**

**Priority direction 1:** Consider the feasibility and effectiveness of implementing self-directed approaches to HIV testing in Canada.

**Priority direction 2:** Develop diverse mechanisms to ensure appropriate information and linkage to prevention and care services are provided.

**Priority direction 3:** Investigate new ways for the principle of informed consent to be operationalized in self-directed approaches to HIV testing.

**Priority direction 4:** Assess the regulatory reforms that will need to take place to roll out self-directed approaches, particularly self-testing.

**Priority direction 5:** Involve and engage community and users as partners and advisors in assessing need and roll-out, to ensure community relevance.

### **PRIORITY DIRECTIONS: HIV TESTING AS A GATEWAY TO THE CONTINUUM OF HIV PREVENTION AND CARE**

**Priority direction 1:** Approach HIV testing as an opportunity to enter the full HIV prevention and care continuum.

**Priority direction 2:** Improve access to and information about HIV treatment immediately or soon after diagnosis, alongside linkage to care and supportive services.

**Priority direction 3:** Engage in community mapping to build partnerships to understand local services and service pathways to ensure that clients receive the best care possible and are not lost to care.

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# INTRODUCTION

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In October 2016, CATIE hosted *National Deliberative Dialogue on Reaching the Undiagnosed: Scaling up effective programming approaches to HIV testing and linkage to prevention and care*, a national two-day invitational meeting. This meeting convened a select group of leaders from HIV testing policy, practice, and research, and CATIE Board Members to share practice-based knowledge about effective strategies within or across regions and populations and discuss evidence related to testing and linkage programs.

Discussion of programming included factors for success, key population-specific priorities, and possibilities for adaptation. Pros and cons of various approaches were discussed, and key issues related to the implementation and uptake of evidence-based approaches were shared and debated. Given that many evidence-based HIV testing approaches come with some concern (e.g., routine testing without consent; couples testing leading to coercion to test), challenges requiring creativity, practice, and policy shifts were explored. This report is a thematic synthesis of the key areas discussed, including key challenges and facilitators to HIV testing, and program models to consider in clinical, community-based, and self-directed settings. Efforts to improve linkage to services were also discussed and are highlighted here.

key programming approaches implemented needed to meet this goal and the practice and policy shifts needed to deliver these programming approaches. Participants held divergent and convergent viewpoints and provided relevant context for where and how different programming approaches may be applicable. The meeting fostered multi-region, cross-sectoral collaboration, knowledge sharing, and networking among Canada's HIV testing leadership.

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## MEETING GOAL

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The goal of the meeting was to produce key priority directions in HIV testing and linkage programming to improve our ability to reach the HIV undiagnosed and link them to care. These priority directions, developed by meeting participants, included

## BACKGROUND

### THERE IS AN URGENT NEED TO IMPROVE DIAGNOSIS OF HIV IN CANADA

For people living with HIV, engagement in HIV care, support and treatment begins with a diagnosis of HIV infection. Recent research has shown that early diagnosis, engagement in care and initiation of treatment is crucial for optimal health and can avert deaths. (1–3) The benefit of HIV treatment is so profound that researchers predict that a young adult who is diagnosed and begins treatment shortly after infection, who has minimal co-existing conditions *and* who takes treatment every day can have a near-normal life expectancy. (2) Additional benefits of an HIV diagnosis come from linking people living with HIV to other care and support services, such as mental health, harm reduction and housing services. (4) Early diagnosis is also an effective means of preventing transmission. When people know they are infected with HIV they are more likely to take steps to protect their partners. (5) Additionally, HIV treatment is a highly effective prevention strategy because of the dramatic reduction in HIV transmission risk when a person living with HIV is on treatment and has an undetectable viral load. (6–8) HIV testing and linkage to treatment and care are necessary to realize these prevention benefits.

In Canada, we could do even better at diagnosing HIV and engaging people in HIV treatment and care. (9–15) In late 2015, Canada endorsed the ambitious UNAIDS global *90-90-90* HIV targets, which call for 90% of people living with HIV to know their status, 90% of all people diagnosed with HIV to be on treatment, and 90% of people on treatment to successfully manage their infection by 2020. (16) Achieving these goals will get the world on track to end

the AIDS epidemic by 2030. Recently, PHAC released Canadian estimates on progress towards 90-90-90: as of 2014, an estimated 80% of HIV infected persons were diagnosed, 76% of those diagnosed were on treatment, and 89% of those on treatment have suppressed viral loads. (16) While progress has been made, there are still major gaps in the HIV response to meet these targets. (16–20)

Of the approximately 75,500 people who live with HIV in Canada, an estimated 20% are unaware of their status. (21) This group represents a hidden population that may account for more than 50% of new HIV infections, particularly among people who are newly infected and have high viral loads (5,22,23) In addition, we know that many people are being diagnosed late in HIV infection (9,24) and start treatment late (17). For example, a recent national study found almost half of people starting HIV treatment in 2012 had CD4 counts below 350 (17) and a provincial study found that only 35% of people living with HIV had an undetectable viral load (19). Many people who are diagnosed late have had multiple missed opportunities for earlier diagnosis in acute, community, and primary care settings (25). Without timely diagnosis, combined with linkage and engagement in treatment and care, none of these people are able to maximize the health and prevention benefits of early HIV treatment, care and support.



## **HIV TESTING IS AN IMPORTANT GATEWAY TO THE CONTINUUM OF PREVENTION AND CARE AND KEY TO ENDING THE EPIDEMIC**

HIV testing is the gateway to HIV diagnosis and engagement in treatment, care and support for people living with HIV. It is also the gateway to enhanced engagement in HIV prevention, care and support for people who test HIV-negative but are at ongoing high risk of transmission. Recently, there has been an emphasis placed on the intentional linkage of HIV testing services with the full continuum of HIV prevention, treatment, care and support, which is fundamental to improving our response. This represents a paradigm shift from earlier approaches, which tended to differentiate HIV prevention and HIV treatment as separate areas of practice. New World Health Organization (WHO) guidelines have argued that, without active efforts to ensure linkage, engagement and retention in treatment and care, testing and learning one's HIV-positive status has limited value. (26) Recent International Association of Providers of AIDS Care (IAPAC) guidelines also call for increasing HIV testing coverage alongside significantly improved linkage to and retention in care and treatment. (27) These guidelines also argue that linkage to prevention services is critical, both for those who test HIV-negative and are at continuing high risk and those who test positive. For example, HIV testing is an ideal opportunity to identify people at high risk for infection and refer them for enhanced prevention services, such as PrEP and risk reduction counselling. (26,27) Testing can also serve as a gateway to other, non-HIV specific services for those living with HIV and at risk. (4)

## **NEW KNOWLEDGE ABOUT HIV TESTING CAN HELP IMPROVE DIAGNOSIS, LINKAGE AND ENGAGEMENT**

An enhanced effort to reach the undiagnosed in Canada includes the uptake of programmatic

approaches based on new research and knowledge in HIV testing, as well as the scale up of evidence-informed approaches to testing/linkage. Canada has played a leadership role in some of this new research and program development; however, the uptake of Canadian and international knowledge into practice is occurring unevenly across the country. There is an opportunity to share knowledge of effective testing and linkage practice to help improve efforts to reduce HIV transmissions and improve health and quality of life for people living with HIV. (3,25,28–59)

Recently, the Public Health Agency of Canada (PHAC) and the governments of British Columbia and Saskatchewan have released guidelines recommending that the offer of an HIV test be made part of periodic routine medical care. (25,32,33) This approach can increase opportunities for early HIV detection and address challenges in encouraging high-risk individuals to initiate HIV testing themselves (and at the appropriate frequency). The routine offer of HIV testing has been shown to be cost-effective in some jurisdictions. (34–37) This approach is being considered or has been implemented in some regions in Canada (e.g., British Columbia; (38) Saskatchewan; (33) Manitoba (39)). The PHAC testing guidelines also recommend a simplified pre-test risk assessment process, which would allow clients to assess their own risk without feeling compelled to provide sensitive personal information. (32,60) A more flexible and tailored approach to pre- and post-test counselling, which ensures that HIV testing remains voluntary and based on informed consent, is also outlined in these guidelines. (32) These more flexible approaches may increase access to HIV testing.

New program approaches to HIV testing are being implemented in various jurisdictions in Canada. Couples testing and counselling is one approach that can facilitate diagnosis and decisions around prevention, care, and

family planning. The U.S. “Testing Together” pilot found couples testing to be very effective at identifying new cases of HIV among MSM; 11% of people tested were newly identified as HIV positive, 2 to 3 times higher than through conventional approaches. (40–42) In addition, 17% of couples in the study were newly identified as serodiscordant. (43) Following this success, two centres in Ontario have engaged in a couples testing pilot program.

In addition to new approaches, some Canadian jurisdictions are using new technologies to improve HIV testing. Two clinics that screen for STIs among high-risk MSM in Vancouver used pooled nucleic acid amplification testing (NAAT) to help identify people in the acute phase of HIV infection. They increased awareness about the availability of this technology through innovative social marketing campaigns. (44) HIV point-of-care testing (POCT) is an innovation that has greatly expanded access to and uptake of HIV testing and diagnosis in some Canadian jurisdictions. (45,50) However, access to HIV POCT varies by province, region, community, and population, a challenge in getting ahead of the epidemic in Canada. (45) Although not yet available, home-based HIV testing has been debated in Canada since the approval in the U.S. of the oral testing kit, OraQuick. These technologies have the potential to reach individuals at high risk for HIV infection; however, significant concerns about counselling, confirmatory testing, partner notification, performance, and cost remain. (46–49) challenges remain. Kiosk-facilitated, directed HIV self-testing offers one novel approach to address logistical challenges. Emergency department patients, 18-64 years, were recruited to evaluate use of tablet-based-kiosks to guide patients to conduct their own point-of-care HIV tests followed by standard-of-care HIV tests by healthcare workers. Both tests were OraQuick Advance tests. Of 955 patients approached, 473 (49.5%) Multiplexed POCT devices that offer simultaneous screening for HIV and related co-

infections are also on the horizon and have the potential to provide rapid diagnosis of multiple STBIs in populations at risk for HIV.

New settings to reach the undiagnosed through targeted strategies are also being explored in various Canadian jurisdictions. The development of new settings for HIV testing has been facilitated by the use of POCT in some jurisdictions. New settings for testing include, but are not limited to, Indigenous health centres, addictions facilities, transitional housing, indoor commercial sex venues, during street outreach, and prisons (45,50). Ontario piloted anonymous POCT and STI screening successfully in two provincial prisons, as well as through a variety of community-based organizations. (50–53) The Montreal SPOT Project, which provided POCT, STI testing, and linkage to care services in a community site (50) found that 10% of people tested had not previously been tested for HIV (55), and that their approach attracted a high proportion of MSM born outside of Canada. (54) Vancouver Coastal Health and Island Health (B.C.) have piloted a pharmacist-provided HIV testing and linkage model (57) and a recently-funded (2016) pilot project will look at factors influencing the acceptability and feasibility of pharmacist-provided HIV testing in Alberta and Newfoundland, including pharmacies in both urban and rural areas. (61) Non-regulated and allied health care providers are also being engaged as testers in some jurisdictions. Evidence supports this approach; providers such as pharmacists, social workers, and “peers” may be appropriate for the tester role. (26,56) In some cases, these providers are more effective at engaging with people at high-risk than traditional testers (56) and may expand the availability and uptake of HIV testing services. (26)

Immediate linkage to treatment from diagnosis will likely become the standard of care in many high-income countries (1) given that early care and treatment can significantly improve health

outcomes. (3) Some jurisdictions are assessing this strategy. In Vancouver, a pilot found that a hospital could improve the average number of days between diagnosis and care through a rapid referral program, which provided same-day connection to an HIV specialist and other resources such as peer navigators and primary care doctors; it reduced the average time to care from 21 days to one day. (58) One sexual health clinic in Toronto has revised their HIV test aftercare services based on evidence that clients were facing psycho-social barriers to care. This model (*Making the Links*) includes immediate referral to primary care alongside counselling and ongoing follow-up for one year. 98% of clients were referred to an HIV primary care physician and had their first appointment 1-2 weeks post reactive HIV test. (59)

## POPULATION-SPECIFIC APPROACHES TO HIV TESTING ARE IMPORTANT

Certain populations in Canada experience very high rates of HIV. Compared to their counterparts, the rate of new HIV infections is 131 times higher among men who have sex with men, 59 times higher among people who inject drugs, 6 times higher among Canadians born in countries where HIV is endemic, and 3 times higher among Indigenous people. (62) We also know that testing rates differ across and within these different populations in Canada and that populations at high risk are not testing as frequently as they should. (21) This evidence tells us there is room for improvement and that population-specific strategies are warranted (63).

Population-specific approaches to HIV testing can be embedded into integrated programs that address multiple health issues most relevant to a particular population. For example, GayZone, gay men's STI/HIV testing clinic in Ottawa, has above-average HIV and STI positivity rates and has demonstrated the utility of providing

these services in a population-specific manner. (64) Population-specific approaches can also address many obstacles that contribute to poor engagement in HIV testing, prevention and care, substantially limiting the effectiveness of efforts to improve prevention and health outcomes. The Lancet–UNAIDS Commission recently noted: "...[the scale up of testing] will not be sufficient to control the epidemic" if we do not address the stigma, discrimination, syndemics, and the social and structural drivers of the HIV epidemic. (65,66) Stigma related to HIV is a critical barrier to HIV testing for specific populations affected by HIV, particularly Indigenous communities, African, Caribbean, and Black communities, and gay men. (32,67–70) Lack of perceived HIV risk, knowledge and comfort are also barriers. (67) The lack of culturally safe services is also a barrier. (67) To address these and other barriers, many different population-specific strategies have been implemented. For example, the *Know Your Status* Project, a first-of-its kind mobile, HIV/HCV/STI project delivered in Saskatchewan First Nation communities to increase diagnoses and reduce stigma, successfully addressed significant gaps in the continuum of care. (71)

It is also important to expand efforts to address barriers to HIV testing and engagement in prevention and care that are not population-specific. *It's Different Now*, a city-wide social marketing campaign used the latest science to spark a public conversation about HIV in Vancouver for all residents. In Canada, the criminalization of HIV non-disclosure is a significant barrier to testing for all populations. (72)

# PROCESS

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## DELIBERATIVE DIALOGUE

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Deliberative dialogue is a form of discussion aimed at finding the best course of action. The purpose is not so much to solve a problem or resolve an issue as to explore the most promising avenues for action.

Deliberative dialogue differs from debate, negotiation, brainstorming, and consensus-building. The purpose is not simply to talk to each other, but rather to think together. We did not aim to reach a single conclusion or consensus, necessarily; rather, the purpose of this process is to produce collective insight and judgment reflecting the thinking of the group – in this case a group of HIV testing and linkage experts from across Canada.

