2016 Manitoba HIV Program Update

April 2017

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INTRODUCTION

The Manitoba HIV Program was established in 2007 with the purpose of providing evidence informed specialized care, treatment, and support to all adults living with HIV in the province. The Program strives to:

- *Improve access to high-quality health care for people living with HIV.*
- *Provide supports that enable clients to remain engaged in HIV care.*

Currently, the Manitoba HIV Program provides care to approximately 1,285 adult Manitobans living with HIV.

In the first quarter of each calendar year, chart audits are conducted for all clients who entered care with Manitoba HIV Program during the previous year. In 2016, 103 people entered care with the Manitoba HIV Program in either of its two Winnipeg-based sites: Nine Circles Community Health Centre and the Health Sciences Centre outpatient clinic.

This report is designed to briefly describe clients who entered care with the Manitoba HIV Program in 2016 and to provide an overview of how the Program provides care and support to Manitobans living with HIV. This report also suggests some areas for improvement within the Manitoba HIV Program and highlights key funding and resource gaps in the province.

SOME KEY TERMS

Abbreviation	Term	Definition
HAART	*Highly active antiretroviral therapy*	A combination of HIV medications (usually three or more) that comprise the treatment regimen for a person living with HIV. HAART "controls" HIV infection by reducing the number of virus particles in someone's blood.
CD4	*CD4+ cell count*	The number of CD4 cells per millilitre of blood sample. CD4 cells are white blood cells that play an important role in our body's immune system. When someone becomes infected with HIV, the virus targets and begins to destroy CD4 cells. The CD4 count of an HIV-negative person usually ranges from 500-1,700 cells/mm^3. A person living with HIV with a CD4 count greater than 350 cells/mm^3 is typically quite healthy, but a very low CD4 count (e.g., less than 200 cells/mm^3) is often used as an indication of the clinical progression to AIDS.
MSM	*Men who have sex with men*	MSM is a term often used to describe males who engage in sexual activity with other males, regardless of how they identify their own sexuality.
VL	*Viral load*	The number of copies of HIV in one millilitre of blood sample. A VL test is a useful indicator of how well someone's HAART regimen is working, and how active the virus is in the person's body. An undetectable VL indicates that there are so few copies of HIV in a blood sample that the laboratory test can no longer detect it. In Canada, a VL is considered undetectable if there are fewer than 40 copies per millilitre of blood. Achieving an undetectable VL is the goal of HAART as it significantly reduces the chance of transmitting HIV to sexual or injecting partners.

2016 KEY MESSAGES

Indigenous peoples and black people of African or Caribbean descent accounted for over two-thirds of all clients entering HIV care in Manitoba

Once again, the Manitoba HIV Program saw substantial changes in the demographic profile of clients who entered care in 2016. Notably, over 30% of clients self-identified as African/Caribbean/black (ACB)—a substantial increase from previous years.

The disproportionate representation of Indigenous and ACB populations among new clients in the Manitoba HIV Program reinforces the need to closely examine and address broader social and structural factors that create and perpetuate these inequities.

As part of a coordinated, comprehensive response to HIV in Manitoba, the Program continues to develop partnerships with organizations that provide frontline services to affected communities across the province. Additionally, given Manitoba's dynamic HIV epidemic, it is important that the Program can quickly adapt to the changing needs of its clients, acknowledging that different groups may have substantially different HIV care needs. As such, adequate resources and funding are necessary for the Manitoba HIV Program to provide a wide range of high quality health and social services, in different configurations, to accommodate diverse needs.

Over 50% of clients entered HIV care with CD4 counts below 350 cells/mm^3

Since 2007, late diagnosis and presentation to care has persisted and remains a serious concern for the Manitoba HIV Program. In 2016, 66% of clients who entered HIV care off-treatment had CD4 counts below 350 cells/mm^3, and 76% had CD4 counts below 500 cells/mm^3.

Late presentation, when CD4 counts are already quite low, can result in poorer long-term health outcomes, including increased risk of opportunistic infections (like tuberculosis or pneumonia) and early death. As such, late presentation to care has serious implications for the health care system as direct medical costs for late presenters can be nearly double compared to clients who present to care with higher CD4 counts. Additionally, late presentation is a public health concern as it is typically associated with higher viral loads, and subsequently, increased risk of forward transmission to sexual or injecting partners.

Routine HIV testing must remain a provincial priority

Most recent testing guidelines highlight the importance of routine HIV testing for general populations, but without any specificity about testing intervals. The Manitoba HIV Program endorses routine HIV testing and supports the notion that any person requesting or warranting a test for chlamydia, gonorrhoea, syphilis, hepatitis B, or hepatitis C should also be offered an HIV test.

To improve acceptability of HIV testing, health care providers, particularly in primary care settings, must be aware of all HIV testing options available in Manitoba and understand the importance of regularly offering HIV testing to clients. The WHO has recently endorsed the implementation of HIV testing by lay providers using rapid diagnostic tests—an option that should be expanded in Manitoba.

Currently, rates of HIV testing in Manitoba are relatively low and Manitobans are faced with a myriad of barriers to routine testing. By fostering partnerships with primary care providers, other health care professionals, and health service organisations, the Manitoba HIV Program is committed to facilitating the development of safe and non-judgemental environments for all people seeking HIV testing, prevention, treatment, care, and support services.

