

Acknowledgements

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Acronyms

ART Antiretroviral Therapy

CHERT Community HIV/HCV Evaluation Reporting Tool

HAART Highly active antiretroviral therapy

HIV Human Immunodeficiency Virus

HCV Hepatitis C Virus

CBO Community-based organization

PLWHAs People living with HIV/AIDS

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1.0 Introduction

This report outlines a series of indicators that can be used to measure the difference community-based HIV/HCV organizations are making across BC. The common use of these indicators across the sector will improve our ability to compare the relative effectiveness of different programs and services to make more informed choices, and improve learning from organizations' most successful practices (Kramer et al., 2009). Commonly measuring these indicators will also support a more informed understanding of the contribution the community-based sector is collectively making to the provincial strategy to address HIV/AIDS in BC, as outlined in *From Hope to Health: An AIDS-free Generation* (BC Ministry of Health, 2012).

The indicators included in this report were informed by a logic model of the community-based HIV and HCV sectors in BC (see Figure 1 below), a search of peer-reviewed literature and a stakeholder consultation process. The search of the peer-reviewed literature was conducted to identify commonly employed indicators in the assessment of community based HIV and HCV programming across the continuum of care. A series of key stakeholder interviews were also conducted with representatives from local health authorities (n = 6), the BC Centre for Disease Control (n = 1), Ministry of Health (n = 1) and community-based organizations (CBOs) (n = 7) to identify best practices for evaluating community-level HIV and HCV programming and services.

2.0 Report Roadmap

To align with *From Hope to Health's* monitoring and evaluation framework, indicators included in this report have been grouped into categories that reflect the contribution of CBOs across the cascade of prevention and care, as follows (BC Ministry of Health, 2012).



3.1 HIV and HCV Prevention Indicators



3.2 HIV and HCV Testing and Diagnosis Indicators



3.3 HIV and HCV Linkage to Care Indicators



3.4 HIV Care, Treatment and Retention Indicators



3.5 HCV Care and Treatment Indicators

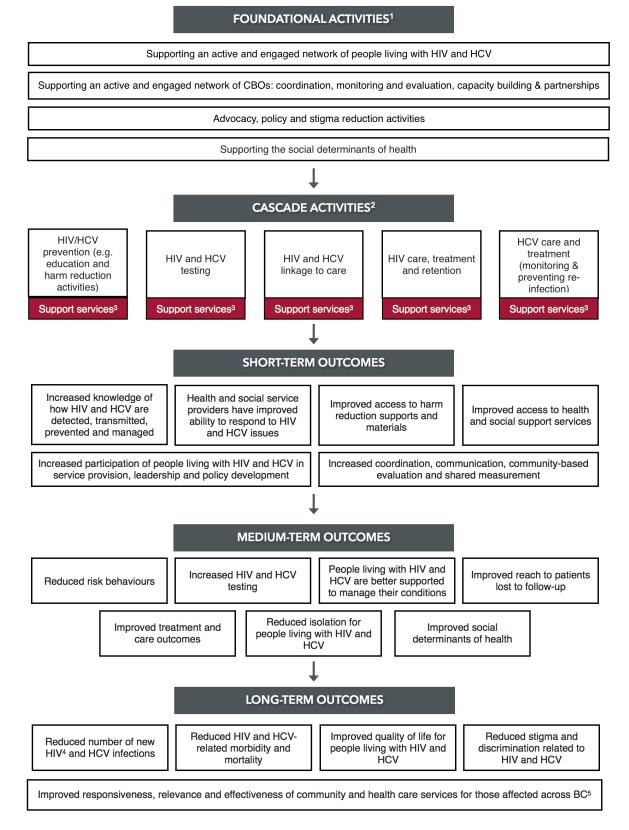


3.6 Indicators Related to Foundational Activities in the Logic Model

For each of the indicators, the following is described: definition; significance; proposed data source; possible levels of disaggregation; limitations; and sources using similar indicators. Indicators to measure both the performance and outcomes of CBOs in the HIV/HCV sector (i.e. process-level and outcome-level indicators) have been included.

It is important to note that measurement of the indicators included in this report should not replace the need for CBOs to conduct individual evaluations of their programs and services. If your organization or program requires additional resources on how to conduct such evaluation work, the <u>CIHR Centre for REACH Evaluation Toolkit</u> provides a useful step-by-step guide to help you get started.

Figure 1. Logic model: Community-Based HIV and Hepatitis C Sectors in BC



- 1. Important cross-cutting activities that are essential to the success of the cascade of prevention and care in BC.
- 2. Activities that take place along the cascade of prevention and care for BC.
- 3. Community-based organizations (CBOs) provide many support services to ensure people are engaged and retained throughout the cascade of prevention and care, such as counselling services and transportation to medical appointments. Note that such support services are also provided by other types of agencies and are essential to people's success along the cascade.
- 4. Ministry of Health. (2014). From Hope to Health: Towards an AIDS-free Generation. Retrieved from: http://www.health.gov.bc.ca/library/publications/year/2012/from-hope-to-health-aids-free.pdf
- 5. Adapted from: Ministry of Health. (2014). Setting Priorities for the B.C. Health System. Retrieved from: http://www.health.gov.bc.ca/library/publications/year/2014/Setting-priorities-BC-Health-Feb14.pdf

3.0 Implementing Indicators

In the next phase of this project, PAN and the PHSA will explore how to implement and make use of the indicators listed in this report. There has been an identified need for a more effective way of evaluating how community-based organizations contribute to provincial HIV and HCV strategies and support people along the prevention and care cascades – whether directly or indirectly. We know anecdotally that community-based organizations provide essential services to people living with HIV and HCV in BC but having a set of data that would allow us to more intimately understand these contributions would immensely help the Ministry of Health, health authorities and CBOs in planning and implementing services in these sectors. Information provided by these new ways of collecting data will allow us to examine the HIV and HCV systems as a whole, make mid-course corrections and improvements to services, and see our impact over time. The following are some possible options for the sector to explore.