Thinking together involves listening deeply to other points of view, exploring new ideas and perspectives, searching for points of agreement, and bringing unexamined assumptions into the open. Deliberative questions take the form “what should we do?” The process revolves around a pressing question that needs to be addressed (i.e., how can we decrease the number of people who are undiagnosed and inadequately linked to services?), and through dialogue, try to come to a common understanding that opens acceptable pathways to action.

## AGENDA OVERVIEW

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The deliberative dialogue agenda was developed to facilitate discussion focused on two key questions:

- 1) How can we decrease the number of people who are undiagnosed in Canada?
- 2) How can we ensure those tested are linked to appropriate services in the *most timely* and *culturally safe* way?

The agenda for this meeting was framed by four key topics, each centred on approaches and mechanisms for HIV testing and linkage. The meeting also included two priority-population specific panels. For a copy of the agenda, please see Appendix A.

Presentations in each of these sessions were meant to serve as a catalyst for discussion and were not intended to provide an exhaustive review of testing programming in Canada. The dialogue that took place focused on how we can use these approaches to better reach the right people, at the right time, and with the right services. Facilitation of the discussion endeavored to focus in on factors for success, key population-specific priorities if appropriate and gaps in programming knowledge in the room. The pros and cons of approaches were discussed were considered in some cases, and concerns were revealed and responded to.

The goal of the meeting was to produce key priority directions in HIV testing and linkage programming to improve our ability to reach

the HIV undiagnosed and link them to care. The dialogue was meant to capture:

- Program approaches that need to be considered and taken up to help respond to the Canadian HIV epidemic
- The practice and policy shifts associated with these program approaches.
- Divergent and convergent viewpoints
- Relevant context for where and how different programming approaches may be applicable to various epidemics and contexts.

We shared a pre-reading package with participants two weeks before the deliberative dialogue. The purpose of the pre-meeting reading list was to ensure that all participants came to the deliberative dialogue with a shared baseline of knowledge of HIV diagnosis-related Canadian epidemiology, HIV testing technologies available in Canada, and common HIV testing processes in Canada.

These materials included an overview of the meeting; an HIV testing process fact sheet (Appendix 2); HIV testing technologies fact sheet (Appendix 3); Pre-recorded webinar on HIV surveillance, estimates and cascade in Canada, delivered by PHAC (In English: <http://www.catie.ca/en/hiv-surveillance-estimates-and-cascade-canada-2014>; In French: <http://www.catie.ca/fr/surveillance-estimations-cascade-vih-canada-2014>); the PHAC HIV Screening and Testing Guide (<http://www.phac-aspc.gc.ca/aids-sida/guide/hivstg-vihgdd-eng.php#a>); the WHO Consolidated Guidelines on HIV Testing Services ([http://apps.who.int/iris/bitstream/10665/179870/1/9789241508926\\_eng.pdf?ua=1&ua=1](http://apps.who.int/iris/bitstream/10665/179870/1/9789241508926_eng.pdf?ua=1&ua=1)); the Canadian Consensus statement on the health and prevention benefits of HIV antiretroviral medications and HIV testing (<http://www.hivconsensusvih.ca>);

and a link to the CATIE testing section of the website, which includes information on HIV and hepatitis C testing and how tests work (<http://www.catie.ca/en/prevention/testing-and-diagnosis>).

## **PARTICIPANTS**

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Fifty leading experts in HIV testing and linkage programming – including people living with HIV, policy makers, health planners in community, clinical, and public health arenas, and service providers – were invited to attend the deliberative dialogue. Fifteen CATIE Board members also participated. CATIE staff members joined as observers. Please see Appendix C for a participant list.

## OUTCOMES: ISSUES AND PRIORITY DIRECTIONS EMERGING FROM THE DELIBERATIVE DIALOGUE

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Regions across Canada are implementing diverse HIV testing and linkage programs and practices, in an effort to effectively reach the HIV undiagnosed and link them to relevant services. These programs also can provide important opportunities to engage people who are HIV negative but at ongoing high risk for HIV. In the discussions about the program models, settings where HIV testing can take place, personnel who are best suited to provide HIV testing, and HIV testing technologies that are available and in the pipeline and relevant for Canada, several issues and priority directions were articulated and provided here. These priority directions should be considered to improve Canadian efforts to decrease the number of people who are HIV undiagnosed in Canada and ensure those tested are linked to appropriate services in the most timely and culturally safe way. These issues and priority directions reflect one of the four key topics that framed the meeting agenda: 1) reaching the undiagnosed through clinical settings; 2) reaching the undiagnosed through community-based settings and partnerships; 3) self-directed approaches; and 4) linkage across the continuum of HIV prevention and care; or cut across all topics, and are therefore referred to below as “cross-cutting”.

The issues and priority directions outlined below do not represent a singular national view. Instead, the deliberative dialogue reflected diverse viewpoints on HIV testing programming in Canada. The differences that were reflected in discussion was reasonable and expected, given

regional and population-specific disparities in access to testing approaches and technologies, different health systems, access to resources, and HIV epidemiology. Important tensions are noted below.

The intention of capturing these issues and priority directions is to support various stakeholders to enhance their efforts to reach the HIV undiagnosed and link people to appropriate and effective services. It is the responsibility of each jurisdiction to ensure that HIV testing approaches available in their region are relevant to their context and health system, but also that they explore evidence-based approaches that may be new to them. We can benefit from learning from the experiences of other regions, organizations and communities. As the national knowledge broker in HIV and hepatitis C prevention, testing, treatment and care, CATIE will use these priority direction and the issues revealed at the deliberative dialogue to inform our knowledge exchange work over the next few years. CATIE will continue to engage, consult and follow the guidance of those most affected by HIV as well as a breadth of other stakeholders in defining CATIE’s role and responsibilities in the collective work to address HIV.

### **ISSUES AND PRIORITY DIRECTIONS: CROSS-CUTTING DISCUSSION**

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Some of the discussion throughout the deliberative dialogue focused on issues and

priority directions that cut across all four key topics that framed the agenda. These issues and directions have been summarized here.

### Barriers to HIV testing access

A significant portion of the discussion focused on how structural-level, provider-level and individual-level barriers affect access to HIV testing, especially among specific priority populations and in certain jurisdictions in Canada. Through population-specific presentations, participants engaged in discussions of how these barriers affect HIV testing access among gay, bi and other men who have sex with men (gbMSM), people who use drugs, sex workers, Indigenous communities, and African, Caribbean and Black (ACB) communities. Many common factors were expressed, and discussion took place about how HIV testing in Canada needs to address these barriers to ensure that all people at risk can equitably access and use services.

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*“Barriers to testing exist at the system-, provider-, and individual-level. We can’t only work at one level. Don’t just increase the offer; shift the offer.”*

– meeting participant

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The two barriers limiting access to HIV testing that stood out as particularly problematic and wide-spread were: 1) HIV-related stigma and discrimination (including the criminalization of HIV non-disclosure); and 2) a lack of trust in providers and the health care system due to racism, colonization, and homophobia. These barriers influence access to and uptake of HIV testing at the system-level, the provider-level, and the individual/patient-level across all priority populations.

### Addressing system-level barriers to HIV testing access & linkage

□ **Priority direction 1:** Address system-level barriers to HIV testing and linkage to care

Barriers to HIV testing and linkage to care are rooted in system-level factors. To decrease the number of people who are HIV undiagnosed in Canada and ensure those tested are linked to appropriate services in the most timely and culturally safe way, these factors must be addressed. Many participants called for HIV decriminalization, the elimination of stigma, and the universality and ease of access to testing, treatment, and prevention options. This necessitates the dedication of resources to address these systems level barriers. *Individual, provider, or institution-level* barriers are often rooted in these system-level factors. However, it was also strongly argued that we can’t wait for the elimination of systemic barriers to improve our testing efforts. We need to also work at the individual- provider-, institutional- and systemic-level at the same time. Some resources earmarked to improve access to HIV testing should be spent on system-level interventions that eliminate barriers to HIV testing and prevention services.

### Addressing provider-level barriers to HIV testing access & linkage

□ **Priority direction 2:** Address provider-level barriers to HIV testing and linkage to care

To improve access to and uptake of HIV testing, provider-level barriers must be addressed. Participants at the deliberative dialogue highlighted that health care providers and institutions should bear much of the responsibility to address barriers to services. While the individual person at risk is often the focus of discussion related to barriers, participants consistently reframed this narrative

to focus on the activities and *responsibilities* of providers and institutions.

- **Priority direction 3:** Address barriers to HIV testing and linkage to care through culturally safe and competent services

Culturally incompetent and unsafe HIV testing may lead to the avoidance of services. The ability of health care providers to talk with, develop, and maintain a trusting relationship with individuals will depend on a recognition and understanding of the realities of individuals' lives and histories. It is important that health care providers and institutions think about and address intersectional discrimination in their provision of health care to all patients, particularly those from marginalized or at-risk populations, such as gbMSM, Indigenous communities, people who use drugs, sex workers, and ACB communities.

While some providers are supportive and provide culturally safe care, participants at the deliberative dialogue commented at length on uncomfortable, reluctant and/or undertrained health care providers in relation to the lives, experiences, and needs of people at risk for HIV. This discomfort and reluctance creates a barrier to HIV testing for communities at risk. How health care providers communicate with patients can improve or reduce their engagement in services and affect health outcomes. Providers and institutions have the responsibility to prioritize effective strategies that operationalize anti-racist, anti-homophobic and decolonizing concepts into practice.

- **Priority direction 4:** Support organizations and institutions to review and be held accountable to the Truth and Reconciliation Calls to Action to address barriers to HIV testing and linkage to care for Indigenous people.

Some participants at the deliberative dialogue recommended that organizations be challenged

to review and be held accountable to the Truth and Reconciliation Calls to Action (Health and Education actions specifically), and to consider reviewing the [Summary of the Final Report of the Truth and Reconciliation Commission of Canada](#). The purpose of the Truth and Reconciliation Commission is to support understanding among all Canadians of the history of cultural genocide of Indigenous people in Canada, to come to terms with the events of the past in a manner that overcomes conflict, and establish a respectful and healthy relationship among people going forward. Taking up the calls to action is a way for Indigenous and non-Indigenous Canadians to work towards addressing the impact of intergenerational trauma on Indigenous peoples, which is linked strongly to HIV risk, among other negative outcomes. By encouraging health care providers and institutions to consider and take up these calls to action, progress can be made towards decolonizing health care and addressing system-provider- and institutional level barriers to HIV testing and linkage for Indigenous communities.

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*“Some health providers will treat us just like ‘everyone else’ – but we actually have specific health needs.”*

– meeting participant

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#### **Address individual-level barriers to HIV testing access & linkage**

- **Priority direction 5:** Create multiple pathways to testing, tailored to the needs of each person.

A mosaic of HIV testing and linkage approaches and methods are required to reach our goals in any particular jurisdiction. Many venues are needed (e.g., clinical, outreach, community, prison); all types of referrals should be included in some way (i.e., no wrong door); multiple providers should be engaged; diverse forms of education for communities at risk and



service providers are required, among other things. Creating multiple pathways to testing can facilitate entry into testing for a diversity of individuals.

### Using evidence to implement, monitor, and evaluate HIV testing and linkage programs

Decision-making based on the best available evidence from surveillance, research, and evaluation is an important component of public health. Using scientific evidence to guide program planning, engaging communities in decision making, and conducting program evaluations are important components of successful initiatives. Participants at the deliberative dialogue discussed the use of various forms of data to guide HIV testing and linkage programming decision-making, including geographic, population, facility and service prioritization.

#### Using data to identify the most strategic mix of testing interventions

- **Priority direction 6:** Use local data to choose a strategic mix of HIV programming approaches to reach the undiagnosed and link them to care

The deliberative dialogue focused on the identification of effective HIV testing approaches for a particular context or population, and the determination of the right testing interventions in a jurisdiction through the use of data. As noted elsewhere, given that a mosaic of approaches and methods are required to reach our goals in any particular jurisdiction, using data that reveals the local HIV context is important to guide efforts.

- **Priority direction 7:** Define the threshold at which testing should be offered and the frequency of testing for different populations.

Given that not all individuals carry the same burden of HIV risk, providers benefit from

guidelines that stipulate a different frequency of testing for those at higher risk. These guidelines exist in some jurisdictions already (e.g., BC, Ontario). Guidelines should indicate how providers should adapt their approach/services for their own patients or population. In BC, for example, providers are instructed to routinely offer HIV testing to the general public every five years, and annually for men who have sex with men, Indigenous communities and people from countries where HIV is endemic. (25) In Ontario, frequency guidelines are population-based. (73) In other provinces, a different approach may be warranted. It is the responsibility of public health and health care providers to ensure that HIV testing is available at every opportunity, as long as it remains effective and efficient, based on local data.

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*“People have a right to know [their HIV status], even if there are no supports in the community.”*

– meeting participant

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- **Priority direction 8:** Make resources available to innovate and try new things. When the evidence does not exist, pilot approaches.

Participants discussed the value of trying new things and highlighted that, where evidence does not exist, it is important to provide opportunities to pilot new initiatives, assessing progress through rigorous evaluation and data collection.

#### Using health equity impact assessments to guide decision-making

- **Priority direction 9:** Use health equity impact assessments to assess impact and relevance of different interventions

Health equity impact assessments are a mechanism to ensure that the potential health impacts and health *equity* impacts of a particular

program or strategy are considered before implementation. This tool allows the user to identify how a program or policy will impact population groups in different ways. The end goal is to maximize positive impacts and reduce negative impacts that could potentially widen health disparities between population groups. (74) The use of health equity impact assessments in HIV testing intervention design and roll-out could support more equitable access to and use of HIV testing and linkage services in Canada.

### Using program evaluations to assess progress

- ▣ **Priority direction 10:** Use evaluation data to assess how effective the strategic mix of HIV testing and linkage interventions are in reaching the undiagnosed and linking them to care.

To understand if efforts are working, jurisdictions need to have clear HIV testing targets and the ability to collect and analyse data to understand if their efforts are working. Examples of targets include: the proportion of people estimated to be undiagnosed; percentages of priority populations who have been tested for HIV; CD4 count at diagnosis; and, ratio of people linked to care. Data on missed opportunities for diagnosis and the stage of HIV at diagnosis were also identified as critical in assessing the success of testing interventions, particularly those that offer tests routinely to patients (see below).

Participants at the deliberative dialogue noted that HIV testing programs should be implemented until no longer cost effective. Data needs to be collected on whether access to testing outcomes for key populations has increased.