Starting HAART early and achieving viral suppression quickly among new patients to care must be prioritized

The World Health Organization's most recent HIV treatment guidelines from 2015 indicate that all people living with HIV should be started on antiretroviral therapy, regardless of CD4 count. This position was further endorsed, in 2016, by the Association of Medical Microbiology and Infectious Disease Canada position statement on the use of early antiretroviral therapy in HIV infected persons. Early treatment of HIV reduces mortality and morbidity and serves as an important prevention strategy by reducing probability of transmission.

The Manitoba HIV Program strives to start all interested clients on HAART as soon as possible. However, the Program must recognize that there many reasons as to why this is not always possible, including, but not limited to: client preference, financial barriers associated with Pharmacare deductibles, and multifaceted barriers to remaining engaged in HIV care.

DEMOGRAPHICS OF CLIENTS ENTERING CARE IN 2016

Status of clients entering care

- Seventy (68.0%) clients that entered care with the Manitoba HIV Program in 2016 were newly diagnosed with HIV.
- Ten (9.7%) clients transferred to Manitoba knowing their HIV status, but were not on HAART.
- Twenty-three (22.3%) new clients transferred into Manitoba, were aware of their status, and were on HAART.
    - 91.3% of clients entering care on HAART had a suppressed viral load (<200 copies/mL).
- See **Figure 1**.

Age

The average age of clients entering care in 2016 was 41.8 years, consistent with previous years.

- 4.9% of clients entering care were 17-24 years.
- 41.8% of clients entering care were 25-39 years.
- 52.4% of clients entering care were 40-64 years.
- 1.0% of clients entering care were ≥65 years.

Sex

In 2016, the majority (68.9%) of clients entering the Manitoba HIV Program were male, but the province continues to have one of the largest proportions of women living with HIV, compared to men, in Canada.

- Thirty-two female clients entered care with the Manitoba HIV Program, comprising approximately one-third of all new clients.

Geography

In 2016, most clients (79.6%) who entered care with the Manitoba HIV Program were living in Winnipeg at the time of audit.

- Only 18 (17.5%) new clients were living outside of the Winnipeg Regional Health Authority (WRHA), with most living in Southern Health-Santé Sud or the Northern Regional Health Authority.
- Several new Manitoba HIV Program clients (5.8%) were living outside of Manitoba and 2.9% were either incarcerated or moved out of province.
- See **Figure 2**.

Similar to previous years, more people living outside of the WRHA presented to care with very low CD4 counts and fewer had reached viral suppression at time of audit, in comparison to those living in Winnipeg.

- 42.9% of new clients living outside of the WRHA (excluding those who entered care while on HAART) presented to care with CD4 <200 cells/mm^3, compared to 23.4% of people living in Winnipeg.
- 69.2% of clients living outside of WRHA had a suppressed viral load (<200 copies/mL) at time of audit, compared to 75.4% of clients living in Winnipeg.

Ethnicity

A much greater proportion of individuals self-identified as African/Caribbean/black (ACB), in comparison to all previous years. However, the largest proportion of new Manitoba HIV Program clients remained individuals who self-identify as Indigenous.

- Forty (38.8%) new clients to care identified as Indigenous (First Nations, Métis, or Inuit).
  - 80.0% of Indigenous clients were eligible to receive their medications through the First Nations and Inuit Health Branch of Health Canada (i.e. Treaty status).
- Thirty-two (31.1%) clients identified as ACB.
  - 84.4% reported acquiring HIV in an HIV-endemic country.
- Twenty-four (23.3%) clients entering into care self-identified as white.
- Five (4.9%) clients self-identified as Asian.
- Two (1.9%) clients entering HIV care were of other or unknown ethnicity.
- See **Figure 3**.

HIV EXPOSURE CATEGORIES AMONG CLIENTS ENTERING CARE IN 2016

In 2016, the Manitoba HIV Program once again saw heterosexual contact as the most commonly reported primary HIV transmission risk among new clients to care. This proportion continues to be substantially higher than what is reported nationally.

- 56.3% (n = 58) of clients entering care with the Manitoba HIV Program reported unprotected heterosexual contact as their primary risk exposure for HIV.
  - 41.4% (n = 24) of new clients reporting heterosexual contact as their primary risk exposure are believed to acquire HIV in an endemic country
  - See **Figure 4**.
- 25.2% (n = 26) identified MSM as their primary risk exposure for HIV.
- 10.7% (n = 11) reported injection drug use (IDU) as their primary risk exposure.
  - 63.6% and 27.3% of clients reporting IDU as a primary risk exposure reported MSM and heterosexual contact, respectively, as secondary risk exposures
  - See **Figure 4**.

HIV-RELATED HEALTH INDICATORS AT PRESENTATION TO CARE AMONG NEW CLIENTS IN 2016

Of the 103 new clients entering care with the Manitoba HIV Program in 2016, 80 (77.7%) were not on HAART upon referral to the Program, and 77 (96.3%) of those clients were successfully

linked to care. Among clients linked to care, 67 (87.0%) had been successfully started on HAART at the time of audit.