1. Individual Evaluation Plans

We do not want to underestimate the value of individual evaluation plans for programs, projects, services or policies in the community-based HIV and HCV sectors. The indicators included in this report will be useful tools for CBOs and third party evaluators when building such evaluation plans. Furthermore, health authorities and other funding bodies should encourage and support their funded agencies and services to evaluate their services to ensure that programs are: adequately meeting the needs and having positive outcomes on the lives of people with lived experience with HIV and HCV in BC, being run effectively and efficiently and improving services as needed, and are supporting the goals laid out by health authorities and the Ministry of Health.

Benefits of encouraging more robust program evaluation for individual programs and services could include the following for different stakeholder groups involved with the community-based HIV and HCV sectors in BC.

- For the Ministry of Health:
 - Improved ability to assess whether CBO programs and services are supporting the goals and guiding principles of From Hope to Health and the Viral Hepatitis Strategy
- For Health Authorities:
 - Improved ability to assess whether contracted agencies are supporting the goals and objectives of funding areas

 Improved ability to assess whether contracted agencies are completed planned activities and meeting intended outcomes

• For CBOs:

- Identification of program strengths and areas for improvement
- Improved design and delivery of programs and services
- Ability to demonstrate the difference programs and services are making
- Improves ability to apply and secure future funding given documentation of performance
- Offers CBOs with a foundational document to begin strategic planning
- For People with Lived Experience:
 - Improved design and delivery of services for people with lived experience
 - Potential to be engaged as peer evaluators, offering the opportunity to develop research and evaluation skills

2. Creation of a set of common indicators or a shared measurement platform

Shared measurement platforms, or a set of common indicators, would allow organizations to report on a set of measures that are applicable to their programs and services, using webbased tools to inexpensively collect and analyze the data (Kramer, et al., 2009). This would allow health authorities to examine, in a standardized way, how community-based organizations are supporting people along the prevention and care cascade and the goals laid out in From Hope to Health at both a regional level and across regions or provincial level. Kramer and colleagues (2009) explains that the benefits of such platforms include: lower costs and greater efficiency in annual data collection; expert guidance for less sophisticated organizations; and improved credibility and consistency in reporting.

Benefits of developing a set of common indicators, or a shared measurement platform, could include the following for different stakeholder groups involved with the community-based HIV and HCV sectors in BC.

- For the Ministry of Health:
 - Improved ability to identify gaps and best practices to inform provincial strategies and policy change due to use of consistent measures

Enhanced alignment with From Hope to Health and the new provincial Viral Hepatitis
 Strategy and the ability to assess cross-regional progress

• For Health Authorities:

- Improved understanding of effective strategies
- Improved comparability of outcomes resulting for programs and services
- Improved understanding of impact resulting from funding
- Greater alignment among the goals of different organizations, promoting a collective impact model
- Improved ability to compare outcomes across programs and services
- Improved ability to do data-driven planning
- Ability to look at longitudinal changes within the organization and across the sector

For CBOs:

- Opportunities to learn from other organizations' successes and failures
- Ability to benchmark and compare performance to other organizations
- Potential for less duplication in reporting to funders, resulting in cost savings
- Decreases need for internal expertise around indicator development
- Ability to look at longitudinal changes within the organization and across the sector

For People with Lived Experience:

- Improved service delivery resulting from organizations adopting programs and services strategies demonstrated to be most effective
- With accessible dissemination and knowledge translation tools, improved ability to understand the health of the system and how these sectors are working

3. Designing and implementing a set of practice standards for the HIV and HCV sectors

Accreditation, with accompanying practice standards, is an approach that is used by many health care and social service organizations to ensure optimal quality of care. In order to become accredited, health and social service organizations must undergo a process of assessing whether they are meeting certain principles and standards, as well determining areas for improvement (Accreditation Canada, 2013). This process aims to improve the quality, safety and efficiency of organizations so they are able to offer the best possible care and service (Accreditation Canada, 2013). Accreditation decisions can be informed through a variety of data sources, such as background document review, site visits, and survey findings.

While there may not be resources to fully implement an accreditation process for the HIV and HCV sector in BC we might consider a first step - identifying a set of practice standards that all HIV and HCV services (both community-based and health authority-provided services) in BC would uphold and work towards. As part of this work we would require all services to provide evidence on how they are reaching these standards, which would be independently assessed.

Practice standards would be collaboratively developed by Ministry, health authority and community-based stakeholders and could include standards relating to the guiding principles in From Hope to Health. Lessons could be learned from previously developed accreditation processes, such as those employed by Accreditation Canada and The International HIV/AIDS Alliance. The International HIV/AIDS Alliance (2010) has adopted an accreditation system for CBOs providing HIV services within developing counties. Alliance organizations are required to meet nine principles containing thirty-eight standards. For instance, the principle of having a 'functional and effective monitoring and evaluation system' includes the standard that the organization should have a monitoring and evaluation plan, with clearly defined indicators linked to objectives (Alliance, 2013). To demonstrate they meet this standard, organizations must provide evidence of a having a monitoring and evaluation framework and a strategic plan. The indicators included in this report could be part of the evidence toolkit for these practice standards.

Given the benefits of accreditation, the HIV and HCV sectors in BC could consider implementing such a model. The information included in this report could be grouped and packaged into high-level accreditation principles, which would contain best practice standards. The indicators listed in this report could then measure these best practice standards. We would then collectively determine the frequency for reporting on practice

standards and how they will be evaluated, and by whom. The purpose of implementing such an accreditation process would be to guarantee quality in service delivery and promote learning and development within CBOs.

Benefits of developing an accreditation process could include the following for different stakeholder groups involved with the community-based HIV and HCV sectors in BC.