Understanding how well people are linked to HIV services from HIV testing is also important. World Health Organization (WHO) guidelines have argued that, without active efforts to ensure

linkage, engagement and retention in treatment and care, testing and learning one's HIV-positive status has limited value. (26) Recent International Association of Providers of AIDS Care (IAPAC) guidelines also call for increasing HIV testing coverage alongside significantly improved linkage to and retention in care and treatment. (27) These guidelines also argue that linkage to prevention services is critical, both for those who test HIV-negative and are at continuing high risk and those who test positive. Testing can also serve as a gateway to other, non-HIV specific services for those living with HIV and at risk. (4) . Targets and measurement of the HIV care cascade is critical.

### Using “Missed Opportunities” Data to Guide Programming:

Participants discussed the importance of using data on missed opportunities for diagnosis as an indicator of quality care. The evidence of the benefits of reaching people early for clinical reasons is clear (1–3) and many agreed that it is unacceptable for a health care provider to “miss a diagnosis”; meaning, engaging with a person with unknown undiagnosed HIV and not offering an HIV test, even if a risk has not been revealed. Some jurisdictions collected data on missed opportunities: this data indicates the number of encounters an undiagnosed HIV positive individual has with the health care system over a particular time period before they are offered or provided with an HIV test and diagnosed. This data provides clear and useful measures of success on the ability of a health system to reach the HIV undiagnosed and can support health planners to understand where to implement routine (offer) testing initiatives.

## Integrating HIV testing and linkage efforts with other services

Participants discussed drawbacks of fragmented health services (e.g., missed opportunities for linkage to relevant health interventions). Fragmented services exist when HIV testing, support and treatment services are offered in different settings. For example, services for STBBI testing are fragmented when a patient needs to make multiple appointments to be tested for multiple STBBIs. Participants discussed the value of integrating HIV testing services with testing for other STBBIs, as well as providing HIV testing services alongside programs that address the mental, spiritual, emotional and physical needs of the patient and their sexual or drug-using partners, to achieve optimal health and wellness.

### Integration of HIV testing with testing for other STBBIs

- **Priority direction 11:** Ensure that HIV testing is provided alongside STBBIs testing when appropriate

There was consensus at the deliberative dialogue that we should optimally integrate our approaches to HIV testing with STBBIs, based on the needs of affected groups because HIV and other STBBI share common modes of transmission, affected populations, common risk behaviours, and common social and structural risk factors.

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*“Anyone who comes for an HIV test should be offered HCV and STI testing, and vice versa.”*  
– meeting participant

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## Integrating HIV testing services with programs that address a patient’s mental, emotional, physical, and spiritual needs

- **Priority direction 12:** Ensure that HIV testing is provided within a holistic programming approach that allows for comprehensive health promotion and disease prevention efforts

Participants discussed how social environments contribute to HIV risk and health outcomes, and some proposed that HIV testing programming should be provided alongside or with active linkage to the mental, emotional, physical, and spiritual services that might be required to reduce the individual’s risk and improve wellness.

### Rethinking partner notification to address the HIV care needs of partners

- **Priority direction 13:** Reframe our conceptualization of partner notification to “partner care”

Partner notification is a secondary prevention process through which sexual partners and other contacts exposed to an STI, including HIV, are identified, located, assessed, counselled, screened and treated; it is understood by public health providers to produce a public health benefit (e.g., disease surveillance and control). (75) More recently, as we have come to understand the role that *early* HIV diagnosis and treatment play in achieving optimal health outcomes for people living with HIV, partner notification is being reframed as *partner care* by some health providers and public health practitioners. (76) “Partner care” as a concept and practice reframes partner notification from a primarily population health activity to a clinical, or individual health activity. Partner care is an important component of all testing approaches and settings not only as a public health strategy to reduce transmission, but also for the health

and wellness of individuals who are diagnosed HIV positive.

### **ISSUES AND PRIORITY DIRECTIONS: REACHING THE UNDIAGNOSED THROUGH CLINICAL SETTINGS**

HIV testing in clinical settings, such as primary care, hospitals, and public health units, is a critical component of a jurisdiction's mix of HIV testing approaches. These settings are diverse; multiple approaches to HIV testing and "types" of testers within these settings are needed to optimize the way that we reach the HIV undiagnosed and link them to care and services. Nurses, nurse practitioners, and physicians play an important role as HIV testers within these settings, and other professionals and peers may also be important.

Both routine provider-initiated testing and targeted, risk-based testing play an important role in reaching the HIV undiagnosed through clinical settings. Instead of thinking about targeted *or* routine testing, deliberative dialogue participants considered these approaches as two aspects of an integrated testing strategy designed to meet regional or local needs.

#### **The routine offer of HIV testing in clinical settings**

While it is common to find targeted, risk-based testing in Canadian clinical settings (because it is considered effective in identifying HIV positive individuals), discussion during the clinical settings session focused almost entirely on issues related to the implementation of routine, provider-initiated testing. In this form of HIV testing, a test is *offered* routinely to an individual irrespective of a specific identified risk event (people are not routinely tested without consent).

Participants considered the routine HIV testing as an additional entry point to the HIV prevention and care continuum. Routine testing has been implemented in Canada in 1) general health care settings, such as hospitals and primary care, and 2) high-prevalence clinical settings and refers to the addition of an offer of an HIV test to routine medical care. Some jurisdictions in Canada, such as parts of British Columbia and Manitoba, have implemented this approach in addition to the existing, more traditional methods of HIV diagnosis (i.e., targeted, risk-based testing).

#### ***HIV Testing in Acute Care in Vancouver Coastal Health Authority Region***

In 2011, the three acute care hospitals in Vancouver started to routinely offer an HIV test to patients presenting to hospital irrespective of perceived risk, as part of general hospital care. This new testing approach significantly changed everyday practice in these clinical settings, and was proven to be effective in reaching people with HIV testing earlier in their infection and cost effective. Vancouver Coastal Health's decision to implement routine offer in acute care was data-driven: they knew that 1/3 of patients diagnosed with HIV in the past 3 years had at least one previous encounter with the health care system and had not been provided with an HIV test. This data revealed important missed opportunities for diagnosis that the routine offer of HIV testing would address.

Successful implementation relied on addressing the magnitude of the practice change associated with the inclusion of HIV testing as a part of routine care. For more information on the process to implement this approach, please see: <http://www.catie.ca/en/pc/program/acute-care>

As described at the deliberative dialogue, routine testing is based on the notion that identifying a person's risk is not sufficient to meet the goal of early diagnosis for all people who are at risk. With routine testing, neither the patient nor the provider has to recognize or reveal a risk factor for HIV. This approach has been demonstrated to be highly acceptable to patients and health care providers in numerous clinical settings and effective in reaching and diagnosing patients. This programming approach can also address systems- provider- and individual-level barriers to HIV testing, such as lack of awareness and misconceptions related to HIV by physicians and patients. Routine testing can be provided in an opt-out or an opt-in manner.

Routinely offering HIV testing may be particularly relevant for communities where identifying a risk is impossible or not ideal. As participants at the deliberative dialogue discussed, in Vancouver, for example, while gay men's health services are relatively common and many gay-identified men access HIV testing in these spaces, non-identified men who have sex with men may be hesitant to visit clearly identified "gay" services. By providing HIV testing routinely in other health care services, these men can access HIV testing without identifying behaviour or risk. In semi-urban and rural settings this may also be particularly relevant. Many rural communities have a hospital or nursing station; some may benefit from the exploration of the relevance of the routine offer of HIV testing based on broad inclusion criteria. An example provided at the deliberative dialogue described how, in rural Manitoba, individuals access HIV testing through a local care provider who they may know personally. By offering testing to everyone who is sexually active, HIV stigma may be reduced as testing may be seen as relevant to everyone and diagnoses may increase.

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*"We must move forward in addressing stigma and create access to HIV testing and treatment at the same time. We can't wait until stigma is gone to increase opportunities for people to get an HIV test."*

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– meeting participant

Important considerations were discussed regarding the use and value of the routine testing as a programming approach.

### Human rights and ethical issues

- **Priority direction 1:** Consider and reflect upon the ethical and human rights implications of routine HIV testing, and create an implementation plan that ensures human rights are upheld.

#### *Departure from HIV exceptionalism*

Routine HIV testing is an important departure from the HIV "exceptionalism" that has long distinguished HIV testing from screening for other communicable diseases. First, HIV testing has traditionally been patient-initiated, requiring individuals to ask for testing and identify risk. Second, informed consent for HIV testing has historically required formal and extensive counselling before testing is provided. (77) With routine testing, providers initiate testing and risk is not discussed (unless the individual indicates an interest in discussing this more). Informed consent is still sought, but through an abbreviated pre-test procedure.

The ethics of routine testing emerged as a source of contention at the deliberative dialogue. HIV exceptionalism in HIV testing has been considered very important to protect individuals given the context of HIV-related stigma and the criminalisation of HIV non-disclosure. HIV-related stigma and discrimination are still major issues, and therefore many argue that HIV testing cannot be treated in the same

***Changes to pre-test counselling to obtain informed consent: An abbreviated pre-test procedure***

Obtaining clear verbal informed consent from an individual before administering an HIV test remains the standard of care in Canada. However, how providers obtain informed consent has changed in some circumstances. Until relatively recently, Canadian HIV testing guidelines indicated that pre-test counselling was required for anyone seeking or being offered an HIV test. This counselling was offered verbally and could take approximately 20 minutes. More recently, extensive pre-test counselling has been considered a potential barrier to testing for both individuals and providers in some situations. For people who are repeat testers, do not want to reveal risk to a health care provider, or are unaware of their risks, this counselling may be a barrier; for providers, the time and knowledge required to offer pre-test counselling may also be barriers. With advances in treatments, HIV has also become a chronic, manageable illness like many others, changing the need for extensive pre-test counselling as well.

Given this, the Public Health Agency of Canada (PHAC) and some other jurisdictions have developed new guidelines for pre-test procedures which are specific to the testing situation, including the motivation of the individual seeking testing, any prior experiences they have with HIV testing, and the resources and capacity of the care provider.

While this change has not been without controversy, abbreviated pre-test procedures are required to make routine offer of HIV testing feasible in health care settings.

way as other diagnostic or screening tests. Informed consent, the responsibility to ensure that a person diagnosed with HIV has relevant supports post-diagnosis, and the requirement to ensure that a person fully understands the risks and implications of an HIV diagnosis has been considered paramount and prioritized over the detection of HIV as a public health objective. Critics of the routine offer question if the process of securing informed consent in a provider-initiated model through an abbreviated pre-test counselling procedure will negatively impact patient autonomy. Other participants comment that a shortened pre-test process will miss out on an important HIV prevention education opportunity for those who test negative but are at ongoing high-risk.

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*“But by continuing to make HIV ‘special’, are we sustaining stigma?”*

– meeting participant

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Those who support the implementation of the routine HIV testing argue that HIV exceptionalism is no longer appropriate, given the availability and effectiveness of HIV treatment. We now know with certainty that an early HIV diagnosis is far better for health than a late diagnosis, and early access to HIV treatment is critical for long-term health and life. Many question if HIV exceptionalism and how it plays out in HIV testing, actually contributes to HIV stigma, rather than addresses it.

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*“We need to state unequivocally that informed consent for HIV is the same as for any other condition. For patients with higher likelihood of a positive test, as for any other condition, a more detailed conversation is warranted.*

– meeting participant

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Participants at the deliberative dialogue agreed that HIV testing must be voluntary and free of coercion, and that informed consent before HIV testing is essential. Accepting or refusing a test must not have detrimental consequences to the quality of care offered to an individual. However, what information must be provided to make an informed decision, and how this information is shared, was hotly debated by participants and consensus was not reached. Some argued that it is unethical to withhold HIV testing in environments where pre-test counselling is not feasible and often not necessary. Others argued that pre-test counselling should always be offered.

**Examples of diverse perspectives among the leaders in HIV testing attending the deliberative dialogue:**

*“What are the objectives of pre-test counselling? Are they realistic?”*  
– meeting participant

*“If you have the infrastructure to test in primary care, then a streamlined opt-out approach is the way to go.”*  
– meeting participant

*“We can’t normalize HIV if it’s criminalized.”*  
– meeting participant

*“The criminalization of HIV non-disclosure should NOT be a part of pre-test counselling.”*  
– meeting participant

*Missed diagnoses*

Late diagnosis of HIV is preventable—with negative implications for the individual, and for their partners. There is clear evidence from some Canadian jurisdictions that people who are HIV undiagnosed visit healthcare settings in the months and years preceding their diagnosis. These missed opportunities for an

HIV diagnosis are considered medically and morally unacceptable; routine HIV testing may alleviate this issue. However, the cost of not missing an HIV diagnosis cannot be a reduction in patient autonomy or a dismissal of the social implications of an HIV diagnosis through the approach taken to diagnose every single person with HIV.

*Cost and use of resources*

Given that there are finite resources that any one jurisdiction can devote to HIV testing, there are concerns that the implementation of routine offer will impact the availability of HIV testing in other settings and medical care costs (e.g., if people who are not at risk are being tested in large numbers).

**Implementing routine offer of HIV testing**

Participants at the deliberative dialogue also discussed the process for implementing the routine HIV testing in clinical settings. Implementation of routine testing can require considerable change to policies and procedures. Implementation can be complex; the idea of a phased approach was suggested. Each phase being marked by considerable communication, education and practice change.

- ❑ **Priority direction 2:** When implementing routine testing, a full implementation plan needs to be developed and policies and procedures revised.
- ❑ **Priority direction 3:** When implementing routine testing, provide training for the individuals offering the test, including physicians, nurses, counsellors and outreach workers. This can include training on cultural competency, HIV 101, counselling, etc.
- ❑ **Priority direction 4:** Create a referral plan for the patient that includes all the necessary service providers (individualised)—mental health, housing, food security, etc.

## Targeted, risk-based HIV testing in clinical settings

□ **Priority direction 5:** Continue the use of targeted risk-based HIV testing in clinical settings in Canada; prioritize implementation in specific geographical areas and clinical settings according to epidemiology and current levels of HIV testing coverage.

Targeted, risk-based HIV testing aimed at priority populations in clinical settings is considered a very important approach to reaching the HIV undiagnosed. There is evidence from different settings that positivity rates are high in anonymous, point-of-care, and/or population-specific clinical settings. Reasons for this may be related to the effectiveness of reaching those at particularly high risk through targeted, population-specific approaches. Targeted testing can also maximize the use of testing resources and allow clinics to focus their activities on higher risk populations.

Targeted testing in non-clinical settings was discussed at the deliberative dialogue as well; this is summarized in a section below focused on community-based initiatives.