CD4 count at entry into care

Among clients who entered HIV care off treatment, the median CD4 count at presentation was 271 cells/mm^3. A substantial proportion of clients entering care while not on treatment presented late, with CD4 count ≤350 cells/mm^3, or very late, with CD4 count <200 cells/mm^3.

- 26.6% (*n* = 21) clients entered care with CD4 counts <200 cells/mm^3.
- 65.8% (*n* = 52) clients had CD4 counts ≤350 cells/mm^3 upon entering care.
- See **Figure 6**.

Viral load at entry into care

In 2016, the median viral load at presentation among clients entering care who were not on HAART was 44,800 copies/mL.

- 94.9% (*n* = 75) had a detectable viral load at presentation to care, >200 copies/mL.
- 36.7% (*n* = 29) had very high viral loads at presentation, >100,000 copies/mL.
- See **Figure 7**.

HIV CARE CASCADE AMONG CLIENTS ENTERING CARE IN 2016

An HIV care cascade is a model that illustrates the sequential steps of HIV care through which people living with HIV progress. A cascade also depicts the proportion of individuals who are engaged in HIV care at each step of the cascade.

Figure 7 presents the HIV care cascade for all clients who entered care with the Manitoba HIV Program in 2016, while **Figure 8** focuses only on new clients who were not on HAART when they entered care. The denominator for each cascade step is the previous step of the cascade.

There are important limitations to the HIV care cascades presented in this report. First, the HIV care cascades presented in Figures 8 and 9 are simple snapshots of the care status of clients who entered care with the Manitoba HIV Program in 2016. As such, the cascades are not representative of the entire population of people in HIV care in Manitoba. Furthermore, given the limited time period considered in this report, we would expect that the proportion of clients who were virally suppressed by time of audit is an underestimate of those who will ultimately reach viral suppression. With these limitations in mind, the data presented in the following figures must be interpreted with caution.

First cascade step – New to care

- Defined as total number of clients who entered care in 2016 (*n* = 103; **Figure 7**) or total number of clients not on HAART at entry into care (*n* = 70; **Figure 8**).

Second cascade step – Linked to care

A client is considered to be linked to care if they have at least one appointment at either of the two Winnipeg-based Manitoba HIV Program clinics in the calendar year.

- Proportion of new clients linked to care = number with ≥1 clinic appointment divided by total number of new clients.
- 96.3% - 97.1% of new clients were linked to care in 2016.

Third cascade step – Retained in care

Retention is defined as ≥2 visits to either of the two Winnipeg-based Manitoba HIV Program clinics within 3 months, among those in care for at least 4 months at time of audit.

- Proportion of new clients linked to care = number with ≥2 clinic appointments within 3 months divided by number linked to care.
- 92.0% - 92.2% of linked clients were retained in care in 2016.

Fourth cascade step – On HAART

A client is considered to be on HAART if they were actively being prescribed antiretroviral medications at time of audit.

- Proportion of new clients on HAART = number on HAART divided by number retained in care.
- 94.4% - 95.7% of new clients who were retained in care were on HAART at the time of audit.

Fifth cascade step – Suppressed viral load

A suppressed VL is defined as <200 copies/mL.

- Proportion of new clients with suppressed viral load = number with VL <200 copies/mL divided by number on care.
- 80.6% - 83.0% of new clients on HAART were virally suppressed at the time of audit.
    - The lower proportion of new clients in this step is likely due to the short period of time between HAART initiation and audit for many new clients who entered care later in the 2016 calendar year. In many cases, a person may have to be on consistent HAART for several months before achieving viral suppression.