For the Ministry of Health:

- Enhanced alignment with From Hope to Health and new Viral Hepatitis Strategy provides a mechanism to assess progress made in the Guiding Principles
- Ensures that all HIV and HCV services in the province are adhering to a minimum set of agreed upon standards

For the Health Authorities:

- Ensures that all HIV and HCV services in the province are adhering to a minimum set of agreed upon standards
- Improved quality and safety of HIV and HCV programming
- Provides a tool to work collaboratively with services to ensure that standards are being met and to identify areas for improvement
- Improved implementation of best practices given need to meet standards

For CBOs:

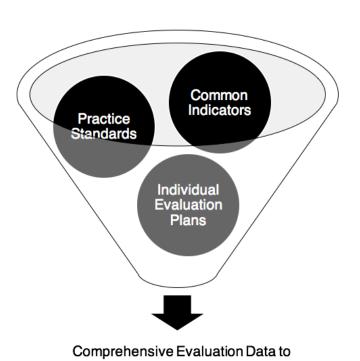
- Determine strengths and areas for improvement
- Potential for less duplication in reporting to funders, resulting in reduced costs
- Ability to improve performance if practice standards are not already being met
- Ability to promote their commitment to providing safe, high-quality services

• For People with Lived Experience:

- Improved quality and safety of care
- Potential to be engaged as reviewers in practice standard review process, which offers an opportunity for skills development and programs to be more relevant to the population they serve

It is important to note that the above options are not mutually exclusive or exhaustive and have been brainstormed in this document to provide ideas for possible directions for the next phase of work on this project. There may be strength in building a mix model where the collective determines a set of common indicators that will be measured by community-based HIV and HCV services and there are a set of mutually agreed upon practice standards that all HIV and HCV services would be adhering to. In addition, it is critical to note that such activities would not replace the need for comprehensive program evaluations to be conducted of each program or service. Figure 2 illustrates this concept of a mixed-model approach.

Figure 2. Mixed-model approach to evaluate the contribution of community-based HIV and HCV organizations



Support Effective HIV and HCV Sectors



4.1 HIV and HCV Primary Prevention Indicators

Indicator 1: Number of people reached through HIV and HCV education sessions focused on risk behaviour reduction		
Description	 Total number of people reached through HIV/HCV education sessions/ workshops focused on risk-behaviour reduction. 	
Significance	HIV education programs have demonstrated to be effective in decreasing risk behaviour and increasing contraceptive use (Kirby et al., 2006).	
Data source	CBO administrative data	
Possible disaggregation	 Target populations Sessions focused on HIV vs. HCV vs. both Peer education vs. not 	
Limitations	Participant tracking challenges	

Indicator 2: Sexual Health Capacity Scale scores before and after participation in education session		
Description	 The Sexual Health Capacity Scale measures knowledge and confidence in preventive sexual practices for HIV and STIs (Bavinton, et al., 2013). Higher scores would indicate greater perceived knowledge and confidence in maintaining sexual health. 	
Significance	HIV education programs have demonstrated to be effective in decreasing risk behaviour and increasing contraceptive use (Kirby et al., 2006).	















Scale	 Scale: 1 (strongly disagree), 2, 3, 4l 5 (strongly agree) Items: I have a good understanding of how HIV is transmitted. I have a good understanding of how HCV is transmitted (ADDED). I would be able to recognize the symptoms of a sexually transmissible infection (STI). I know where to get to get a full sexual health check-up. I know how to put a condom on properly. I know that I am at increased risk for HIV if I have multiple sexual partners (ADDED). I know that I am at increase risk for HIV if I have, or have recently had, a sexually transmitted infection (ADDED). I know that I am at increase risk for hepatitis C by sharing needles and other equipment used to inject drugs (ADDED). I feel confident that I can negotiate the use of condoms with sexual partners.
Measurement	 Participants should complete the scale both before and after participation in education session. Participation should be voluntary. Compare participants' mean scores on the items before and after participation.
Data source	Education session participants
Possible disaggregation	Target population
Limitations	Survey questions focused on sexual health.

Indicator 3: Knowledge of new HIV and HCV prevention technologies before and after participation in CBO education session	
Description	Knowledge of new HIV and HCV prevention technologies before and after participation in CBO education workshops.
Significance	HIV education programs have demonstrated to be effective in decreasing risk behaviour and increasing contraceptive use (Kirby et al., 2006).















Measurement	The Canadian Public Health Association (CPHA) (n.d.) has developed a Training Module to enhance frontline providers' knowledge of New HIV Prevention Technologies. This training module also includes a brief evaluation survey that participants fill out once the training module has been completed. The CPHA recommends that this survey is completed before and after participation in the training module.
Data source	Survey with workshop participants
Possible	Type of new prevention technology learned about
disaggregation	Target group of education session
Limitations	Need to survey workshop participants

Indicator 4: Number of condoms distributed by CBOs	
Description	Total number of condoms distributed by CBOs. Condoms are defined as male or female condoms. The definition of condoms does not include other safer sex materials, such as dental dams and lubricant.
Significance	 Interventions that increase the availability or accessibility of condoms are efficacious in increasing condom use behaviours (Charania, et al., 2011). Condoms reduce risk of HIV and HCV transmission through sexual intercourse.
Data source	CBO administrative data (e.g. condom distribution tracking sheet)
Possible disaggregation	 Male vs. female condoms Distribution to HIV-positive vs. HIV-negative individuals Population served (e.g. sex workers, men who have sex with men, etc.)
Limitations	 At the individual level, distribution of condoms does not always translate to increased condom use. May be difficult for CBOs to track.