## Engaging more testing providers: the role of primary care

In Canada, clinical care providers, such as physicians, nurse practitioners, nurses, and midwives can provide HIV testing in clinical settings, depending on the jurisdiction. Given the diversity of provincial/territorial regulations, settings, testing technologies, programs (e.g., opt-in), and client populations, there is not one particular provider who is best suited to provide HIV testing in all situations. While continuing to support an array of clinical care providers to provide HIV testing and linkage to care, the deliberative dialogue discussion focused on increasing the role of primary care physicians across the spectrum of STBBI testing.

**Priority direction 6:** Support primary care physicians to engage more in HIV testing, including updating their messaging to reflect benefits of HIV testing

Primary care physicians need to play a critical role in HIV and related STBBI testing. Increasing their awareness of this role, as well as skills required to assess for HIV and STBBI risk, may increase HIV diagnoses and reduce *late* diagnoses. To encourage primary care physicians to provide HIV testing, reported provider level barriers to testing in clinical settings need to be addressed. In addition they need to be empowered to adopt HIV and STBBI testing as part of regular care.

While the PHAC *Canadian Guidelines on Sexually Transmitted Infections* includes recommendations for the diagnosis of HIV and STIs in the primary care setting, for some physicians, more needs to be done to support the uptake of these recommendations. (75) The Manitoba HIV Program provides a valuable example of an initiative to increase knowledge and action around HIV testing in primary care offices.

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*“Primary care is an ideal setting for testing because people often seek primary care when they don’t have symptoms, suggesting they may be reached with testing earlier in the course of their infection, something that is needed in Manitoba where a significant minority of people are diagnosed late.”*

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– meeting participant

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## ISSUES AND PRIORITY DIRECTIONS: REACHING THE UNDIAGNOSED THROUGH COMMUNITY-BASED SETTINGS AND PARTNERSHIPS

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Community-based organizations (CBO) play an important role in increasing access to, uptake



of, and linkage from testing among people at risk for HIV. Participants discussed the optimal role of community-based organizations, peers, and other non-regulated and allied providers in HIV testing and linkage, as well as strategies to successfully implement such initiatives. In particular, CBOs play two important roles in testing: 1) increasing awareness among communities at risk of the benefits of HIV testing and where to access HIV testing; and 2) facilitating access to specific HIV testing services through community-clinical partnerships.

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*“We need to enhance our partnerships between public health, health authorities, and community to coordinate resources and provider more access to better services.”*

– meeting participant

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## Community-based organizations and HIV testing messaging

- **Priority direction 1:** Support community-based organizations to update and enhance their messaging about the benefits of HIV testing

The role that community-based organizations (CBO) play in HIV testing cannot be understated. CBOs serving populations at high risk for HIV are well positioned to offer tailored HIV testing information. They are often best suited to identify people at risk of HIV, locate where they are, and increase their awareness of the health and prevention benefits of HIV testing.

Community-based organizations have an important role to play in delivering up-to-date information to communities at risk about the benefits of HIV testing. There is variable access to HIV testing information across the country, and more needs to be done to ensure that communities at risk understand the benefits of early HIV diagnosis and early access to HIV

treatment. For many priority populations, CBOs are best suited to fill this gap.

Organizations need to consider how to use this knowledge in their prevention and community engagement activities; these programs and services can facilitate entry into HIV testing if they provide this information in relevant ways and support linkage to culturally safe testing services. For example, Toronto-based AIDS service organization Africans in Partnership against AIDS (APAA) developed a testing and prevention campaign designed to motivate Black heterosexual men to consider HIV testing and increase awareness of the benefits of knowing one’s status. APAA is uniquely positioned to reach these men and their program helps to ensure that the needs of diverse Black men are reflected in HIV testing messaging.

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*“We have lots of work to do to locate people before they’ll access testing or even have an awareness of the services. This is where CBOs can come in.”*

– meeting participant

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### **Understanding community readiness**

Community readiness refers how ready a community is to address an issue, such as HIV. Understanding a community’s level of readiness to accept or implement an intervention, such as HIV testing, is essential for success of the intervention. Assessing community readiness is an important component of ensuring the success of an HIV testing initiative. A tool to assess community readiness called the Community Readiness Model was developed by the Tri-Ethnic Center at Colorado State University and has been adapted for Canadian Indigenous communities. (78,79)

CBOs can also play a role in increasing community readiness for HIV testing. No examples were presented at the deliberative dialogue, but this role was named as important by multiple participants.

### Community-clinical partnerships to facilitate entry into testing

- **Priority direction 2:** Strengthen collaboration and partnership between community agencies and clinical providers to expand opportunities for testing

Community sites, both fixed venues and outreach, are accessible and comfortable for populations who might not access medical services regularly. This may make them optimal sites for HIV testing. Providing testing services where people are, rather than relying on them to present in clinical sites, may avoid missed diagnoses and increase early diagnoses. This strategy is possible through community-clinical partnerships, where testing services may be provided on-site at a CBO, through mobile testing units (e.g., a van) or through outreach settings (e.g., a bathhouse). Community-clinical partnerships were seen as a strategy to address barriers to HIV testing at the health care provider level, the individual (patient)-level, and at the clinic level. In addition, these partnerships allow CBOs to engage in HIV testing in a manner that would not be possible to do without clinical support/expertise. These initiatives tend to create a space where the community is comfortable accessing testing services, as well as support, treatment, and other services.

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*“This meeting has reinforced the importance of partnerships.”*

– meeting participant

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Three programs were presented that reflect successful community-clinical partnerships to advance HIV testing and many others were discussed. ARCHES, an ASO in Lethbridge, partners with a public health provider to engage adults at high risk for HIV and other STBBIs with integrated testing and support services, bridging an important gap in services in the city. GayZone in Ottawa a walk-in HIV and STI testing clinic associated with an ASO for gay, bi, and other men who have sex with men (bgMSM), was developed in response to the high burden of STBBIs among gay men in Ottawa. The Hassle Free Clinic in Toronto has satellite testing sites in community venues, such as bathhouses, to better reach high-risk gbMSM. These initiatives also require important clinical-community partnerships between a sexual health clinic and community-commercial venues.

Common elements of community-clinical initiatives emerged. First, these partnerships tend to develop in response to gaps in services for specific communities, such as gay men or Indigenous communities. Interdisciplinary care teams of healthcare professionals, community agency employees, and in some jurisdictions, unregulated providers are the foundation of these partnerships. Participants with experience developing partnerships tended to agree that the development of these initiatives is surprisingly easy; memoranda of understanding are important to ensure that all partners understand their role.

These partnerships also tend to support the inclusion of community knowledge into program design and delivery, ensuring the relevance of services. These programs are often highly tailored to community need and testing and information is provided in accessible ways. Engagement through community-clinical partnerships helps to ensure the safe space sometimes required to reveal individual client needs. A drawback of community-clinical partnerships was also raised: that of

challenges with confidentiality when patients know providers or providers are members of the community.

### Role of point-of-care testing at community sites

- ▣ **Priority direction 3:** Consider how point-of-care testing can be used to increase HIV diagnoses among those hard-to-reach in a feasible and cost-effective way.

Point of care testing (POCT) is a strategy that can be used to provide testing services in settings where venepuncture (blood draws used in standard HIV testing) may not be possible, such as community organizations, non-fixed clinical sites, and outreach sites. Participants discussed the value of POCT in community-based settings given that 1) results for POCT can be provided within minutes, 2) they can be used by trained lay persons 3) they have potential to expand HIV testing to communities or regions where HIV testing infrastructure is limited, and, 4) they may reduce the risk of missed diagnoses because people don't have to make a return visit to receive their results. Using this technology in community-based settings may make testing programs more feasible and help ensure that people receive their test results. This technology has an important role to play in expanding HIV testing to where people are and enhancing HIV diagnoses.

Not all provinces have access to POCT. This was described as an important gap HIV testing in Canada. Participants discussed the fact that POCT can potentially impact the quality of care for many communities at risk, the feasibility of POCT in community sites, and the value of POCT as a technology that can be carried out by non-regulated and allied health care professionals. Many pointed out that POCT may be a preferred testing strategy for communities at risk.

### Role of peers and other non-regulated providers in HIV testing

- ▣ **Priority direction 4:** Enhance the role of peers and other non-regulated and allied health care professionals as testers

Non-regulated and allied health care professionals (NRAHCP), such as peers, pharmacists, counsellors, social workers, and others, can play an important role in HIV testing. Expanding HIV testing provision to NRAHCP is a practical response to the need to reach the undiagnosed in Canada. NRAHCP, particularly when they come from the community in question, can increase access to HIV testing services, as well as the acceptability of these services among communities at risk. In many parts of Canada, however, NRAHCP are not engaged in HIV testing, primarily due to the lack of access to POCT. (NRAHCP can be trained to provide POCT but are typically not trained to provide standard HIV testing which requires venipuncture.). In some cases, resistance among public health or lab professionals was cited as an issue due to concerns about carrying out the tests properly. Proper training to ensure that all POC testers, including NRAHCP can perform and interpret the test properly is critical, as is continuing education and support to ensure competency. Interdisciplinary teams responsible for HIV testing and linkage, which include physicians, nurses, and NRAHCP may be very useful in engaging priority populations in testing and ensure adequate linkage to services.

### **Some considerations for peer-based HIV testing**

While it is well recognized that *non-regulated and allied health care providers*, particularly peers or community members, can enhance access to testing, in some communities, being tested by a peer may actually *increase* barriers to testing. Confidentiality and privacy were identified as a particularly important consideration in HIV testing. The drawback of being tested by a peer is a perception or reality that the tester will disclose personal medical information to third parties in the community. Privacy and confidentiality issues are incredibly complex, and must be explored in any consideration of NRAHP providing HIV testing services, particularly but not limited to rural communities.

- ▣ **Priority direction 5:** Enhance the role of people living with HIV in testing and linkage service planning and delivery

The role of people living with HIV as “peers” in HIV testing programming was discussed at different times throughout the deliberative dialogue, but in particular during the community-based testing approaches sessions. In addition to carrying out HIV testing as a NRAHCP, people living with HIV play additional important roles in HIV testing and linkage service planning and delivery. Commitment to full participation of people living with HIV in program and service development and delivery is evident in some testing initiatives in Canada and needed in others. It was felt that peer involvement can help to improve access to culturally competent testing services and there is interest among community providers in further exploring the role of peers in providing HIV testing. Mechanisms to empower people living

with HIV to provide insight to clinical providers and health system decision-makers are needed.

## **ISSUES AND PRIORITY DIRECTIONS: REACHING THE UNDIAGNOSED THROUGH SELF-DIRECTED APPROACHES**

Self-directed approaches, such as HIV self-testing, express testing, and internet-based STBBI screening programs have the potential to increase the number of people who have access to testing, know their status, are diagnosed and initiate treatment. All priority populations may benefit from self-directed approaches, particularly those who frequently re-test due to ongoing risk or who have limited access to other forms of HIV testing. However, the use of these approaches is contingent upon health literacy, a realization of risk, technological literacy, and financial capacity, therefore will not reach all people at risk for HIV. For Canada, self-directed solutions may become a critical new component of our overall effort to reach the HIV undiagnosed, which will continue to include clinic-based testing and community-based testing initiatives.

### **Self-directed approaches: rethinking how we define the testing paradigm**

Self-directed approaches to HIV testing are *patient-centred approaches*, which provide individuals with more control over testing. These models represent a move away from more traditional testing strategies in which the health care provider and/or health system is at the centre and control who is tested, what information is provided to a patient, and how the patient is linked to services post-test. Instead, in self-directed approaches, the individual takes control of their own testing and does not need to engage with a health care provider or public health system in the same way.

**Self-directed approaches to STBBI testing**

**HIV self-testing:** HIV self-testing is where an individual performs a HIV diagnostic test and interprets the result in private. (80) HIV self-testing technologies are not currently available in Canada other than through mail-order from the US.

**Express STI testing:** Express STI testing is a new and innovative approach to self-directed STI testing that uses technology to make screening easy, confidential, and fast. (81) There are no express STI testing programs currently operating in Canada.

**Internet-based STBBI screening programs:**

Internet-based STBBI screening programs allow individuals to access information on and screening for STBBIs via the internet. These programs can take two forms: either providing a laboratory requisition that can be presented at designated lab; or by providing self-sampling kits by mail, where samples are self-collected at home and analyse at a lab. Limited internet-based STBBI screening programs exist in Canada. (81)

- ▣ **Priority direction 1:** Consider the feasibility and potential effectiveness of implementing self-directed approaches to HIV testing in Canada

Participants agreed that the Canadian health care system needs to evolve towards the inclusion of self-directed approaches as one part of an overall HIV testing strategy, but questions remain on how to do this safely and effectively. On one hand, self-directed approaches, which are thought of as useful in reaching some of the ‘hardest-to-reach’ individuals, should be considered given gaps in our current efforts to diagnose people living with HIV in Canada. Self-

directed approaches avoid system- and provider-level barriers to HIV testing: for those for whom engaging with public health or primary care is a disincentive, self-directed approaches, particularly self-testing, is particularly relevant. On the other hand, there may be a healthcare system reluctance to change the diagnostic paradigm, in part based on concerns about patient ability to manage the HIV testing process and outcome outside of the formalized healthcare system, in part based on concerns about a loss of epidemiological information on new diagnoses, and in part due to concerns about missed opportunities to engage people in confirmatory testing, partner notification, and HIV care (or in the case of a negative result, prevention services).

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*“We’re so concerned about all the bad things [people self-testing] might do, but really they might just do the right thing. It is important to provide people with space to be autonomous.”*

– meeting participant

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Participants agreed that in Canada, healthcare professionals and public health regulators may be skeptical of the value of HIV self-directed approaches, but it is important to make efforts to understand the benefits and drawbacks of self-directed approaches and adapt to make space for these opportunities. In all likelihood, patients will be much earlier adopters of these technologies/approaches than health care professionals and public health regulators. If the system makes space for these approaches now, we may be able to ensure that self-directed testing remains within the health care system strategy for reaching the HIV undiagnosed, not outside of it. In doing so, we may make major strides in HIV diagnoses and linkage through these approaches.

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*“Public health should strive to increase access [to testing] in as many ways as possible. People are satisfied accessing health care online and self-directed testing.”*

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## Describing self-directed approaches

Two self-directed approaches to testing were described and discussed in varying detail at the deliberative dialogue. Issues and possible solutions were shared.

### Internet based HIV testing programs

Internet-based HIV and other STBBI testing programs also have the potential to reach more people at risk and increase diagnoses, complementing face-to-face sexual health services. Internet-based testing programs engage clients through a website; specimen collection may then be facilitated either by mail, in which case samples are self-collected at home, or, by providing a requisition that can be presented at designated laboratories. Some programs deliver results by telephone or face-to-face. Concerns related to post-test counselling and timely linkage services, particularly for those who test negative but are at ongoing high risk, were discussed. One successful internet-based program from BC, GetCheckedOnline, was presented and discussed at the Deliberative Dialogue.