APPENDIX 1. FIGURES

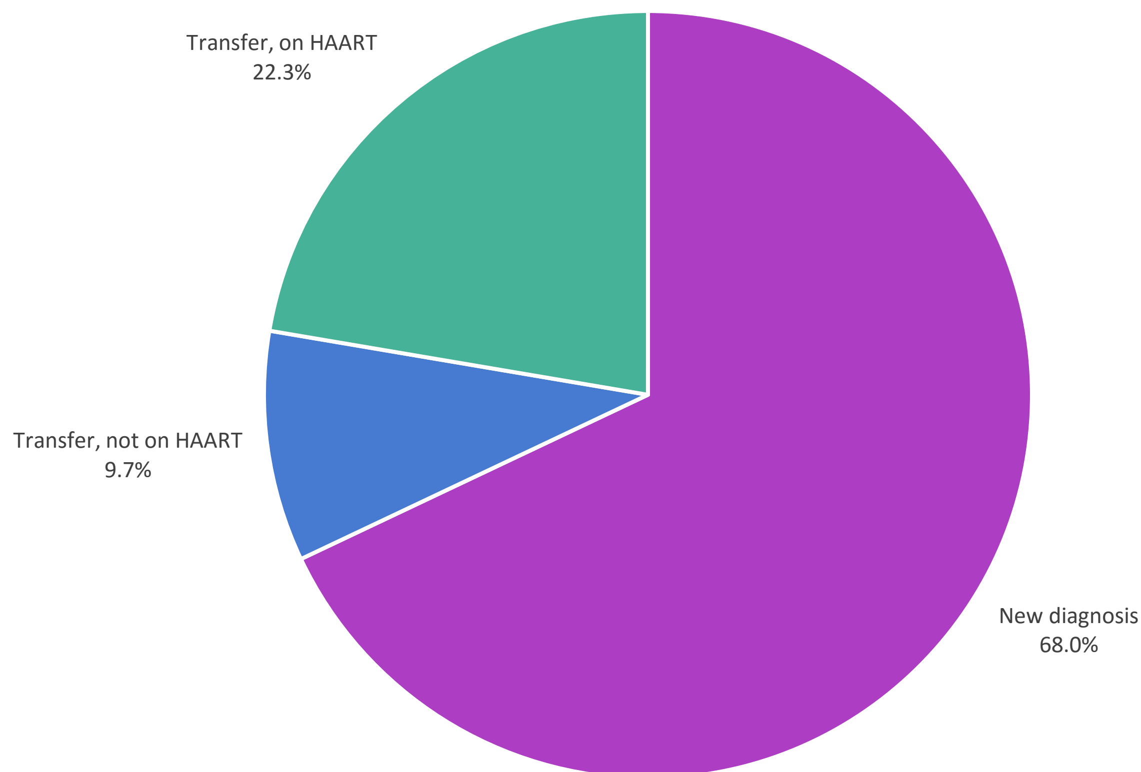

Figure 1. Status of clients entering care with the Manitoba HIV Program, 2016 (*N* = 103).

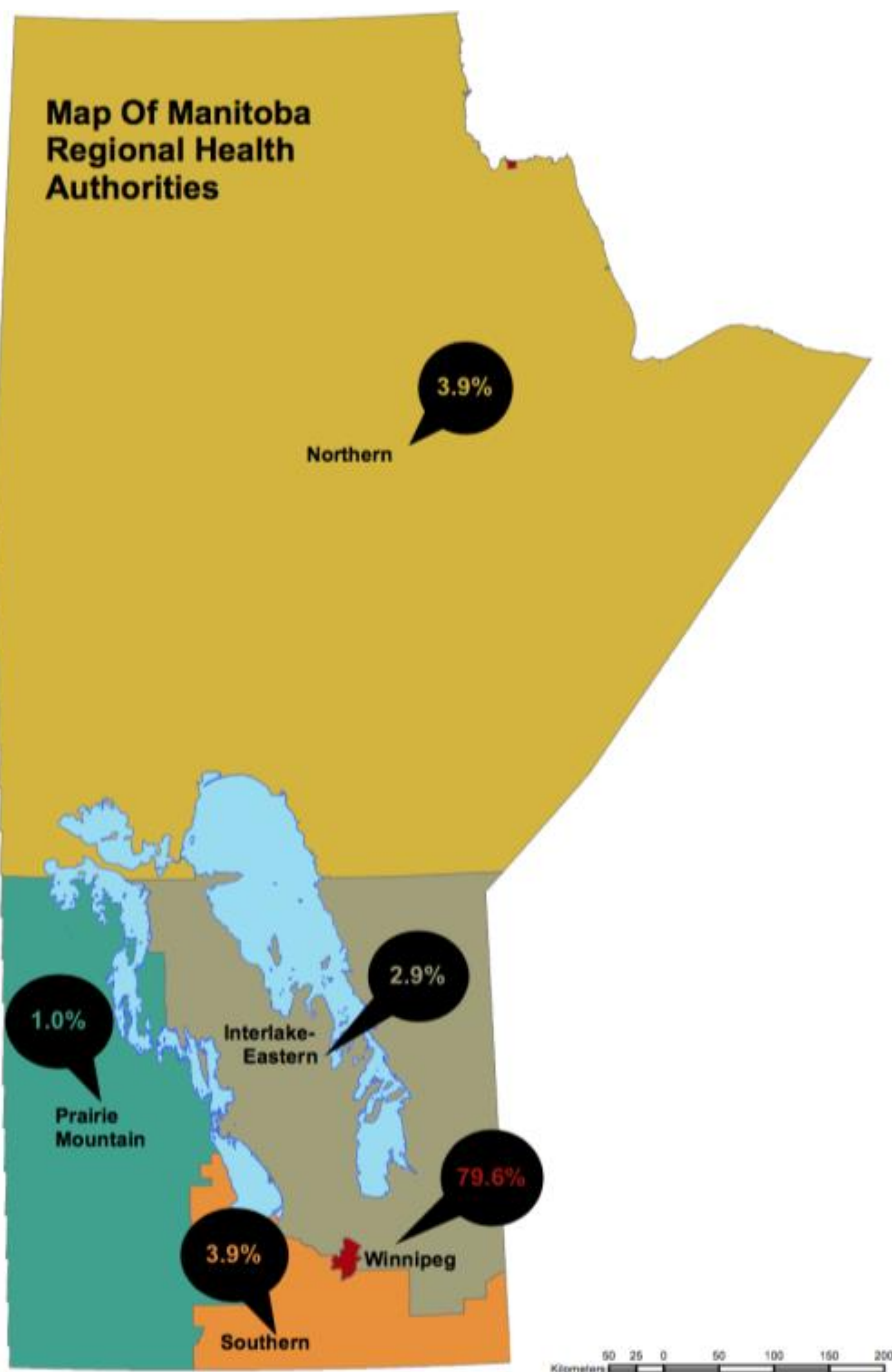

Figure 2. Current location, by Regional Health Authority, of clients who entered care with the Manitoba HIV Program in 2016 (*N* = 103).