Indicator 5: Percent change in health and social service providers' perceived ability to respond to HIV and HCV issues before and after participation in education session	
Description	 Percent change in health and social service providers' perceived ability to respond to clients' HIV and HCV issues before and after their participation in CBO-led education sessions.
Significance	 Training for health and social service providers can improve understanding and practice of evidence-based HIV prevention services (CDC, 2016).
Scale	 Scale: 1 (low ability), 2, 3, 4, 5 (high ability). Items: ability to respond to clients' issues related to HIV/AIDS and Hepatitis C.
Measurement	 Participants should complete the scale both before and after participation in education session. Compare participants' scores before and after participation and calculate percent change.
Data source	Education session participants
Possible disaggregation	Target population for education session
Limitations	Survey participation dropout following education session

Indicator 6: Percent of respondents who report using a condom the last time they had sex		
Description	The percent of respondents who say they used a condom the last time they had sex with a non-marital, non-cohabiting partner, of those who have had sex with such a partner in the last 12 months. Reported condom use at last sex is a valid proxy for condom use behaviours over longer time periods (Younge et al., 2008).	
Significance	Condom use is a key prevention strategy for HIV and HCV transmission.	
Data source	Self-report client survey	
Possible disaggregation	Target group	
Limitations	Social desirability bias	















Indicator 7: Number of clean needles and syringes distributed	
Description	Total number of clean needles and syringes distributed.
Significance	 Exposure to needle and syringe programs is associated with reduction of HCV transmission (Turner, et al., 2011).
Data source	CBO administrative data (e.g. harm reduction material distribution tracking sheet)
Possible disaggregation	Distribution by target groups
Limitations	 At the individual level, distribution of clean needles and syringes does not always translate to use of this equipment. Can be difficult for CBOs to track.

Indicator 8: Number of clean pipes/glass tubes distributed	
Description	Total number of clean needles and syringes distributed.
Significance	Exposure to needle and syringe programs is associated with reduction of HCV transmission (Turner, et al., 2011).
Data source	CBO administrative data (e.g. harm reduction material distribution tracking sheet)
Possible disaggregation	Distribution by target groups
Limitations	 At the individual level, distribution of clean needles and syringes does not always translate to use of this equipment. Can be difficult for CBOs to track.















Indicator 9: Number of referrals to HIV/HCV prevention and support services for those at-risk	
Description	Total number of referrals made to HIV and HCV prevention services.
Significance	 Engagement of vulnerable and marginalized populations in the health and social service system aims to reduce transmission of communicable diseases (HRSS, 2013).
Data source	CBO administrative data
Possible disaggregation	Type of service referrals are made for (e.g. screening/testing for HIV/HCV, syringe services program, post-exposure prophylaxis, mental health and substance use services, etc.)
Limitations	 CBO tracking issues Lack of standardized manner to track referrals Difficulty for CBOs to determine whether client followed through with referral

Indicator 10: Number of at-risk clients provided with HIV/HCV prevention and support services	
Description	Total number of clients provided with HIV/HCV prevention and support services
Significance	 Engagement of vulnerable and marginalized populations in the health and social service system aims to reduce transmission of communicable diseases (HRSS, 2013).
Data source	CBO administrative data
Possible disaggregation	Type of prevention/support service provided (e.g. screening/testing for HIV/HCV, syringe services program, post-exposure prophylaxis, mental health and substance use services, etc.)
Limitations	CBO tracking issues















Indicator 11: Percent change in resiliency and self-efficacy following receipt of support from CBO health promotion case managers	
Description	Total number of clients provided with HIV/HCV prevention and support services
Significance	 Engagement of vulnerable and marginalized populations in the health and social service system aims to reduce transmission of communicable diseases (HRSS, 2013).
Measurement	Outcomes to be measured upon initial consultation with case manager and at follow-up. Percent change in outcomes to be calculated.
Data source	Survey with clients receiving support from health promotion case managers
Possible disaggregation	Client target groupPeer vs. non-peer case managers
Limitations	Need to conduct client survey















4.2 HIV and HCV Testing and Diagnosis Indicators

Indicator 12: Number of HIV tests administered by CBOs	
Description	 The number of HIV tests administered by CBOs. This excludes HIV testing hosted by CBOs and conducted by public health nurses. In other words, external groups or organizations (e.g. BCCDC) have not been involved in the direct provision of testing.
Significance	 Community approaches can increase uptake of testing and have reached first-time testers and newly diagnosed (Suthar, et al., 2013). HIV screening may lead to increased case-finding, reduced number of individuals unaware of their HIV status and reduced stigma (BCCfE & BCCDC, 2015).
Data source	CBO administrative data (e.g. test tracking sheets)
Possible disaggregation	 Types of HIV tests administered (e.g. Point of Care, traditional blood draw, etc.) Tests administered by people with lived experience vs. social service providers, etc.
Limitations	CBO test tracking issues

Indicator 13: Number of HIV tests hosted by CBOs	
Description	 The number of HIV tests hosted, but not directly administered, by CBOs. This refers to testing that is offered by external groups (e.g. BCCDC) that would come into organizations to provide testing.
Significance	 Community-based approaches have demonstrated to increase uptake of HIV testing and have successfully reached first-time testers and those early in the course of infection (Suthar, et al., 2013). HIV screening may lead to increased case-finding, reduced number of individuals unaware of their HIV status and reduced stigma (BCCfE & BCCDC, 2015).
Data source	 Point of Care HIV testing volumes from STOP HIV/AIDS partner agencies CBO administrative data (e.g. test tracking sheets)















Possible disaggregation	 Types of HIV tests administered (e.g. Point of Care, traditional blood draw, etc.) Tests administered by people with lived experience vs. social service providers, etc.
Limitations	CBO test tracking issuesPotential for double-counting of HIV testing being conducted in BC

Indicator 14: Number of new HIV diagnoses identified	
Description	Number of individuals identified with a new positive HIV test from testing administered or hosted by CBOs.
Significance	 New diagnoses may be influenced by expanded HIV screening efforts (BCCfE & BCCDC, 2015). New diagnoses may be influenced by decreased in HIV incidence as a result of expanded ART (BCCfE & BCCDC, 2015).
Data source	Provincial HIV/AIDS surveillance database at BCCDC
Possible disaggregation	 New positive identified by testing administered vs. hosted by CBOs New positives by health authority, gender, age, exposure category
Limitations	 Since individuals can be diagnosed with HIV at varying lengths of time after acquiring infection, this indicator is not a measure of HIV incidence (number of new acquired HIV infections (BCCfE & BCCDC, 2015).