### Self-testing (home-based testing)

HIV self-testing, or home-based testing, is one of the primary HIV-related self-directed approaches being considered in Canada and was a key topic for discussion at the deliberative dialogue. It is a process whereby a person who wants to know their HIV status collects a specimen (via finger prick or oral swab, depending on the test), performs a test and interprets the test result in private. Currently, HIV self-test kits are not regulated or officially available in Canada.

### Get Checked Online

GetCheckedOnline is an internet-based testing service provided by the Clinical Prevention Services Division at BCCDC. GetCheckedOnline is a new approach to HIV and STI testing: in a few steps, a person can visit the webpage, create an account, print a lab form, visit a participating lab to give samples, and receive results online or over the phone. Currently available in Vancouver, Victoria, Duncan, Kamloops and Nelson, BC, GetCheckedOnline was developed to meet a growing need for easier access to HIV and other STI testing in BC. It aims to improve sexual health by increasing the uptake and frequency of testing to increase *timely* diagnosis; to reach populations at greater risk of HIV and STIs who also face barriers to testing; and to increase STI clinic capacity (e.g., reduce wait times) and improve the use of clinician resources (e.g., less time spent on asymptomatic screening). The BCCDC is piloting this service in select communities to see how well it works, and hopes to expand the service to other areas of the province. For more information, visit [www.getcheckedonline.com](http://www.getcheckedonline.com).

In some jurisdictions outside of Canada, HIV self-tests can be available through clinically-restricted models meaning, only through a clinic, or through open-access models, meaning that the tests are publicly available through pharmacies, clinics, or vending machines, etc. This is the model taken up in the US and most commonly discussed in Canada. HIV self-testing may increase testing among people not currently reached by existing services. Concerns related to pre- and post-test counselling and linkage to care were discussed.

### **An Example of Express STI Testing**

The Dean Street Express Clinic, part of the larger 56 Dean Street Clinic in London, UK, is a leading express testing model. It was developed in response to the incredible demand for the Dean Street clinic sexual health services. To meet this demand, Dean Street Clinic staff investigated more efficient care models and established the express service to provide a convenient sexual health screening for asymptomatic patients. Through the use of various technologies, Dean Street Express streamlines STI and HIV testing and significantly reduces the interaction between the patient and the provider. When patients arrive at the clinic, they are invited to register via a touch screen, where they respond to questions about risk and are recommended for particular HIV or STI tests. They then are invited to self-swab for STI tests that are relevant to their risk profile, with the aid of video instruction, in a private room. HIV testing is carried out via rapid, POCT by a health care provider in the same visit if warranted. All results are provided via text message or in person. Express testing is not yet available in Canada, but Clinique A in Montreal, QC is investigating the feasibility of implementing express testing as a part of its services.

### **Understanding benefits and mitigating risks associated with self-directed approaches**

Canadian policymakers and healthcare providers need to weigh the benefits and risks related to introducing and scaling up HIV self-directed testing. The benefits of creating additional entry points to the HIV prevention and care continuum through these approaches include increasing access to testing and earlier diagnosis for people who do not have routine contact

with health services, facilitation of repeat testing, earlier linkage to treatment and care, and de-stigmatization through normalization of HIV testing, as well as autonomy and privacy for the person being tested. Concerns about self-directed approaches included inadequate pre- and post-test information or counselling, the inability of these programs to link people to prevention or care services, and test accuracy (in the case of self-test kits).

### **Accuracy of HIV self-tests**

HIV home-based tests, also known as self-tests, allow people to test themselves for HIV in their home without a healthcare provider present. Currently, two HIV home-based tests have been approved by the Food and Drug Administration (FDA) for use in the United States.

### **Pre/post-test counselling and linkage to care**

- **Priority direction 2:** Develop diverse mechanisms to ensure appropriate information and linkage to prevention and care services are provided

In self-directed testing approaches, because the individuals seeking testing have limited interaction with the health care system, pre- and post-test counselling and information provision, and effective linkage to prevention and care services may be minimized. In self-testing and Internet-based programs, for example, pre-test information procedures typically include self-risk assessment and the provision of information about HIV, but there is no mechanism to ensure that the individual seeking testing has reviewed and understood the information. For self-testing, the responsibility to engage with support services post-test, should they be warranted, lies solely with the person taking the test.

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*“Testing can be a critical tool to hook people up to other services and supports that they might need. Do we lose this with self-testing?”*

– meeting participant

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Providing information and support to people who need it, as well as linkage to relevant services post-test, are critical components of HIV testing. Self-testing initiatives in other jurisdictions and Internet-based programs in Canada and elsewhere include strategies to ensure that individuals engaging in HIV or STI testing have access to information and support, but some concerns remain regarding the robust nature of these services. In jurisdictions outside of Canada that have access to self-testing technologies, such as the US, one solution is to ensure access to 24-hour hotlines with trained counsellors to offer support to individuals who purchase HIV self-testing kits. This form of information provision is suitable for many, but not all, people engaging in testing, such as first-time testers or those who test positive.

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*“If we dispense with (conventional) pre- and post-test counselling, that doesn’t mean that information can’t be included in new approaches.”*

– meeting participant

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However, participants at the deliberative dialogue generally did not consider the reduction in pre- and post-test counselling to be a barrier to the uptake of these approaches in Canada, and in fact, considered it in line with the general shift away from extensive pre-test counselling in *all* situations. (32) For individuals who may be unfamiliar with HIV and important concepts such as risk, the window period, the need for confirmatory testing, and the value of HIV treatment, more information and tailored

messaging will still be important. For example, if individuals who are at particularly high risk for HIV are accessing the test, which is the goal, a negative test during the window period may lead to false reassurance and actually increase transmission; information included with and services linked to self-test kits must convey information about the window period and repeat testing.

There are innovative strategies to ensuring relevant pre- and post-test information, support, and linkage is possible through self-directed testing, such as mobile phone Apps, Serious Gaming\*, or website interfaces. In some situations, simple print-form information will be suitable. Deliberative dialogue participants also pointed out that for Canada, through the regulatory process HIV stakeholders can ensure that there are specific requirements for manufacturers of self-testing kits regarding the information included in the product package. Given that some individuals will still not access care through these mechanisms, it has been emphasized self-tests or Internet-based programs are not a replacement for clinic- or community-based testing; rather, it is one more tool in the toolbox.

The potential for harm that may come along with self-directed approaches to HIV testing can be minimized if this testing approach is provided alongside adequate information, in a regulated manner, within a human rights framework, and with community involvement in decision-making, as is the case with all approaches to HIV testing.

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\* “Serious gaming” involves the use of concepts and technologies derived from computer entertainment games (i.e., video games) for non-entertainment purposes such as health care, emergency management, politics, and others. Susi, T., Johannesson, M. and Backlund, P., 2007. Serious games: An overview



## Next steps for self-directed approaches in Canada

HIV self-directed testing approaches can complement existing HIV testing strategies in Canada. Three things in particular seem to have made space for our consideration of these approaches: the shift towards a more flexible approach to pre-test counselling, reflected in recent PHAC HIV Screening Guidelines; calls to better reach the HIV undiagnosed in Canada with new understandings Canada's progress towards 90-90-90; and dialogue emphasizing the *right* to access testing. Policy makers and providers need to consider the implications of these new approaches for Canada, ensuring that we continue to prioritize confidentiality, informed consent, and availability of counseling to those who need it. Both individual and public health benefits must be considered; new approaches must be convenient, ensure accurate test results, and have good linkages to prevention and care services.

- ▣ **Priority direction 3:** Investigate new ways for the principle of informed consent to be operationalized in self-directed approaches to HIV testing

Participants discussed the role of health care providers in ensuring that discussions about HIV testing are inclusive of self-testing options; policy makers need to focus on regulatory approval of effective technologies and prepare clinics to receive patients who have self-tested; community-based organizations need to consider their role in raising awareness of self-directed approaches (when and where available); and communities at risk need to be preparing for the arrival of these initiatives, particularly self-testing, and be ready.

- ▣ **Priority direction 4:** Assess the regulatory reforms that will need to take place to roll out self-directed approaches, particularly self-testing.
- ▣ **Priority direction 5:** Involve and engage community and users as partners and advisors in assessing need and roll-out, to ensure community relevance

## ISSUES AND PRIORITY DIRECTIONS: HIV TESTING AS A GATEWAY TO THE CONTINUUM OF HIV PREVENTION AND CARE

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There is clear evidence that there are significant health and prevention benefits to early HIV diagnosis and immediate HIV treatment; HIV testing provides a critical contact point with health care and social service systems. There is a common understanding of HIV testing as an entry point to the full continuum of HIV prevention and care, and other services for those who are diagnosed HIV positive, *as well as those* who test negative and are at ongoing high risk.

### HIV testing as an opportunity

- ▣ **Priority direction 1:** Approach HIV testing as an opportunity to enter the full HIV prevention and care continuum

Testing programs and policy should strive to frame HIV testing as an opportunity to do more than assess risk, diagnose HIV and refer for HIV care. HIV testing can be an opportunity to do far more.

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*“Delivering services and maintaining the engagement of the individual who has accessed testing is just as important as seeking that ‘elusive undiagnosed’ individual. What more can you do?”*

– meeting participant

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To be more effective in our prevention and care efforts, HIV testing needs to be used as an *opportunity* to educate patients on things such as the window period, acute infection, prevention strategies, and sexual health; it can provide an opportunity for a health care provider to screen for patient protective factors (in addition to risk factors) to identify opportunities for resilience; it can identify candidates for other STBBI screening; with partnerships and knowledge of services, it can actively and seamlessly link patients to other services, including enhanced HIV prevention and HIV treatment; it can provide access to vaccinations for hepatitis A and B; among many other things.

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*“I want to re-emphasise that the person to whom the offer of a test is made may be living with HIV or not. It’s important that we pay attention to the people who test negative. This may be the only protected time they have to discuss HIV prevention and acquisition.”*

– meeting participant

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Practically, no one provider or testing site can be expected to provide all of the services noted above. Instead, linkages between services must be strengthened to increase reach, access and effectiveness.

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*“If I am referring individuals to you and to your service/institution and you are not referring any to me, we have a problem.”*

– meeting participant

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While challenges in being aware of all community resources were acknowledged, service providers across Canada were challenged by participants at the deliberative dialogue to seize every opportunity to promote services, encourage repeat testing, and connect with communities.

### Linkage to treatment following an HIV diagnosis

- ▣ **Priority direction 2:** Improve access to and information about HIV treatment immediately or soon after diagnosis, alongside linkage to care and supportive services

Immediate access to HIV treatment following an HIV-positive diagnosis is an evidence-based approach to ensuring optimal health outcomes and maximizing HIV prevention. It has been endorsed by HIV experts from around the world (e.g., UNAIDS, Global Fund to Fight AIDS, among others). At the deliberative dialogue, this approach was debated. Delaying access to HIV treatment is considered by many as a denial of the right to health. On the other hand, some argue that proposing treatment immediately could be coercive during a vulnerable time.

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*“Beginning ART in acute infection does not preclude post-test counselling! It’s just an addition!”*

– meeting participant

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*“What does “informed consent” in the context of treatment initiation mean in the context of the potentially traumatic experience of receiving a positive diagnosis? Even if there technically is choice, what are the mechanisms to safeguard against subtle coercive practices?”*

– meeting participant

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While reflective of a global best practice, this approach has not been taken up in many jurisdictions in Canada; one effective Canadian program from Vancouver’s St. Paul’s Hospital that immediately links people diagnosed with HIV to treatment was presented and discussed. Participants agreed that access to HIV treatment immediately or shortly

#### ***What is community mapping?***

Community mapping is a tool to mobilize a community to use its *assets* to develop a plan to solve its problems and improve residents’ quality of life. It includes the process of inventorying the resources and assets available to a specified community. It illuminates community characteristics, including programs, services, organizations, and individuals, and the relationships between these groups. (82,83)

after diagnosis is important, as long as it is accompanied by linkage to care and a range of supportive services.

## Community and service mapping

- **Priority direction 3:** Engage in community mapping to build partnerships to understand local services and service pathways to ensure that clients receive the best care possible and are not lost to care

Given the importance of linkages between services to increase reach, access and effectiveness of HIV testing, discussion took place on mechanisms and opportunities to understand local services and service pathways to optimize our linkage efforts.

In jurisdictions across the country, HIV programs and services, including HIV testing, is being carried out in silos without much communication between stakeholders. Providers must understand what other services exist within a jurisdiction; mapped pathways between services need to be created and used to ensure that clients receive the best care possible and are not lost. Engaging in community mapping to understand and build relationships among HIV and other related providers/services is important.