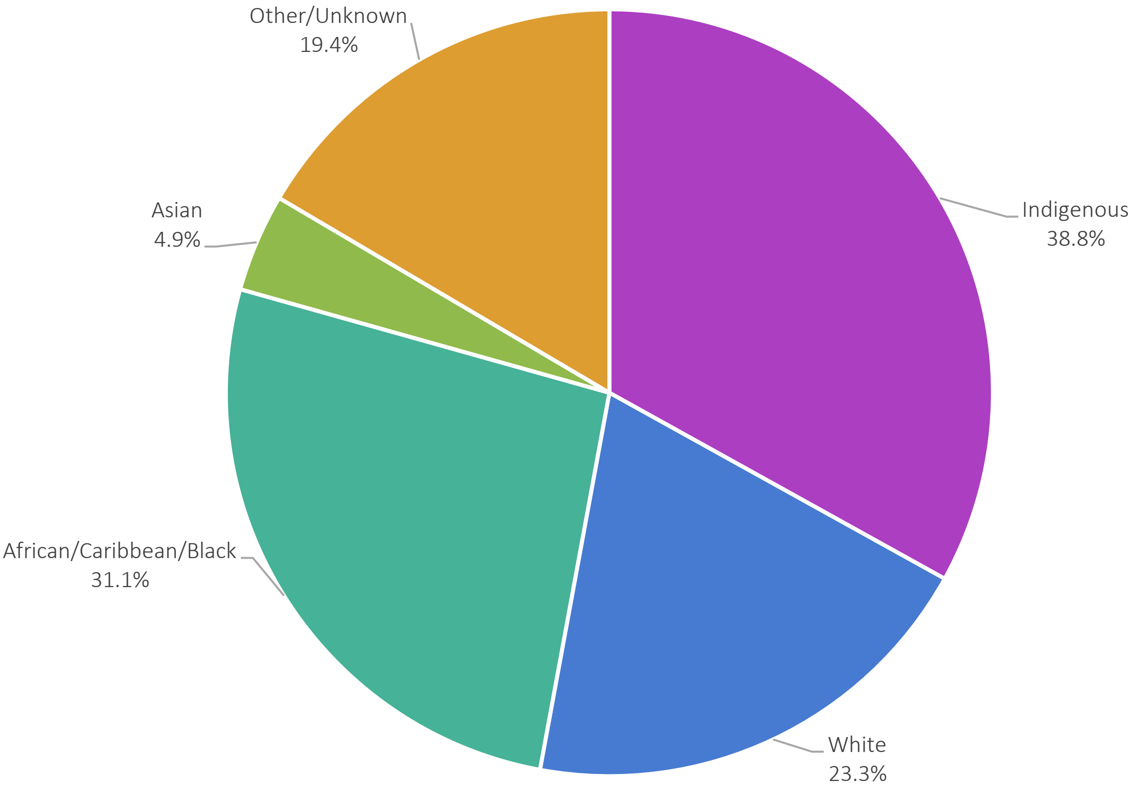

Figure 3. Self-reported ethnicity among clients entering care with the Manitoba HIV Program, 2016 (*N* = 103).