Indicator 15: Number of HCV tests administered by CBOs	
Description	 The number of HCV tests administered by CBOs. This excludes HCV testing hosted by CBOs and conducted by public health nurses. In other words, external groups or organizations (e.g. BCCDC) have not been involved in the direct provision of testing.
Significance	 People living with HCV are often asymptomatic, leading to delayed treatment (CDC, 2015). Undiagnosed and untreated HCV can lead to chronic infections involving serious liver problems.
Data source	CBO administrative data (e.g. test tracking sheets)
Possible disaggregation	 Types of HCV tests administered (e.g. blood draw, NAT, HCV-PCR) Tests administered by people with lived experience vs. social service providers
Limitations	CBO test tracking issues

Indicator 16: Number of HCV tests hosted by CBOs	
Description	 The number of HIV tests hosted, but not directly administered, by CBOs. This refers to testing that is offered by external groups (e.g. BCCDC) that would come into organizations to provide testing.
Significance	 People living with HCV are often asymptomatic, leading to delayed treatment (CDC, 2015). Undiagnosed and untreated HCV can lead to chronic infections involving serious liver problems.
Data source	CBO administrative data (e.g. test tracking sheets)
Possible disaggregation	 Types of HCV tests administered (e.g. blood draw, NAT, HCV-PCR) Tests administered by people with lived experience vs. social service providers
Limitations	Potential for double-counting of HCV testing being conducted in BC















Indicator 17: Number of people with lived experienced trained to provide HIV and HCV testing by CBOs	
Description	The total number of people with lived experience trained to provide HIV and HCV testing by CBOs.
Significance	 Peer testing events offer people the opportunity to seek low-barriers health care provided by people who understand them culturally (PHS Community Service Society, 2013).
Data source	CBO administrative data
Possible disaggregation	HIV- vs. HCV-positive trainees
Limitations	Training offered by health authority vs. CBOs

Indicator 18: Number of people reached by HIV testing educational information provided by CBOs	
Description	Total estimated number of people reached by HIV testing educational information provided by CBOs.
Significance	 Social marketing interventions and mass media campaigns have show to be effective in programming HIV testing (Vidanapathirana, et al., 2006; Wei, et al., 2013).
Data source	CBO administrative data
Possible disaggregation	 Target populations for HIV testing information Medium through which educational information is provided (e.g. mass media campaign, informational brochures, workshops, etc.)
Limitations	Challenges related to tracking reach of educational information















4.3 HIV and HCV Linkage to Care Indicators

Indicator 19: Number of HIV and HCV positive clients that receive support from CBOs to link to care (i.e. case management)	
Description	Total number of HIV and HCV positive clients that have received education/support from CBOs about linking to care. This indicator would only be applicable to those that are positive and have not been linked to care, or have been lost to care.
Significance	Gardner et al. (2005) compared the effectiveness of interventions to link recently diagnosed HIV-infected persons to care. Participants were randomized into: (i) standard of care (passive referral and brochure); or (ii) case management (building a relationship, identifying and addressing clients needs and barriers to health care, encouraging contact with a clinic, and accompanying the client to the clinic). In comparison to standard care, the case manager intervention was associated with a significantly higher rate of successful linkage to HIV care.
Data source	CBO administrative data
Possible disaggregation	Type of support provided to client (e.g. information about treatment, accompanying client to clinic, etc.)
Limitations	CBO tracking issues

Indicator 20: Number of HIV-positive clients who are referred to HIV primary care services and have not received such services in the past	
Description	Total number of HIV-positive individuals who are referred to HIV primary care services by CBOs and have not received such services in the past.
Significance	 Linkage to care is crucial for successful HIV treatment. Delayed linkage impacts medical outcomes (e.g. longer time to virologic suppression) and increased HIV transmission risk (Dombrowski, 2013).
Data source	CBO administrative data
Limitations	 CBO tracking issues Lack of standardized manner to track referrals Difficult to determine if client followed up with referral















Indicator 21: Percentage of newly identified HIV-positive testing events where client was referred to HIV medical care	
Description	Percentage of total newly identified HIV-positive testing events for which clients received a referral to HIV medical care.
Significance	Linkage to care is crucial for successful HIV treatment. Delayed linkage impacts medical outcomes (e.g. longer time to virologic suppression) and increased HIV transmission risk (Dombrowski, 2013).
Data source	CBO administrative data
Possible disaggregation	• N/A
Limitations	 CBO tracking issues Lack of standardized manner to track referrals Difficult to determine if client followed up with referral

Indicator 22: Number of HCV-positive clients who are referred to HCV primary care services and have not received such services in the past	
Description	Total number of HCV-positive individuals who are referred to HCV primary care services by CBOs and have not received such services in the past.
Significance	 Linkage to care is crucial for successful HCV treatment. Early treatment for HCV improves viral clearance outcomes (Corey, et al., 2010). Treatment is highly effective when administered within 12 weeks of diagnosis (Corey, et al., 2010).
Data source	CBO administrative data
Possible disaggregation	• N/A
Limitations	 CBO tracking issues Lack of standardized manner to track referrals Difficult to determine if client followed up with referral















Indicator 23: Total number of HIV and HCV post-test counselling and support sessions	
Description	 Total number of post-test counseling and support sessions held for HIV and HCV testing. Multiple sessions with one client should be counted each time.
Significance	 Information provided during post-test counselling sessions can be key to reducing emotional distress, linking positive individuals with care and sharing information about risks.
Data source	CBO administrative data
Possible disaggregation	 Counselling sessions for HIV vs. HCV Counselling sessions for those with negative vs. positive result
Limitations	CBO tracking issues















4.4 HIV Care, Treatment and Retention Indicators

Indicator 24: Number of HIV-positive clients receiving Highly Active Antiretroviral Therapy (HAART) from CBOs	
Description	This indicator measures the number of HIV-positive clients that are receiving ART from CBOs.
Significance	 Earlier initiation of ART treatment leads to better health outcomes (Palella, et al., 2003). Additionally, there is strong scientific evidence for HAART as prevention of HIV transmission due to lowering of viral loads (Granich, et al., 2010).
Data source	 CBO administrative data Linking client data with administrative data held ay the DTP/BCCfE
Possible disaggregation	Target populationCD4 count and viral load at initiation of treatment
Limitations	 CBO tracking issues The provision of ART is used as a proxy for actively taking the medication. It may be the case that pills have been dispensed but clients are not consuming the medication.