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*“Knowing who does what is key. We know what we do well, but often not of partners or stakeholders around us. Having a better view of investments across the community is important to see gaps and opportunities to do this work better.”*

– meeting participant

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## APPENDIX A: PROGRAM

### NATIONAL DELIBERATIVE DIALOGUE ON REACHING THE HIV UNDIAGNOSED: SCALING UP EFFECTIVE PROGRAMMING APPROACHES TO HIV TESTING AND LINKAGE TO PREVENTION AND CARE

Time	October 13, 2016
8:00	Registration and continental breakfast
8:30	<p>Welcome</p> <ul style="list-style-type: none"> <li>▪ Trevor Stratton, Citizen of the Mississaugas of New Credit First Nation</li> <li>▪ Laurie Edmiston, CATIE, Toronto, Ontario</li> <li>▪ Marc-André LeBlanc, Facilitator</li> </ul>
9:00	<p>Setting the stage</p> <ul style="list-style-type: none"> <li>▪ Tim Rogers, CATIE, Reaching the HIV undiagnosed and linkage to prevention and care, Toronto, Ontario</li> <li>▪ John McCullagh, PositiveLite.com &amp; CATIE, An ethical framework for HIV testing and linkage, Toronto, Ontario</li> </ul>
9:30	<p>Access to and uptake of HIV testing and linkage: Population-focused considerations</p> <p>In this session, panelists will highlight key structural-level factors, provider-level factors, and individual-level factors that can affect access to, and uptake of, HIV testing among specific priority populations in Canada. Participants will have an opportunity to reflect on these factors and share their insights.</p> <ul style="list-style-type: none"> <li>▪ Alexandra de Kiewit, Stella, Montreal, Quebec</li> <li>▪ Jack Janvier, Alberta Health Services, Calgary, Alberta</li> <li>▪ Jody Jollimore, Community-based Research Centre, Vancouver, British Columbia</li> <li>▪ Wangari Tharao, Women's Health in Women's Hands, Toronto, Ontario</li> </ul>
10:45	Break

11:05	<p>TOPIC 1: Reaching the undiagnosed through clinical settings</p> <p>This session is about different approaches to increase access to, and uptake of, testing among the right people at the right time through existing clinical settings (e.g., primary care, hospitals, public health units), and the policy and practice changes associated with this strategy. This session, and the discussion that follows, will focus on the role of clinical settings and providers in reaching the HIV undiagnosed and what is required to successfully implement effective strategies in these environments.</p> <ul style="list-style-type: none"> <li>■ Laurie Ireland, Nine Circles Community Health Centre, Expanding HIV testing in primary care, Winnipeg, Manitoba</li> <li>■ Reka Gustafson, Vancouver Coastal Health, HIV testing in acute care, Vancouver, British Columbia</li> <li>■ Ken English, Ontario Ministry of Health and Long-Term Care, Expanding HIV testing among priority populations in public-health settings, Toronto, Ontario</li> </ul>
12:00	Lunch
1:00	<p>TOPIC 1: Reaching the undiagnosed through clinical settings – Large group discussion</p> <p>Participants will discuss the role of clinical settings and providers in reaching the undiagnosed and provide details of successful strategies. Key challenges and important community-specific factors will be discussed.</p>
1:55	<p>TOPIC 2: Reaching the undiagnosed through community-based partnerships</p> <p>This session is about different approaches to increase access to, uptake of, and linkage from testing among the right people at the right time through community-based partnerships. In this and the following discussion session, the optimal role of community-based organizations and lay providers in HIV testing and linkage will be discussed, as will strategies to successfully implement such initiatives.</p> <ul style="list-style-type: none"> <li>■ Patrick O’Byrne, GayZone, A public health/community partnership, Ottawa, Ontario</li> <li>■ Stacey Bourque, ARCHES Society, HIV, HCV, and STI screening in a community-based organization, Lethbridge, Alberta</li> <li>■ Shawn Fowler, Hassle Free Clinic, Non-regulated and allied healthcare providers and HIV testing in community-based settings, Toronto, Ontario</li> </ul>
2:45	Break
3:05	<p>TOPIC 2: Reaching the undiagnosed through community-based partnerships – Large group discussion</p> <p>Participants will discuss the role of community-based partnerships and providers in reaching the undiagnosed and provide details of successful strategies. Key challenges and important community-specific factors will be discussed.</p>

4:00	<p>TOPIC 3: Diversifying access to HIV testing and linkage through self-directed approaches</p> <p>This session, and the discussion that follows, are about different approaches to increase access to, and uptake of, testing among the right people at the right time through the use of self-directed approaches.</p> <ul style="list-style-type: none"> <li>■ Marc Steben, Institut national de santé publique du Québec (INSPQ), What is possible for Canada?, Montreal, Quebec</li> <li>■ Mark Gilbert, BC Centre for Disease Control (BCCDC), Get checked online, Vancouver, British Columbia</li> </ul>
4:35	<p>TOPIC 3: Diversifying access to HIV testing and linkage through self-directed approaches</p> <p>Participants will discuss key factors to consider when assessing the role of self-directed approaches in Canada and when it may be advantageous and disadvantageous to take up self-directed approaches among specific communities.</p>
5:15	<p>Wrap-up for Day 1 Marc-André LeBlanc, facilitator</p>
5:30–7:30	<p>Reception at the Hotel</p>

Time	Friday, October 14
7:30–9:00	Hot breakfast
8:00	CATIE Annual Meeting CATIE Members are encouraged to attend.
9:00	Reflection on Day 1 and Orientation to Day 2 <ul style="list-style-type: none"> <li>▪ Laurie Edmiston, CATIE, Toronto, Ontario</li> <li>▪ Marc-André LeBlanc, Facilitator</li> </ul>
9:10	<p>TOPIC 4: HIV testing as a gateway to the continuum of HIV prevention and care</p> <p>This session is about the role testing plays as a linchpin in the continuum of prevention and care. In this session, and in the discussion that follows, participants will consider key strategies to actively link testing to care, prevention, treatment, and other services immediately or almost immediately.</p> <ul style="list-style-type: none"> <li>▪ Riyas Fadel, Ministère de la santé et des services sociaux, The role of testing in combination prevention, Montreal, Quebec</li> <li>▪ Nnamdi Ndubuka, Northern Intertribal Health Authority, Linkage and engagement in northern Saskatchewan, Prince Albert, Saskatchewan</li> <li>▪ Shawn Fowler, Hassle Free Clinic, Immediate linkage to services following a diagnosis, Toronto, Ontario</li> <li>▪ Mark Hull, St. Paul's Hospital, Immediate linkage to HIV treatment, Vancouver, British Columbia</li> </ul>
10:00	<p>TOPIC 4: HIV testing as a gateway to the continuum of HIV prevention and care – Large group discussion</p> <p>Participants will discuss the role testing can play in creating opportunities to link people to services that they need. Key challenges and important community-specific factors will be discussed.</p>
10:55	Break
11:15	<p>Population-specific panel</p> <p>The panel will reflect on the discussion that has taken place across the four topics, suggest what is particularly relevant for specific populations, what seems promising or concerning, and reveal any key issues not raised by the group. Participants will be able to engage with these reflections and share their own.</p> <ul style="list-style-type: none"> <li>▪ Alexandra de Kiewit, Stella, Montreal, Quebec</li> <li>▪ Jack Janvier, Alberta Health Services, Calgary, Alberta</li> <li>▪ Jody Jollimore, Community-based Research Centre, Vancouver, British Columbia</li> <li>▪ Wangari Tharao, Women's Health in Women's Hands, Toronto, Ontario</li> </ul>

12:10	<p>Overview of afternoon</p> <p>The facilitator will explain how participants can sign up for one of six discussion groups during lunch, how small-group discussion points will be shared with the large group, and how all participants will have an opportunity to comment on the outcomes of the small groups.</p>
12:15	Lunch
1:15	<p>Small-group breakout sessions</p> <p>Small-group discussions will allow participants to focus in greater detail on each of the primary topics outlined above. Each group is tasked with coming up with the priority directions in programming, policy and practice related to their topic that need to be considered to help drive down the Canadian HIV epidemic. Each group will be asked to provide suggestions for where to go from here.</p> <p>Topic 1: Reaching the undiagnosed through clinical settings  Topic 2: Reaching the undiagnosed through community-based partnerships  Topic 3: Diversifying access to HIV testing and linkage through self-directed approaches  Topic 4: HIV testing as a gateway to the continuum of HIV prevention and care  Topic 5: To be determined by participants  Topic 6: To be determined by participants</p>
2:45	Break
3:00	<p>Large-group report back</p> <p>Each break-out group will present the priority directions that they have identified.</p>
3:35	<p>Large-group discussion and reactions</p> <p>Participants will react and discuss the priority directions presented by other groups. The discussion will be followed by an opportunity for all participants to select what they think are the most important priority directions per topic.</p>
4:30–4:45	<p>Pulling it all together: Next steps, wrap-up, evaluation</p> <ul style="list-style-type: none"> <li>▪ Marc-André LeBlanc, Facilitator</li> <li>▪ Laurie Edmiston, CATIE, Toronto, Ontario</li> </ul>



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## APPENDIX B: ADVISORS

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<b>Geri Bailey</b>	First Nations and Inuit Health Branch, Health Canada
<b>Jean Bacon</b>	Ontario HIV Treatment Network
<b>Chris Buchner</b>	Fraser Health
<b>Richard Elliott</b>	Canadian HIV/AIDS Legal Network
<b>Ken English</b>	Ontario Ministry of Health and Long-Term Care
<b>Riyas Fadel</b>	Ministère de la Santé et des Services Sociaux
<b>Thomas Haig</b>	L'Université du Québec à Montréal
<b>Erin Henry</b>	First Nations and Inuit Health Branch, Health Canada
<b>Bob Leahy</b>	PositiveLite.com
<b>Lynne Leonard</b>	University of Ottawa
<b>Alexandra Musten</b>	CIHR Centre for REACH in HIV/AIDS (REACH 2.0)
<b>Carla Pindera</b>	Nine Circles Community Health Centre
<b>Marc Steben</b>	Institut National Sante Publique du Québec

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## APPENDIX D: SPEAKER BIOS

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### **Stacey Bourque**

Stacey Bourque is Executive Director of ARCHES, Co-Chair of the Community Harm Reduction Network and Chair of the Alberta Community Council on HIV. She is currently working towards her Ph.D. in Population Health Studies, holds a Master of Education (Counselling Psychology) with a focus in addictions and mental health and a Bachelor of Health Sciences in Addictions Counselling. Stacey sees her role as one of ally, creating, implementing and evaluating programs designed from a harm reduction approach to work towards safer substance use practices, sexual health, illness prevention, and stigma reduction. She feels programs are most effective when they are both creative and engaging. Her goal is to empower individuals and communities to define solutions from a 'strengths based' approach.

### **Alexandra de Kiewit**

Alexandra de Kiewit has worked in the community since 2010. Her *Infomane* position at *L'Injecteur* opened the doors for one of her passions: the promotion of health and the inclusion of persons using drugs and sex workers. Being herself an HIV-positive woman and drug user, she adheres totally to the principles of harm reduction which she promotes in her work. After being at AQPSUD for five years, she became an outreach worker at Stella. She has also been working at Cactus' fixed site for more than five years. She co-founded CAPUD (Canadian Association of People Who Use Drugs) of which she is a member of the Board of Directors. She also took part in different projects, such as the book *Pairologie: un guide d'implication par et pour les personnes utilisatrices de drogues*, distributed by CATIE. She attends as many conferences as possible, since she always has an interest in learning.

### **Ken English**

Ken English is a senior program consultant at the AIDS Bureau, Ontario Ministry of Health and Long-Term Care. Ken supports the Ontario government's HIV Testing Strategy which includes the anonymous HIV testing program, rapid/point-of-care testing program, prenatal HIV testing, and testing initiatives tailored to Ontario's priority populations.

### **Riyas Fadel**

Riyas Fadel has a master's degree in sexology from UQAM. He is a research and policy analyst at the STBBI service of the Québec ministère de la Santé et des Services sociaux. His work focuses on prevention for gay men and other MSM, STBBI testing in key populations, pre-exposure prophylaxis, STBBI surveillance systems and community partnerships. He lives in Montreal with his aloof cat Maroo and enjoys traveling to big cities with really tall buildings.

### **Shawn Fowler**

Shawn Fowler has seventeen years of experience working in sexual health and education, focusing on MSM, youth and anti-homophobia. Currently he is a sexual health counsellor at Hassle Free Clinic, where he coordinates the enhanced testing program, which offers anonymous, point-of-care HIV testing at several venues in central Toronto to increase access to HIV testing to MSM communities.

### **Mark Gilbert**

Dr. Mark Gilbert is a physician with the BC Centre for Disease Control and Associate Clinical Professor in the School of Population and Public Health, University of British Columbia. At the BCCDC, Mark leads the BC Online Sexual Health Services program and the development of novel internet-based approaches to sexual



health service delivery. Recent accomplishments include the launch of SmartSexResource.com (an interactive, sexual health education website for the public and health care providers) and GetCheckedOnline.com a comprehensive internet-based testing service for HIV and STIs in BC. Mark is a national expert in research related to gay men's sexual health, HIV and STI testing, and the evaluation of online services, using an integrated knowledge translation approach in collaboration with national and international research partners.

### **Reka Gustafson**

Dr. Gustafson is a medical health officer and Medical Director of Communicable Disease Control in Vancouver, and is Associate Clinical Professor in the School of Population and Public Health at the University of British Columbia. She is involved in surveillance, prevention and control of communicable diseases, such as HIV and tuberculosis, and outbreak investigation and management. Dr. Gustafson's other areas of practice include policy development in the areas of communicable disease control and healthy eating. Dr. Gustafson was the medical lead for the implementation of routine HIV testing in hospitals in Vancouver.

### **Mark Hull**

Mark Hull completed his fellowship in infectious diseases at the University of British Columbia. He went on to complete a postdoctoral fellowship with the Canadian CIHR HIV Clinical Trials Network (CTN). He is currently Clinical Associate Professor in the Division of AIDS at University of British Columbia and Research Scientist at the BC Centre for Excellence in HIV/AIDS. He is a co-chair of the CTN Biomedical Prevention Working Group which is currently drafting Canadian Pre/Post Exposure Prophylaxis Guidelines. Disclosures: Dr. Mark Hull has received grant support from the National Institute on Drug Abuse (NIDA R01DA031043-01) and has received honoraria paid to his institution for speaking engagements

and/or consultancy meetings from the following: AbbVie, Bristol Myers Squibb, Gilead, Merck, Ortho-Janssen, and ViiV.

### **Laurie Ireland**

Laurie Ireland is a family physician from Winnipeg, Manitoba. She completed a Bachelor of Arts degree at the University of Toronto in 1995. She returned to school in 1999 at the University of Manitoba where she completed a Bachelor of Science degree in 2001 and her Medical Degree in 2005. Laurie completed her family practice training in 2007 in the St. Paul's Hospital program at the University of British Columbia. Her residency training was followed by a three-month enhanced skill program in HIV primary care under the supervision of the BC Center for Excellence in HIV/AIDS. Dr. Ireland returned to Winnipeg after her training where she has worked at Nine Circles Community Health Center, the primary care site of the Manitoba HIV Program since September 2007. Laurie is currently the medical director at Nine Circles and the Primary Care Lead with the Manitoba HIV Program.

### **Jack Janvier**

Dr. Jack Janvier is an infectious diseases specialist who is based out of the Peter Lougheed Center in Calgary. He also does HIV care at the Southern Alberta Clinic. He is of Dene ancestry, growing up in La Loche, Saskatchewan. He has a Bachelor of Science degree (1997) and a Doctor of Medicine degree (2001) from the University of Saskatchewan. He did his internal medicine training at the University of Saskatchewan and then received his infectious diseases training at the University of Calgary. He has been working full time in Calgary since 2009. He has been involved on the advisory board of HIV Community Link's Strong Voices Aboriginal Program for about three years. He also recently joined the board of directors for HIV Community Link Calgary. He has also been involved in an advisory role for collaborative teams looking

at tackling the HIV epidemic in Aboriginal populations in Saskatchewan.

### **Jody Jollimore**

Jody Jollimore is a gay men's health researcher and consultant who currently works as Director of Policy for the Community Based Research Centre in Vancouver, BC. His work includes the scale-up of HIV prevention initiatives for gay, bisexual, Two-Spirit and other men who have sex with men across the province. Prior to consulting, Jody was Director of Research & Strategic Partnerships at the gay men's health organization, Health Initiative for Men (HIM). Jody combines a passion for policy, public health and partisan politics to affect change that positively impacts LGBT health. A pan-Canadian with a Master's in Public Policy from SFU, he currently lives in Vancouver's beautiful west end.