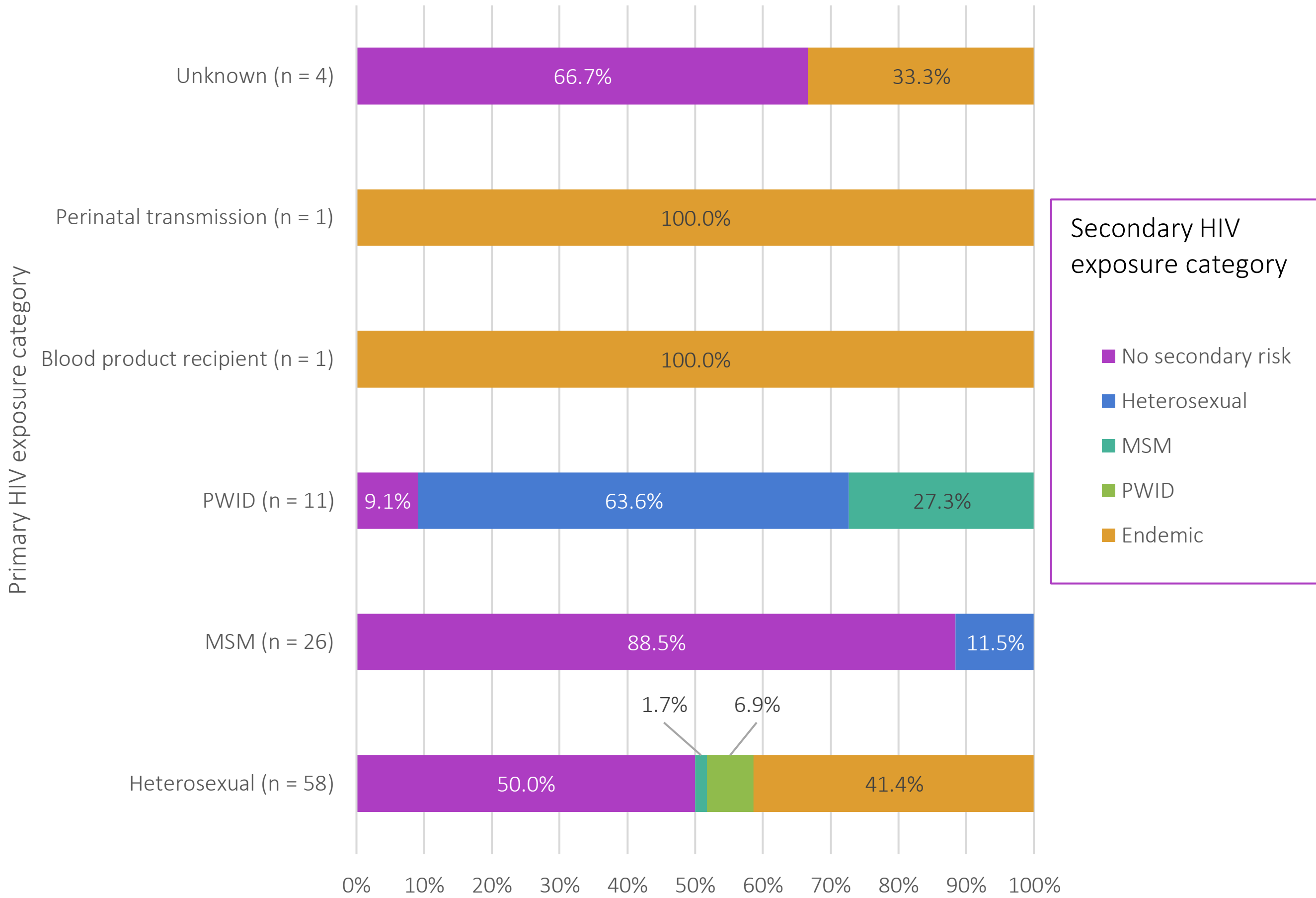

Figure 4. Self-reported primary and secondary HIV exposure categories among Manitoba HIV Program clients entering care in 2016 (N = 103).

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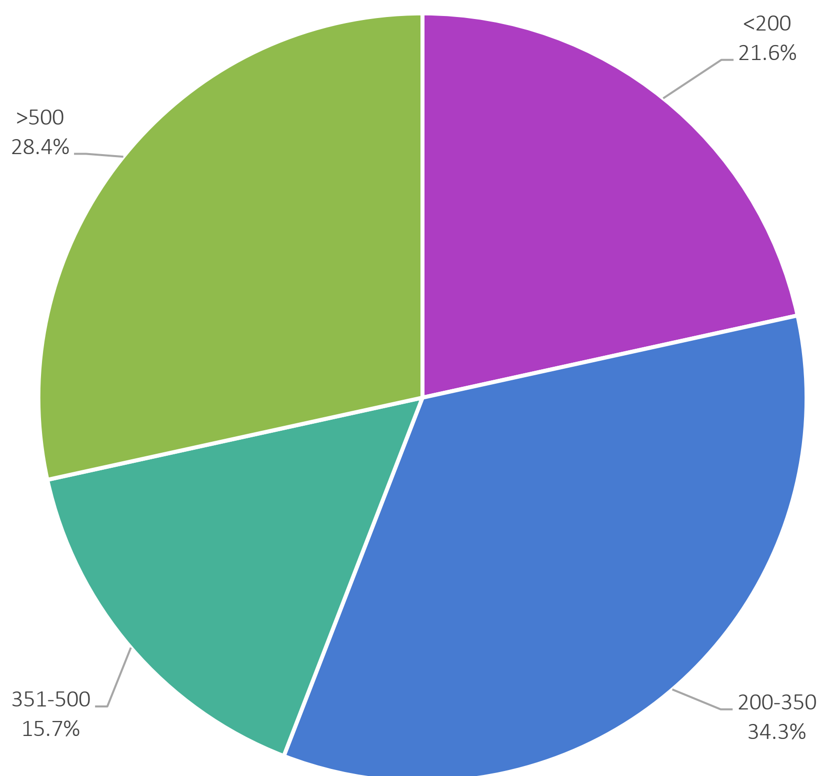

Figure 5. CD4 count (cells/mm^3) at presentation among Manitoba HIV Program clients who entered care while not on HAART in 2016 (*n* = 79).