Indicator 25: Number and satisfaction of PLWHA provided with ancillary support services by CBOs	
Description	Total number and satisfaction of PLWHA provided with ancillary support services by CBOs. Recommendations for satisfaction scales can be found in Indicator #36.
Significance	 Ashman and colleagues (2002) found that the receipt of ancillary services among PLWHA was associated with receiving primary medical care from a provider and improved retention in care. Ancillary care services examined included case management, mental health and substance abuse treatment/counseling, advocacy, respite and buddy/companion services, as well as good, housing, emergency financial assistance and transportation (Ashman, et al., 2002). Sherer et al. (2002) similarly found that PLWHA receiving certain support services (case management, transportation, mental health and chemical dependency) were significantly more likely to receive primary health care and had improved retention in care. Homeless/marginally-housed PLWHA have been associated with poorer HAART access, adherence and treatment outcomes (Milloy, et al., 2012). Food security and HIV/AIDS are intertwined in a vicious cycle through nutritional, mental health and behavioural pathways. Normen and colleagues (2004) conducted a study to assess the level of food insecurity and hunger among HIV-positive persons accessing ART in BC. Study findings demonstrated that almost one half of the participants who were eligible for ART in BC in 1998-1999 were food insecure.
Data source	CBO client survey
Possible disaggregation	Type of ancillary support provided (e.g. housing or housing subsidies, food security and nutrition supports, mental health and substance use supports, transportation to medical appointments, etc.)
Limitations	CBO tracking issues















Indicator 26: Number of referrals to ancillary support services for PLWHA provided by CBOs	
Description	 Total number and satisfaction of PLWHA provided with ancillary support services by CBOs. Recommendations for satisfaction scales can be found in Indicator #37.
Significance	 Ashman and colleagues (2002) found that the receipt of ancillary services among PLWHA was associated with receiving primary medical care from a provider and improved retention in care. Ancillary care services examined included case management, mental health and substance abuse treatment/counseling, advocacy, respite and buddy/companion services, as well as good, housing, emergency financial assistance and transportation (Ashman, et al., 2002). Sherer et al. (2002) similarly found that PLWHA receiving certain support services (case management, transportation, mental health and chemical dependency) were significantly more likely to receive primary health care and had improved retention in care. Homeless/marginally-housed PLWHA have been associated with poorer HAART access, adherence and treatment outcomes (Milloy, et al., 2012). Food security and HIV/AIDS are intertwined in a vicious cycle through nutritional, mental health and behavioural pathways. Normen and colleagues (2004) conducted a study to assess the level of food insecurity and hunger among HIV-positive persons accessing ART in BC. Study findings demonstrated that almost one half of the participants who were eligible for ART in BC in 1998-1999 were food insecure.
Data source	CBO administrative data
Possible disaggregation	Type of support service referrals (e.g. housing support, mental health and substance use services, food security services, etc.)
Limitations	 CBO tracking issues Lack of standardized manner to track referrals limits comparability Difficulty for CBOs to determine whether client followed through with referral















Indicator 27: Number of HIV-positive clients receiving case management services or support services that focus on connection and retention in care		
Description	Total number of HIV-positive CBO clients receiving case management services or support services, including support sessions that focus on connection to HIV care, retention in HIV care and HIV management. Case management may be delivered through in-person meetings with clients, telephone conversations or others forms of communication.	
Significance	The use of case managers has demonstrated to increase likelihood of retention in care (Willis, et al., 2013).	
Data source	CBO administrative data	
Possible disaggregation	Clients by types of case management services received	
Limitations	CBO tracking issues	

Indicator 28: Percentage of HIV-positive clients enrolled in treatment adherence programs offered by the CBO		
Description	Percent of HIV-positive clients enrolled in a treatment adherence program offered by the CBO.	
Significance	Bogart and colleagues (2012) found that participants of the treatment advocacy program offered at ASOs in the US exhibit better ARV adherence rates that non-participants. This program facilitates clients' navigation through the medical system and provides HIV disease and treatment education through one-on-one sessions and community education forums, as well as referrals to services for health needs (e.g. mental health, substance use, housing, food/nutrition programs).	
Data source	CBO administrative data	
Possible disaggregation	Types of supports received by clients in treatment adherence programs	
Limitations	CBO tracking issuesVariation in what constitutes 'treatment adherence program'	















Indicator 29: Percentage change on client acuity scale for intake to reporting time		
Description	 Acuity scales are used to measure the level of client service needs and the frequency at which support should be provided along the cascade of care and prevention. There are typically four levels of acuity management: intensive for high need clients, moderate, basic and self- management/no needs/minimal management. These acuity levels are determined based on the number of points scored in the initial acuity scale assessment. 	
Significance	 Employing the acuity scale support efficient and targeted use of resources (Boston Public Health Commission, 2014). Using the acuity scale should help to tailor services to client needs and adjust service provision as these needs change over time (Boston Public Health Commission, 2014). 	
Measurement	Clients would be asked a series of questions to determine acuity level. Domains of questions tend to include the following: adherence to medical care and treatment, health status, health literacy, sexual/reproductive health promotion, mental health, alcohol and drug use, housing, legal, living situation/support systems, income/personal finance management, transportation, nutrition. Clients with more intensive needs receive higher scores.	
Data source	Survey with clients of CBOs	
Possible disaggregation	Clients' gender, age, ethnicity, exposure group, etc.	
Limitations	Resources and logistics with conducting survey with clients at multiple time points	















