Monitoring HIV Care among Key Populations in Canada

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BACKGROUND

- The Public Health Agency of Canada (PHAC) is responsible for coordinating the ***Federal Initiative to Address HIV/AIDS in Canada*** (FI), and surveillance is a fundamental component of this response.
- **"Tracks"** are enhanced surveillance systems that monitor the prevalence of HIV and related infections, as well as the associated risk behaviours among the key populations such as Aboriginal peoples (A-Track) and men who have sex with men (M-Track).
- The HIV care cascade, as described by Gardner et al., is a framework to show the extent to which people living with HIV are engaged along the continuum of care.[1]
- PHAC is developing national measures for the HIV care cascade in Canada.

OBJECTIVE

- To develop the HIV care cascade for A-Track pilot and M-Track phase 1 surveillance systems using available data.

METHODS

- Figure 1 illustrates the overall Tracks survey design.
  - A-Track pilot survey:
    - In Regina, SK from Dec. 2011 to June 2012
    - Self-identified as Aboriginal or Aboriginal ancestry, age 16 to 60
  - M-Track phase 1 survey:
    - 5 sites (Victoria, Winnipeg, Toronto, Ottawa, and Montréal) between 2005 and 2007
    - Men who self-identified as ever had sex with another man (MSM), at least 15 years old

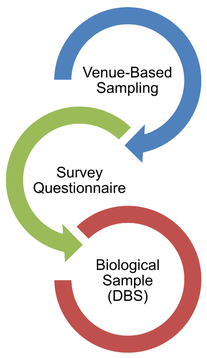

Figure 1. Survey design

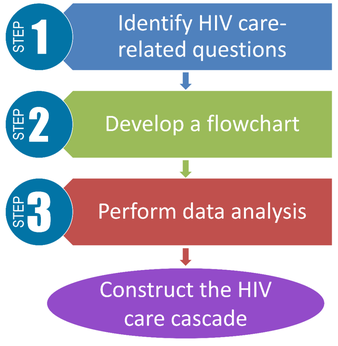

Figure 2. Methodology

- To analyze the data, and appropriately construct the HIV care cascade for each survey, we applied a multi-step process as depicted in Figure 2.

RESULTS

- Table 1 summarizes the main results, and Figure 3 shows the measured elements of the cascade of care for both survey analyses.
  - A-Track pilot: From 1064 participants, 1045 provided a dried blood spot (DBS), of which 54 (5.2%) were HIV-positive.
  - M-Track phase 1: Overall, 4838 men participated but only 4793 completed the survey questionnaire. 3410 participants offered a biological sample, where 501 (15.1%) showed positive results for HIV.

Table 1. Number (and proportion) of participants as reported to select questions of each Track survey study. The right column of the table shows specific elements of the HIV care cascade.

Questions/Indicators	A-Track Pilot (N = 1064)[2]	M-Track P1 (N = 4793)[3]	HIV Cascade Element
Ever tested for HIV	750	3870	
HIV seropositive[a]	54 (5.2%)	501 (15.1%)	HIV-Positive
HIV positive (self-reported)	30	538	
Aware of their HIV positive status	29 (55.8%)[b]	385 (80.9%)[c]	Knowledge of Positive HIV
In care for HIV[d]	26 (89.7%)		Linked to Care
Ever taken prescription drugs for HIV	20 (76.9%)[e]	289 (76.1%)[f]	
Currently on HIV treatment	19 (73.1%)[e]	247 (65.9%)[f]	On Treatment

[a]Of participants who provided a sufficient blood sample for HIV test and also completed the survey questionnaire
[b]Of participants with positive serology results, excluding those with missing data (n = 52)
[c]Of participants with positive serology results, excluding those with missing data (n = 476)
[d]Of participants who were aware of their HIV positive status (data were not collected in the M-Track phase 1 survey)
[e]Of participants who were in care for HIV (n = 26)
[f]Of participants who were aware of their HIV positive status, excluding those with missing data (n = 375)

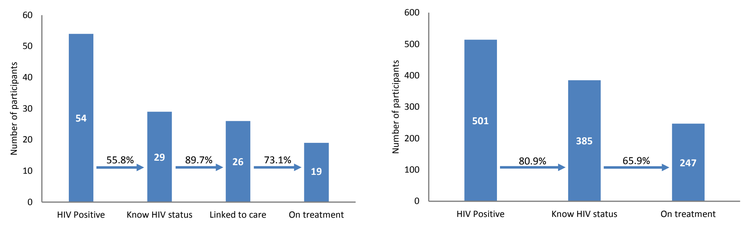

Figure 3. The HIV care cascade for A-Track pilot (left) and M-Track phase 1 (right) surveys

DELIVERABLES

- Compiled the complete results of this analysis, including flowcharts, HIV cascade measures and graphs to be utilized for generating internal documents.
- Presented the results of this project to the members of the Surveillance and Epidemiology Division (SED).

DISCUSSION

- Both populations, i.e. Aboriginal peoples and MSM, are disproportionately affected by HIV/AIDS.
- It is important to reach undiagnosed people, to take advantage of available treatment and care and reduce the transmission rate.
- Limitations of the study include:
  - Convenience sampling, therefore the results may not be representative.
  - Self-reported data are subject to recall bias and social desirability bias.

CONCLUSIONS & NEXT STEPS

- The results of this analysis emphasize the need for ongoing monitoring of HIV through multiple surveillance systems, with a focus on the key populations in order to provide national-level data on its epidemic in Canada.

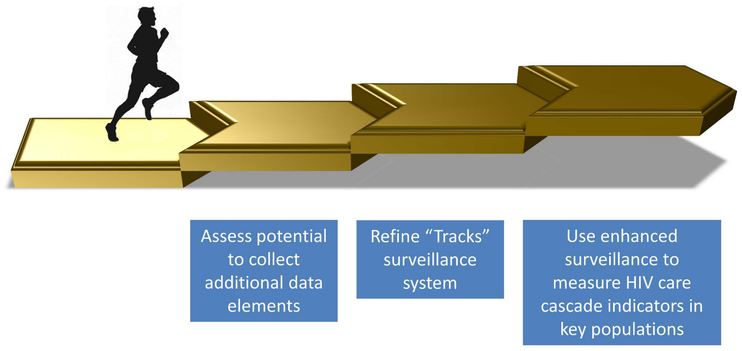

Figure 4. Potential areas for further development

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KEY REFERENCES

1. Gardner E et al. The Spectrum of Engagement in HIV Care and its Relevance to Test-and-Treat Strategies for Prevention of HIV Infection. Clinical Infectious Diseases. 2011; 52(6):793-800.
2. Public Health Agency of Canada. Summary of Key Findings from the A-Track Pilot Survey (2011-2012). PHAC; 2014.
3. Public Health Agency of Canada. M-Track: Enhanced Surveillance of HIV, Sexually Transmitted and Blood-borne Infections, and Associated Risk Behaviours among Men Who Have Sex with Men in Canada, Phase 1 Report. PHAC; 2011.