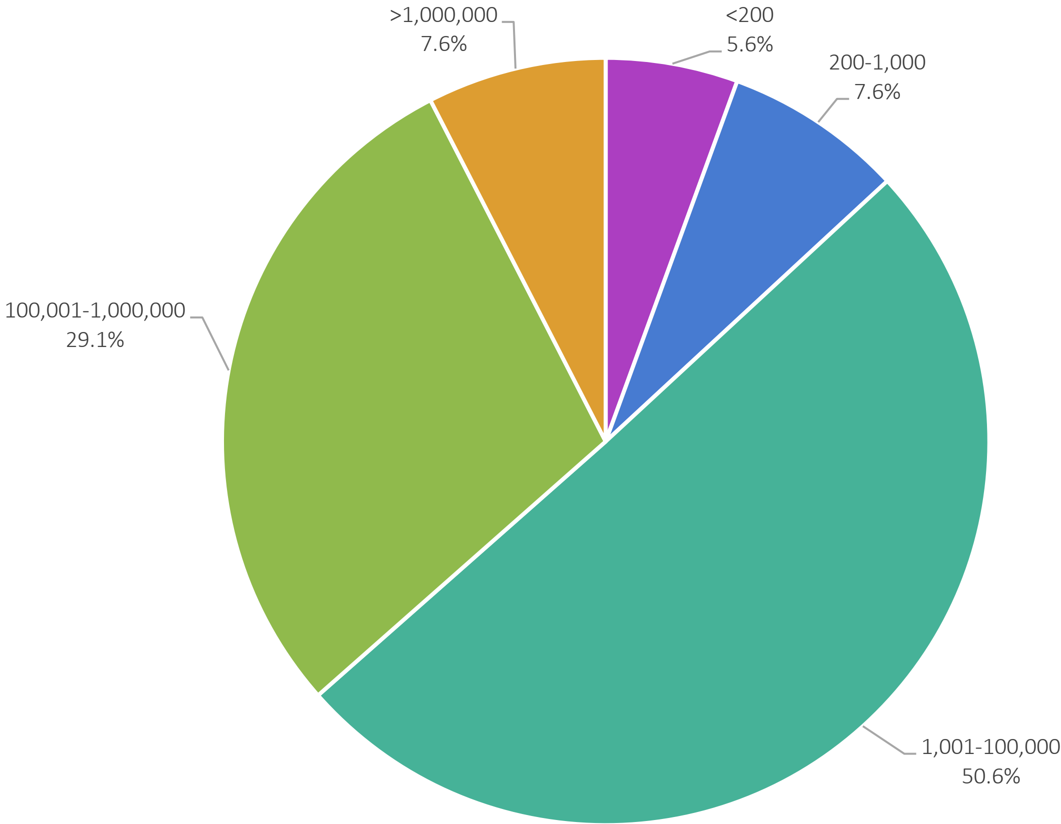

Figure 6. Viral load (copies/mL) at presentation among Manitoba HIV Program clients who entered care while not on HAART in 2016 (*n* = 79).