### **John McCullagh**

John McCullagh, who lives with HIV, is the board chair of CATIE and the publisher of PositiveLite.com, Canada's online HIV magazine. He has worked for over four decades in the health and social services field, in both front-line and management positions. John has many years of experience working with people living with, at risk for and/or affected by HIV; with gay men and queer youth; and with street-involved youth. He was one of the founders of the Toronto Counselling Centre for Lesbians and Gays (now known as David Kelley Services), and was a counsellor there throughout the 1980s, in the early years of the AIDS epidemic. Now retired, John volunteers with ACT (AIDS Committee of Toronto), where he is a peer researcher, and where he also facilitates an ongoing series of psycho-educational workshops on aging well with HIV.

### **Nnamdi Ndubuka**

Born and raised in Nigeria, Dr. Nnamdi Ndubuka completed his undergraduate medical training at Nnamdi Azikiwe University, Nigeria. He worked in various parts of Nigeria as a family

physician. In 2004, Dr. Ndubuka moved to Botswana, southern Africa where he worked with the Botswana Ministry of Health and the Botswana-Harvard School of Public Health AIDS Partnership as a Physician, Researcher and Public Health Specialist. In 2012, he relocated to Canada with his family. He is currently Medical Health Officer with the Northern Inter-Tribal Health Authority (NITHA), Prince Albert, Saskatchewan where he provides public health expertise to the NITHA Partnership consisting of Prince Albert Grand Council, Meadow Lake Tribal Council, Peter Ballantyne Cree Nation, and Lac La Ronge Indian Band. He has a wealth of experience in the field of public health programming and infectious disease research. His special interests lie in Aboriginal health and wellness. He obtained a Master degree in public health from University of South Africa, a diploma in HIV management from Colleges of Medicine South Africa, and doctoral degree in health studies from the University of South Africa.

### **Patrick O'Byrne**

Patrick O'Byrne RN, PhD is Associate Professor of Nursing at the University of Ottawa, and a registered nurse with over 10 years of clinical experience in public health, primary care, and STI/HIV prevention. He has extensive experience executing research aimed at understanding and improving the health of gay men and other sexual minority groups. To date, Dr. O'Byrne's work has been quantitative, qualitative, and interventional, and has, first, explored the Internet, bars, bathhouses, and gay circuit parties (all studies CIHR-funded), and, second, has evaluated HIV prevention and public health interventions in these milieux and in frontline care settings; e.g., development of self-directed testing kits for gonorrhoea and chlamydia in bathhouses; development of an HIV testing clinic for gay men in Ottawa. Dr. O'Byrne has also implemented the first community-based, nurse-led HIV post-exposure prophylaxis program for gay men in Canada. Lastly, Dr. O'Byrne has published four book chapters and 56 peer-

reviewed publications on gay men's health, public health, primary care, and HIV prevention. He has four other publications currently under review on these topics.

**Tim Rogers**

Tim Rogers is Director of Knowledge Exchange at CATIE. He has been involved with CATIE for almost 20 years, first as a volunteer and then a staff member. During this time, he has watched CATIE grow from a local organization working in HIV treatment to a national knowledge exchange broker in all aspects of HIV and HCV prevention, care, treatment and support.

**Marc Steben**

A family practitioner, Dr. Steben is medical advisor at the STI unit of Quebec's National Public Health Institute. He chairs Québec province committee on STI and is a member of the STI laboratory analysis committee. He is a professor in the Social and Preventive Medicine Department of the School of Public Health at Université de Montréal. He is the medical director of Clinique A, a clinic devoted to multidisciplinary approach to sexual health. He is a member of the Canadian STI guidelines expert group. He has chaired the 26th International papillomavirus society meeting as well as the first Public health workshop and Clinical workshop in July 2010. He is Chair of the Canadian network on HPV prevention International Centre for Infectious Diseases and is on the board of the ISSVD and a founding member of IUSTI Canada branch of IUSTI North America.

**Wangari Tharao**

Wangari Tharao is Program and Research Manager at Women's Health in Women's Hands, a community health centre that provides primary healthcare services for African, Caribbean, Latin American and South Asian women in Toronto and surrounding areas. She is also a community based researcher, researching HIV issues relevant to women living in Canada who have migrated from countries with generalized

HIV epidemics, mainly from Africa and the Caribbean. Her research bridges knowledge generation, programmatic and policy practice to support effective actions on HIV. Wangari is also a recognized HIV advocate and has co-founded several local, provincial, national and international networks including, the African and Caribbean Council on HIV/AIDS in Ontario (ACCHO), the Canadian HIV/AIDS Black, African and Caribbean Network (CHABAC) and the African and Black Diaspora Global Network on HIV and AIDS (ABDGN) to support Black populations living in Canada and other developed countries mount effective responses to HIV/AIDS.

## APPENDIX E: EVALUATION REPORT

The Deliberative Dialogue was evaluated by CATIE to determine if we successfully met our objectives. CATIE also uses evaluations such as these to learn lessons to inform our future directions in designing and implementing knowledge exchange activities on topics related to programming.

### EVALUATION METHODOLOGY

An evaluation form was distributed to attendees to fill out upon completion of the event. CATIE staff collected the evaluation forms. Frequency descriptives were produced to summarize the outcomes for the event.

### EVALUATION RESULTS

A total of 43 completed evaluation forms were analyzed. Not including the CATIE staff who attended, 59 people participated in the deliberative dialogue, resulting in a 72% response rate. CATIE staff were requested not to complete evaluation forms.

Based on the survey responses, participants reflected the diversity of audiences for which the meeting was intended:

Type of Organization	%
AIDS service organization	19.5%
Community health centre	12.2%
Other community-based organization	12.2%
Public health unit or sexual health clinic	14.6%
Government organizations (other than a public health unit)	22.0%
Clinic/hospital	12.2%
Academic, university, and/or school	2.4%
Other	4.9%
Total	100

### Was the deliberative dialogue well organized?

- 98% agreed or strongly agreed that the deliberative dialogue was well organized.

### Was the deliberative dialogue relevant and useful for participants?

Overall, the deliberative dialogue was very relevant to participants:

- 100% agreed or strongly agreed that the deliberative dialogue was appropriate for them.
- 100% agreed or strongly agreed that the deliberative dialogue was relevant to their work.

- 100% would recommend CATIE continue to offer this type of event.
- 95.1% were satisfied or very satisfied with the deliberative dialogue.
- 92.6% thought the deliberative dialogue was useful or very useful for their work.

### Did the deliberative dialogue increase knowledge, capacity and/or networks among participants?

- 100% agreed or strongly agreed that the deliberative dialogue was effective at facilitating collaboration and knowledge sharing among HIV testing and linkage leaders.
- 100% agreed or strongly agreed that this deliberative dialogue provided an opportunity to network with others.
- 97.6% agreed or strongly agreed that they will use/apply the knowledge gained through this deliberative dialogue in their work.
- 85.7% agreed or strongly agreed that the deliberative dialogue increased their capacity to respond to the HIV undiagnosed in their community.

### Did the deliberative dialogue achieve its goals to inform priority directions and increase knowledge of programming?

- 95.2% agreed or strongly agreed that the deliberative dialogue was effective at informing priority directions for reaching the HIV undiagnosed and ensuring linkage to prevention and care.
- 83.3% agreed or strongly agreed that the deliberative dialogue increased their knowledge of HIV testing programming approaches.

## KEY THEMES RELATED TO KNOWLEDGE EXCHANGE

The deliberative dialogue participants were also asked a series of qualitative questions. Participants provided many ways in which the deliberative dialogue might inform the work that they do. Several key themes emerged:

- Some will use the information to inform their health system planning related to HIV testing and linkage
- Some will use the information gained to inform their local HIV testing/linkage program
- Some will use the information gained to create new programming in testing and linkage

The deliberative dialogue participants also provided many ways in which the deliberative dialogue was useful. A few key themes emerged: 1) inclusion of a diversity of models and service provision from across the country, 2) networking, and 3) increase in knowledge in programming.

The deliberative dialogue participants also provided a few mechanisms which could have improved the deliberative dialogue. Key themes included: 1) more time for questions/discussion; 2) more structure around tense discussion points; 3) more focus on rural and remote communities/regions

## APPENDIX F: REFERENCES

1. Hosein SR. Study confirms starting HIV treatment early prevents illness and death [Internet]. CATIE News. 2015. Available from: <http://www.catie.ca/en/catienews/2015-06-01/study-confirms-starting-hiv-treatment-early-prevents-illness-and-death>
2. Hosein SR. Deaths due to late HIV diagnosis still a problem [Internet]. CATIE News. 2013. Available from: <http://www.catie.ca/en/catienews/2013-07-11/deaths-due-late-hiv-diagnosis-still-problem>
3. The INSIGHT START Study Group. Initiation of Antiretroviral Therapy in Early Asymptomatic HIV Infection. *N Engl J Med*. 2015 Aug 27;373(9):795–807.
4. CATIE. HIV in Canada: A primer for service providers: HIV Testing and Diagnosis [Internet]. Toronto, Ontario: Canadian AIDS Treatment Information Exchange; 2015 [cited 2015 Dec 16]. Available from: <http://www.catie.ca/en/hiv-canada/5>
5. Marks G, Crepaz N, Senterfitt JW, Janssen RS. Meta-analysis of high-risk sexual behavior in persons aware and unaware they are infected with HIV in the United States: implications for HIV prevention programs. *J Acquir Immune Defic Syndr* 1999. 2005 Aug 1;39(4):446–53.
6. Cohen MS, Chen YQ, McCauley M, Gamble T, Hosseinipour MC, Kumarasamy N, et al. Antiretroviral Therapy for the Prevention of HIV-1 Transmission. *N Engl J Med*. 2016 Sep;375(9):830–9.
7. Rodger AJ, Cambiano V, Bruun T, Vernazza P, Collins S, van Lunzen J, et al. Sexual Activity Without Condoms and Risk of HIV Transmission in Serodifferent Couples When the HIV-Positive Partner Is Using Suppressive Antiretroviral Therapy. *JAMA*. 2016 Jul 12;316(2):171.
8. Prevention Access Campaign. Undetectable = Untransmittable [Internet]. [cited 2016 Sep 21]. Available from: <http://www.preventionaccess.org/undetectable>
9. Althoff KN, Gange SJ, Klein MB, Brooks JT, Hogg RS, Bosch RJ, et al. Late Presentation for Human Immunodeficiency Virus Care in the United States and Canada. *Clin Infect Dis*. 2010 Jun;50(11):1512–20.
10. Plitt SS, Mihalicz D, Singh AE, Jayaraman G, Houston S, Lee BE. Time to Testing and Accessing Care among a Population of Newly Diagnosed Patients with HIV with a High Proportion of Canadian Aboriginals, 1998–2003. *AIDS Patient Care STDs*. 2009 Feb;23(2):93–9.
11. The SPARTAC Trial Investigators. Short-Course Antiretroviral Therapy in Primary HIV Infection. *N Engl J Med*. 2013 Jan 17;368(3):207–17.
12. Siegfried N, Rutherford GW. Optimal time for initiation of antiretroviral therapy in asymptomatic, HIV-infected, treatment-naïve adults. In: *Cochrane Database of Systematic Reviews* [Internet]. Chichester, UK: John Wiley & Sons, Ltd; 2010 [cited 2015 Jan 24]. Available from: <http://doi.wiley.com/10.1002/14651858.CD008272.pub2>
13. Okulicz JF, Le TD, Agan BK, Camargo JF, Landrum ML, Wright E, et al. Influence of the Timing of Antiretroviral Therapy on the Potential for Normalization of Immune Status in Human Immunodeficiency Virus 1–Infected Individuals. *JAMA Intern Med*. 2015 Jan 1;175(1):88.
14. Le T, Wright EJ, Smith DM, He W, Catano G, Okulicz JF, et al. Enhanced CD4+ T-Cell Recovery with Earlier HIV-1 Antiretroviral Therapy. *N Engl J Med*. 2013 Jan 17;368(3):218–30.
15. Thornhill J, Inshaw J, Oomeer S, Kaleebu P, Cooper D, Ramjee G, et al. Enhanced normalisation of CD4/CD8 ratio with early antiretroviral therapy in primary HIV infection. *J Int AIDS Soc* [Internet]. 2014 Nov 2 [cited 2015 Jan 24];17(4(Suppl 3)). Available from: <http://www.jiasociety.org/index.php/jias/article/view/19480>
16. Government of Canada. Summary: Measuring Canada's progress on the 90-90-90 HIV targets [Internet]. 2016 Dec. Available from:

- <http://www.healthycanadians.gc.ca/publications/diseases-conditions-maladies-affections/hiv-90-90-90-vih/index-eng.php>
17. Adam BD. Epistemic fault lines in biomedical and social approaches to HIV prevention. *J Int AIDS Soc.* 2011;14(Suppl 2):S2.
  18. Nosyk B, Montaner JSG, Colley G, Lima VD, Chan K, Heath K, et al. The cascade of HIV care in British Columbia, Canada, 1996–2011: a population-based retrospective cohort study. *Lancet Infect Dis.* 2014 Jan;14(1):40–9.
  19. Wilton J, Broecker L. The HIV treatment cascade – patching the leaks to improve HIV prevention. *Prev Focus* [Internet]. 2013 Spring; Available from: <http://www.catie.ca/en/pif/spring-2013/hiv-treatment-cascade-patching-leaks-improve-hiv-prevention>
  20. Mugavero MJ, Amico KR, Horn T, Thompson MA. The State of Engagement in HIV Care in the United States: From Cascade to Continuum to Control. *Clin Infect Dis.* 2013 Jun 23;57(8):1164–71.
  21. Public Health Agency of Canada. Estimates of HIV Incidence, Prevalence and Proportion Undiagnosed in Canada, 2014 [Internet]. 2015 [cited 2015 Dec 16]. Available from: <http://healthycanadians.gc.ca/publications/diseases-conditions-maladies-affections/hiv-aids-estimates-2014-vih-sida-estimations/index-eng.php>.
  22. Brenner BG, Roger M, Routy J-P, Moisi D, Ntemgwa M, Matte C, et al. High rates of forward transmission events after acute/early HIV-1 infection. *J Infect Dis.* 2007 Apr 1;195(7):951–9.
  23. Miller WC, Rosenberg NE, Rutstein SE, Powers KA. Role of acute and early HIV infection in the sexual transmission of HIV: *Curr Opin HIV AIDS.* 2010 Jul;5(4):277–82.
  24. Hall HI, Halverson J, Wilson DP, Suligoi B, Diez M, Le Vu S, et al. Late Diagnosis and Entry to Care after Diagnosis of Human Immunodeficiency Virus Infection: A Country Comparison. Palaniyar N, editor. *PLoS ONE.* 2013 Nov 5;8(11):e77763.
  25. Office of the Provincial Health Officer. HIV Testing Guidelines for the Province of British Columbia [Internet]. British Columbia: Government of British Columbia; 2014. Available from: <http://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/hiv-testing-guidelines-bc.pdf>
  26. World Health Organization. Consolidated Guidelines on HIV Testing Services [Internet]. Geneva, Switzerland: World Health Organization (WHO); 2015 Jul. Available from: [http://apps.who.int/iris/bitstream/10665/179870/1/9789241508926\\_eng.pdf?ua=1&ua=1](http://apps.who.int/iris/bitstream/10665/179870/1/9789241508926_eng.pdf?ua=1&ua=1)
  27. International Advisory Panel on HIV Care Continuum Optimization. IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents. *J Int Assoc Provid AIDS Care JIAPAC.* 2015 Nov 1;14(1 Suppl):S3–34.
  28. Suthar AB, Ford N, Bachanas PJ, Wong VJ, Rajan JS, Saltzman AK, et al. Towards Universal Voluntary HIV Testing and Counselling: A Systematic Review and Meta-Analysis of Community-Based Approaches. Sansom SL, editor. *PLoS Med.* 2013 Aug 13;10(8):e1001496.
  29. Lewis NM, Gahagan JC, Stein C. Preferences for rapid point-of-care HIV testing in Nova Scotia, Canada. *Sex Health.* 2013;10(2):124.
  30. Zetola NM, Pilcher CD. Diagnosis and management of acute HIV infection. *Infect Dis Clin North Am.* 2007 Mar;21(1):19–48, vii.
  31. Schwandt M, Nicolle E, Dunn S. Preferences for Rapid Point-of-Care HIV Testing in Primary Care. *J Int Assoc Physicians AIDS Care JIAPAC.* 2012 Jun 1; 11(3):157–63.
  32. Public Health Agency of Canada. Human immunodeficiency virus HIV Screening and Testing Guide [Internet]. Public Health Agency of Canada. 2013 [cited 2015 Dec 12]. Available from: <http://www.phac-aspc.gc.ca/aids-sida/guide/hivstg-vihgdd-eng.php>
  33. Government of Saskatchewan. Saskatchewan HIV Testing Policy. Saskatchewan; 2014.
  34. Sanders GD, Bayoumi AM, Sundaram V, Bilir SP, Neukermans CP, Rydzak CE, et al. Cost-Effectiveness of Screening for HIV in the Era of Highly Active Antiretroviral Therapy. *N Engl J Med.* 2005 Feb 10; 352(6):570–85.
  35. Hutchinson AB, Farnham PG, Duffy N, Wolitski RJ, Sansom SL, Dooley SW, et al. Return on Public Health Investment: CDC's Expanded HIV Testing

- Initiative. *JAIDS J Acquir Immune Defic Syndr*. 2012 Mar;59(3):281–6.
36. Walensky RP, Freedberg KA, Weinstein MC, Paltiel AD. Cost-Effectiveness of HIV Testing and Treatment in the United States. *Clin Infect Dis*. 2007 Dec 15; 45(Supplement 4):S248–54.
37. Gustafson R, Nathoo A. HIV Testing in Acute Care. In Toronto, Ontario: CATIE; 2013.
38. Johnston C, Broeckaert L, Canadian AIDS Treatment Information Exchange. Shifting the paradigm: the history of the Vancouver STOP HIV/AIDS Project [Internet]. 2014 [cited 2016 Jan 6]. Available from: <http://site.ebrary.com/id/10863154>
39. Becker ML, Thompson LH, Pindera C, Bridger N, Lopez C, Keynan Y, et al. Feasibility and success of HIV point-of-care testing in an emergency department in an urban Canadian setting. *Can J Infect Dis Med Microbiol J Can Mal Infect Microbiol Médicale AMMI Can*. 2013;24(1):27–31.
40. Georgia Department of Health. Ongoing HIV Risk Behaviors in Metropolitan Atlanta: Preliminary Data from the National HIV Behavior Surveillance (NHBS) System, Men who have Sex with Men (MSM2) [Internet]. 2010. Available from: [https://dph.georgia.gov/sites/dph.georgia.gov/files/related\\_files/site\\_page/MSM2-Ongoing%20HIV%20Risk%20Behaviors-082211.pdf](https://dph.georgia.gov/sites/dph.georgia.gov/files/related_files/site_page/MSM2-Ongoing%20HIV%20Risk%20Behaviors-082211.pdf)
41. Centers for Disease Control and Prevention. Use of social networks to identify persons with undiagnosed HIV infection – Seven U.S. Cities. 2005 Jun.
42. Centers for Disease Control and Prevention. HIV Testing at CDC Funded Sites, United States, Puerto Rico and the U.S. Virgin Islands, 2011. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2013 Nov.
43. Sullivan PS, Wall KM, O'Hara B, Jones J, Barnes J, DiClemente R, et al. The prevalence of undiagnosed HIV serodiscordance among male couples presenting for HIV testing. *Arch Sex Behav*. 2014 Jan;43(1):173–80.
44. Gilbert M, Cook D, Steinberg M, Kwag M, Robert W, Doupe G, et al. Targeting screening and social marketing to increase detection of acute HIV infection in men who have sex with men in Vancouver, British Columbia: AIDS. 2013 Oct;27(16):2649–54.
45. Gahagan J, Condran B, Hajizadeh M. HIV Point-of-Care Testing (POCT) in Canada: Action Plan 2015-2020 [Internet]. Halifax, Nova Scotia; 2015 Dec. Available from: <http://pacificaidnetwork.org/wp-content/uploads/2015/12/National-HIV-POCT-Action-Plan-english-web.pdf>
46. Gaydos CA, Solis M, Hsieh Y-H, Jett-Goheen M, Nour S, Rothman RE. Use of tablet-based kiosks in the emergency department to guide patient HIV self-testing with a point-of-care oral fluid test. *Int J STD AIDS*. 2013 Sep;24(9):716–21.
47. AIDS Calgary Awareness Association. Position Statement: HIV Testing.
48. Broeckaert L. HIV home-based testing: Potential benefits and ongoing concerns. *CATIE Prev Focus* [Internet]. 2014 Spring; Available from: [http://www.catie.ca/en/pif/spring-2014/hiv-home-based-testing-potential-benefits-and-ongoing-concerns#footnote10\\_wpfpq03](http://www.catie.ca/en/pif/spring-2014/hiv-home-based-testing-potential-benefits-and-ongoing-concerns#footnote10_wpfpq03)
49. Pilcher CD, Louie B, Facente S, Keating S, Hackett J, Vallari A, et al. Performance of Rapid Point-of-Care and Laboratory Tests for Acute and Established HIV Infection in San Francisco. Pant Pai N, editor. *PLoS ONE*. 2013 Dec 12;8(12):e80629.
50. Asghari S, Minichiello A, Maybank A, Swab M, Marshall Z, Schwandt M, et al. HIV Point-of-Care Testing in Canadian Settings: A Scoping Review [Internet]. 2015. Available from: <http://www.reachprogramscience.ca/wp-content/uploads/2015/06/POCT-Canada-Summary-Sheet-V7.pdf>
51. CATIE. Pilot to Offer Anonymous, Rapid Point-of-care HIV Testing in Prisons [Internet]. 2014. Available from: <http://www.catie.ca/en/pc-program/poc-prisons?tab=quick-facts>
52. Ken English, Ontario Ministry of Health and Long-Term Care. Personal Communication. 2016.
53. Gallaher S, Higeli A. New Approaches to HIV Testing. In Toronto, Ontario: CATIE; 2015.
54. Émond G, Fadel G, Otis J, Girard M-E, the Spot Project Research Team. SPOT-Montreal, a rapid HIV testing intervention for MSM in a community setting attracts a high proportion of MSM born outside of Canada (2010). In Saskatoon, Saskatchewan; 2010.



55. Émond G, Otis J, Blais M, the SPOT Project Research Team. MSM not previously tested for HIV: baseline data from the SPOT Project (2010). In Toronto, Ontario; 2011.
56. BC Centre for Disease Control. Point of Care HIV Test Guidelines for Health Care Settings. BC Centre for Disease Control; 2014 May. Report No.: Chapter 5.
57. Buchner C. New Approaches to HIV Testing. In Toronto, Ontario: CATIE; 2015.
58. Thumath M, Sandstra I, Forrest J. Implementation of a rapid referral pathway to HIV treatment for gay men and MSM diagnosed with acute HIV-infection in sexual health clinics in British Columbia. In: Program and abstracts. 2015.
59. Fowler S, Lin A. Making the Links: Referral to Care for the Recently Diagnosed. In Toronto, Ontario; 2015.
60. Hosein S. New PHAC testing guide includes recommendations to promote HIV testing during routine medical care. CATIE News [Internet]. 2013 May 9; Available from: <http://www.catie.ca/en/catieneews/2013-05-09/new-phac-testing-guide-includes-recommendations-promote-routine-hiv-testing>
61. POCT in Pharmacies Pilot Project Funded [Internet]. REACH 2.0. 2017. Available from: <http://www.reachprogramscience.ca/poct-in-pharmacies-pilot-project-funded/>
62. Yang Q, Ogunnaike-Cooke S, Halverson J, et al. Estimated national HIV incidence rates among key sub-populations in Canada, 2014. In Winnipeg, Canada; 2016.
63. Ha S, Paquette D, Tarasuk J, Dodds J, Gale-Rowe M, Brooks JI, et al. A systematic review of HIV testing among Canadian populations. *Can J Public Health Rev Can Santé Publique*. 2014 Feb;105(1):e53-62.
64. O'Byrne P, MacPherson P, Ember A, Grayson M-O, Bourgault A. Overview of a gay men's STI/HIV testing clinic in Ottawa: clinical operations and outcomes. *Can J Public Health Rev Can Santé Publique*. 2014 Oct;105(5):e389-394.
65. Piot P, Abdool Karim SS, Hecht R, Legido-Quigley H, Buse K, Stover J, et al. Defeating AIDS—advancing global health. *The Lancet*. 2015 Jul;386(9989): 171–218.
66. Rourke S, Bacon J, McGee F, Gilbert M. Tackling the social and structural drivers of HIV in Canada. *Can Commun Dis Rep [Internet]*. 2015 Dec 3;41(12). Available from: <http://phac-aspc.gc.ca/publicat/ccdr-rmtc/15vol41/dr-rm41-12/ar-03-eng.php>
67. Traversy G, Austin T, Timmerman K, Gale-Rowe M. An overview of recent evidence on barriers and facilitators to HIV testing. (Canada Communicable Disease Report CCDR).
68. Prestage G, Brown G, Keen P. Barriers to HIV testing among Australian gay men. *Sex Health*. 2012;9(5):453.
69. Mill J, Archibald C, Wong T, Jackson R, Worthington C, Myers T, et al. The Diagnosis and Care of HIV Infection in Canadian Aboriginal Youth. Canadian Aboriginal AIDS Network; 2008 Jan.
70. ACCHO. Ontario HIV/AIDS Strategy for African, Caribbean and Black Communities 2013-2018 [Internet]. African and Caribbean Council on HIV/AIDS in Ontario (ACCHO); 2013. Available from: [http://www.accho.ca/portals/3/documents/resources/acb\\_strategy\\_web\\_oct2013\\_en.pdf](http://www.accho.ca/portals/3/documents/resources/acb_strategy_web_oct2013_en.pdf)
71. Smith LA, Andrews J. Know your Status Project: HIV Case Management as a Model of Improvement of Quality of Care. In Regina, SK; 2013. Available from: <http://www.slideshare.net/SaskQualitySummit/know-your-status-project>
72. CATIE. HIV in Canada: A primer for service providers: Criminalization of HIV non-disclosure [Internet]. Canadian AIDS Treatment Information Exchange; 2015. Available from: <http://www.catie.ca/en/hiv-canada/4/4-1/4-1-2>
73. AIDS Bureau, Ministry of Health and Long-Term Care. Ontario HIV Testing Frequency Guidelines: Guidance for Counselors and Health Professionals [Internet]. Toronto, Canada; 2012 Apr. Available from: <http://www.catie.ca/sites/default/files/HIV-testing-frequency-guidelines.pdf>
74. Ontario Ministry of Health and Long-Term Care. Health Equity Impact Assessment [Internet]. 2013. Available from: <http://www.health.gov.on.ca/en/pro/programs/hea/testimonials.aspx>
75. Canadian Guidelines on Sexually Transmitted Infections [Internet]. Ottawa, ON: Public Health Agency of Canada; 2016. Available from: <http://www.phac-aspc.gc.ca/std-mts/sti-its/cgsti-ldcits/section-2-eng.php#a9>

76. BC Centre for Disease Control. Communicable Disease Control Manual Chapter 5 – Sexually Transmitted Infections. Guidelines for Testing, Follow up, and Prevention of HIV [Internet]. Vancouver, BC; 2016 Oct. Available from: [http://www.bccdc.ca/resource-gallery/Documents/Communicable-Disease-Manual/Chapter%20%20-%20STI/HIV\\_Guidelines\\_Testing\\_FollowUp\\_Prevention.pdf](http://www.bccdc.ca/resource-gallery/Documents/Communicable-Disease-Manual/Chapter%20%20-%20STI/HIV_Guidelines_Testing_FollowUp_Prevention.pdf)
77. April MD. Rethinking HIV exceptionalism: the ethics of opt-out HIV testing in sub-Saharan Africa. *Bull World Health Organ*. 2010 Sep 1;88(9):703–8.
78. CAAN. Assessing Community Readiness & Implementing Risk Reduction Strategies: Manual. The Canadian Aboriginal AIDS Network (CAAN); 2012.
79. Tri-Ethnic Center for Prevention Research. Community Readiness for Community Change [Internet]. Colorado State University; 2014. Available from: [http://triethniccenter.colostate.edu/docs/CR\\_Handbook\\_8-3-15.pdf](http://triethniccenter.colostate.edu/docs/CR_Handbook_8-3-15.pdf)
80. World Health Organization. HIV Self-Testing [Internet]. 2017. Available from: <http://www.who.int/hiv/topics/self-testing/en/>
81. Steben M. Big Picture: Self-Directed Approaches. In Toronto, Canada; 2016.
82. Michigan State University. Best Practice Briefs. 1998 1999; Brief No. 3.
83. Kretzmann JP, McKnight JL. Building communities from the inside out: a path toward finding and mobilizing a community's assets. Evanston, Ill.: Center for Urban Affairs and Policy Research, Northwestern University; 1993.