Indicator 30: Percent of HIV-positive clients that report staff at community organizations "know them as a person"		
Description	Percent of HIV-positive clients that report staff at X organization "know them as a person".	
Significance	 Studies have reported a positive association between quality of patient-provider relationships and self-reported adherence to HAART (Bakken, et al., 2000; Schneider, et al., 2004). A study conducted by Beach and colleagues (2006) demonstrated that patients who reported that their provider knows them "as a person" were more likely to receive HAART, be adherent to HAART and have undetectable serum HIV RNA. 	
Measurement	 Beach et al. (2006) developed a single item to measure the quality of the patient-provider relationship. The item asked patients to respond, "yes", "no", or "don't know" to the statement, "My HIV provider really knows me as a person." Association between this measure and the following outcome measures was explored: (i) receipt of HAART measured by patient self-report and confirmed by chart review; (ii) adherence to HAART measured using a validated survey; (iii) serum HIV-1 RNA. The Dr. Peter Centre successfully employed this measure in a study exploring the effectiveness of their interventions on ART adherence and health outcomes (Turje, et al., 2012). 	
Data source	CBO client survey	
Possible disaggregation	• N/A	
Limitations	 Need for survey to be conducted with clients Self-report Beach et al. study speaks to medical providers, rather than staff of CBOs 	















Indicator 31: Health-related quality of life score for HIV-positive clients of CBOs	
Description	Health-related quality of life score for HIV-positive clients of CBOs.
Significance	 Quality of life issues are becoming more important for PLWHA given advances in HIV treatment and resulting increases in life expectancy (Crook, et al., 2005). Basavaraj and colleagues (2010) argue that social support for PLWHA has shown a strong potential to influence health-related quality of life measures. A study comparing PLWHA that were high versus low users of CBOs found that both groups has similar health-related quality of life scores (Crook, et al., 2005). However, these authors argue that their results suggest that CBOs can enhanced health-related quality of life for persons living with HIV by increasing providers' capacity to identify and address client depression and its consequences.
Measurement	 The Medical Outcomes Study HIV (MOS-HIV) Health Survey is a questionnaire widely used to measure health-related quality of life of PLWHA (Crook et al., 2005). The MOS-HIV 36-items assess physical, role, socializing and cognitive functions and pain, mental health, energy, health distress, quality of life, and health transition. Indices for each of these dimensions are scored from 0 to 100. The 31-item World Health Organization Quality of Life HIV BREF Instrument assess wellbeing in adults who are HIV-positive (WHO, 2002). It covers the respondent's perception of quality of life within six broad domains: physical, psychological, level of independence, social, environmental and spiritual.
Data source	Client survey
Possible disaggregation	 Length of time client has been associated with CBO High vs. low use of CBOs - inventory developed by Browne and colleagues (1990) includes questions about respondents' use of categories of direct health services/primary care, emergency room, specialists, hospital episodes and days, etc.
Limitations	 CBO tracking issues Lack of standardized manner to track referrals limits comparability Difficulty for CBOs to determine if client followed through with the referral















Indicator 32: Loneliness Scale scores for people living with HIV before and after participation in support groups	
Description	The UCLA Loneliness Scale indicates feelings of separation and isolation, and has was found to be reliable in a study comparing loneliness among people living with HIV who attend and do not attend support groups (Kalichman, et al., 1996).
Significance	 Research demonstrates that social support groups offer a means of addressing the support needs of people living with HIV. A study conducted by Kalichman and colleagues (1996) found that people living with HIV that did not attend support groups were more lonely and depressed than those who did attend support groups. Loneliness among PLWHA has been found to be associated with greatly likelihood of depression for these individuals (Grov, et al., 2010).
Measurement	Various versions of the UCLA Loneliness Scale (e.g. 3-item; 8-item; 20-item, etc.)
Data source	Client survey
Possible disaggregation	Type of support group
Limitations	Other factors impacting clients' loneliness outside of support groups

















4.5 HCV Care and Treatment Indicators

Indicator 33: Number of clients receiving HCV treatment from CBOs	
Description	Total number of CBO clients receiving treatment for HCV from CBOs.
Significance	• Early treatment for HCV improves viral clearance outcomes (Corey, et al., 2010). Treatment is highly effective when administered within 12 weeks of diagnosis (Corey, et al., 2010).
Data source	CBO administrative data
Possible disaggregation	Type of treatment received
Limitations	 CBO tracking issues Lack of consistent tracking method leads to limited comparability of data

Indicator 34: Number and satisfaction of HCV-positive people provided with ancillary support services by CBOs	
Description	 Total number and satisfaction of HCV-positive people provided with ancillary support services by CBOs. Recommendations for satisfaction scales can be found in Indicator #36.
Significance	 Appropriate health information and social supports can play a key role in the self-management of health for people living with HCV (Temple-Smith, et al., 2004).
Data source	CBO administrative data
Possible disaggregation	Types of ancillary services provided (e.g. housing support, mental health and substance use services, food security services, etc.)
Limitations	CBO tracking issues















Indicator 35: Number of referrals to ancillary support services for HCV-positive people, provided by CBOs	
Description	 Total number of referrals made to support services for HCV-positive people by CBOs.
Significance	 Appropriate health information and social supports can play a key role in the self-management of health for people living with HCV (Temple-Smith, et al., 2004).
Data source	CBO administrative data
Possible disaggregation	Types of ancillary services provided (e.g. housing support, mental health and substance use services, food security services, etc.)
Limitations	 CBO tracking issues Lack of standardized approach for tracking referrals results in limited ability to compare numbers between organizations















4.6 Indicators Related to Foundational Activities in the CBO Sector Logic Model

Indicator 36: Client satisfaction with services provided by CBOs	
Description	Clients' satisfaction ratings with different aspects of community-based HIV/AIDS and HCV services.
Significance	Consumer satisfaction is an important measurement domain in health and human service assessment (Attkisson & Greenfield, 1996).
Measurement	The Client Satisfaction Questionnaire (CSQ) is a broadly adopted self- report questionnaire constructed to measure satisfaction with services received by individuals and families. The CSQ includes an 8-item, 4-point scale survey (Attkisson & Greenfield, 1996).
Data source	Client survey
Possible disaggregation	High vs. low use of CBO services
Limitations	Time and effort required to conduct client survey

Indicator 37: Stigma and discrimination related to HIV and HCV		
Description	Self-report measurement of stigma and decimation related to HIV and HCV.	
Significance	 Prior research has shown that HIV-related stigma has been associated with the following for people living with HIV: despair, loneliness, stress, post-traumatic stress disorder, depression, anxiety, distress, self esteem and self image, emotional health, mental health, and life satisfaction (Logie & Gadalla, 2009). Similarly, consequences of HCV-related stigma include loss of interpersonal relationships, mental health issues, emotional health issues (Butt, 2008). Stigma can impede the success of disease control measures when people avoid or delay diagnosis and treatment, leading to continuing risk of disease transmission (Butt, 2008). 	