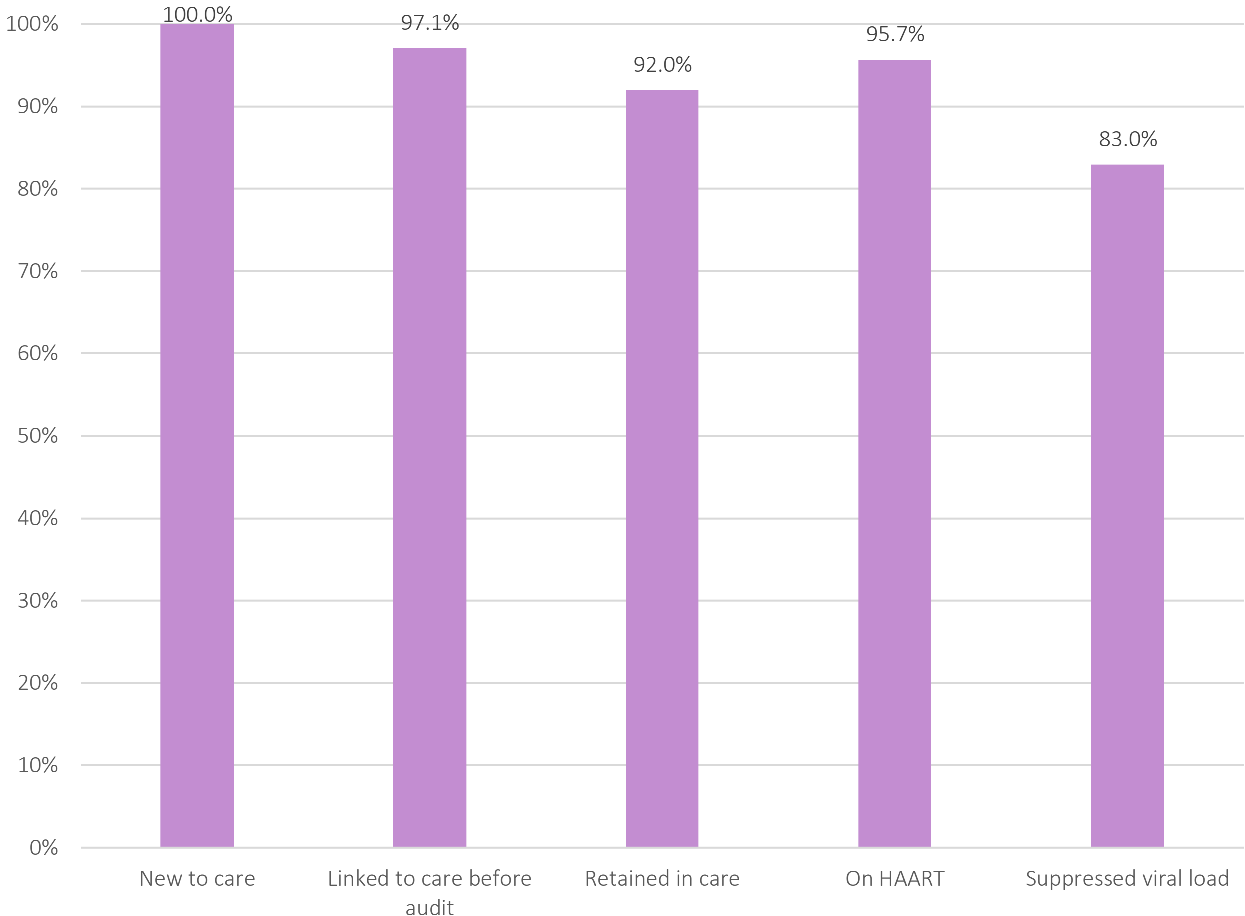

Figure 7. HIV care cascade among all clients entering care with the Manitoba HIV Program in 2016. *N* = 103 at first cascade step.

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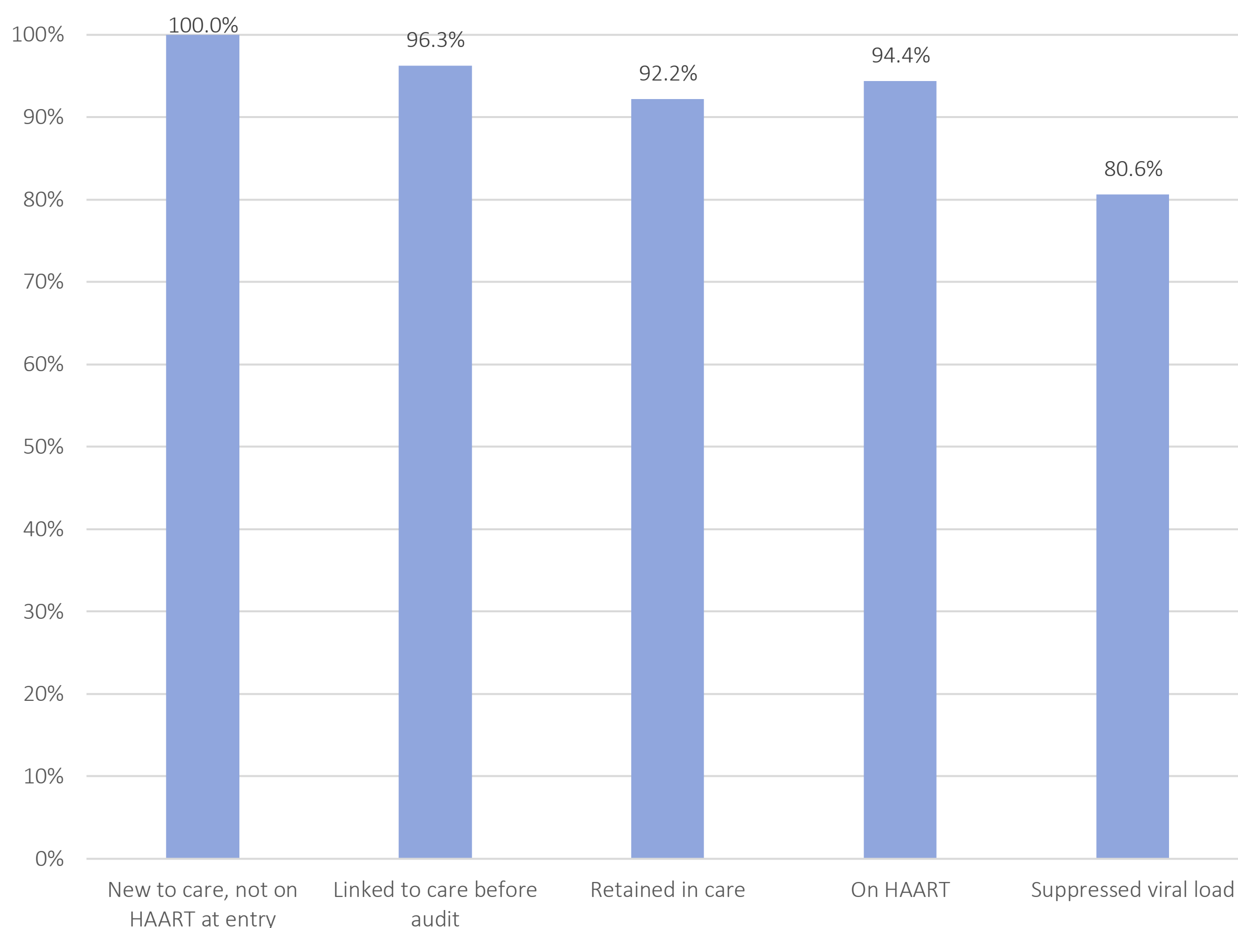

Figure 8. HIV care cascade among clients entering care with the Manitoba HIV Program in 2016, excluding those transferred to care on HAART. *N* = 80 at first cascade step.