Measurement	 Stangl and colleagues (2012) outline specific questions for measuring stigma and discrimination across three populations: people living with HIV, the general population and healthcare providers. Questions can be viewed here. ***Questions would need to be adapted for HCV.
Data source	Client survey, general public survey and healthcare provider survey
Possible disaggregation	• N/A
Limitations	Suggestion to conduct surveys with three populations (PLWHA, the general population and healthcare providers)

Indicator 38: Percent of HIV and HCV positive clients participating in service provision, research and evaluation, leadership and policy development	
Description	 The percent of HIV- and HCV-positive clients that participate in CBOs' service provision, research and evaluation activities, leadership and policy development.
Significance	 People living with HIV and HCV have directly experienced the factors that make individuals and communities vulnerable to infection and, once infected, the HIV-related illnesses and strategies for managing them. Their involvement in program development and implementation and policy-making will improve the relevance, acceptability and effectiveness of programs (UNAIDS, 2007). The benefits of engaging people living with HIV and HCV are wide ranging, from improved self-esteem and health to improved relevance of programs (UNAIDS, 2007).
Measurement	 CBOs should track involvement of people living with HIV and HCV in different organizational activities. USAID (2005) conducted a baseline measurement of the greater involvement of people living with HIV/AIDS (GIPA) in Greater Mekong Region. Questionnaires were created for different groups - government officials, health service providers, NGOs and civil society leaders, and PLWHA (2005). Questionnaires can be accessed here.
Data source	CBO administrative data Client survey















Possible disaggregation	 How clients are engaged (e.g. service provision, research and evaluation, leadership vs. policy development) HIV-positive clients vs. HCV-positive clients
Limitations	Time and effort required to conduct client survey

Indicator 39: Percent of peers that report skill development following participation in workshops/retreats offered by CBOs	
Description	Percent of peers that report developing their skills following their participation in workshops/retreats offered by CBOs providing HIV and HCV programs and services.
Significance	Development of skills may be necessary for people living with HIV and HCV that are unfamiliar with health care settings or lack social and work-related skills (Brashers, et al., 2009). Interactions with others living with HIV has been found to lead to the development of decision-making and self-advocacy skills (e.g. information seeking) (Brashers, et al., 2000).
Data source	Survey with participants of peer workshops/retreats
Possible disaggregation	Type of skills developed (e.g. self-advocacy skills, confidence to manage health, HIV coping skills, work-related skills, etc.)
Limitations	Reliance on self-report responses















Indicator 40: Number of partnerships held with other agencies (non-profit organizations, corporations, public sector - health authorities, government bodies, universities)	
Description	Total number of partnerships held with different types of agencies, including non-profit organizations, corporations, and public sector.
Significance	 Benefits of partnerships for CBOs have been found to include: sharing resources, information and strategies with partner agencies (PAN, 2013). Collaborative partnerships between agencies are a promising strategy for engaging organizations in the common purpose of addressing community health issues (Roussos and Fawcett, 2000).
Data source	CBO administrative data
Possible disaggregation	Formal vs. informal partnershipsType of partnerships formed
Limitations	Reliance on self-report responses

Indicator 41: Percent of CBOs working collaboratively on projects with other CBOs		
Description	Percent of CBOs providing HIV/HCV programs and services that work collaboratively on projects or initiatives with other CBOs.	
Significance	 Benefits of partnerships for CBOs have been found to be sharing resources, information and strategies with partner agencies (Pacific AIDS Network, 2013). Collaborative partnerships between agencies are a promising strategy for engaging organizations in the common purpose of addressing community health issues (Roussos and Fawcett, 2000). 	
Data source	CBO administrative data	
Possible disaggregation	Type of collaborative projects	
Limitations	Challenge of tracking projects agencies have partnered on	















Indicator 42: Percent of CBOs using at least one common indicator to measure progress towards collective outcomes		
Description	 Percent of CBOs providing HIV/HCV programs and services that are using at least one common indicator to measure progress towards collective outcomes. 	
Significance	 Measuring indicators consistently across CBOs allows organizations to learn from each other's success and failures (Kania & Kramer, 2011). When the work of CBOs is measured in different ways, it is not possible to compare the relative effectiveness of different organizations in order to make informed choices, and CBOs cannot identify and learn from their peers' successful practices (Karmer, Parkhurt, & Vaidyanathan, 2009). 	
Data source	CBO survey	
Possible disaggregation	Common measures used to track progress towards collective outcomes	
Limitations	Need to conduct survey with all CBOs to accurately report on indicator	

Indicator 43: Percent of CBOs linked with a provincial network (e.g. PAN) are percent of them that complete a network survey		
Description	Percent of CBOs providing HIV/HCV programs and services that are linked with at least one provincial network (e.g. PAN, Red Road HIV/AIDS Network, etc.), and the percent of them that complete a network survey.	
Significance	Support from backbone organizations is a critical condition for successful collective impact initiatives (Turner, 2012). Backbone organizations are intended to: guide vision and strategy, support aligned activities, establish shared measurement practices, build public will, advance policy and mobilize funding (Turner, 2012).	
Data source	CBO administrative data	
Possible disaggregation	Specific network survey completed	
Limitations	Content of network surveys vary substantially between networks	













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