

**Nine Circles Community Health Centre**

*Rapid Point-of-Care HIV Testing (POCT)  
Demonstration Program – Evaluation Report  
August, 2009*

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## Introduction & Background

Nine Circles Community Health Centre (Nine Circles) is a community-based, multi-faceted, primary health care centre which provides advocacy, care, treatment and support for people living with, affected by and at risk for HIV/AIDS (Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome); and is committed to the prevention of HIV and STIs (Sexually Transmitted Infections) by means of education, research and up-to-date information and treatment. One of Nine Circles' strategic goals is "to provide access to early HIV diagnosis to allow people to discover infections as early as possible thereby allowing access to appropriate interventions that will promote individual health and reduce risk of onward transmission." As such, Nine Circles best practices outline the need to use the current evidence base to ensure appropriate and optimal access to care including ways to increase access to services for underserved populations in Manitoba.

Currently research into Point-of-Care HIV testing (POCT) demonstrates that this is an appropriate and feasible model for increasing uptake of HIV testing in particular among hard to reach or underserved populations. Further presentations made at a recent National Collaborating Centre for Infectious Diseases (NCCID) sponsored HIV prevention Forum (Ottawa, April 13, 2007) and the 16<sup>th</sup> Annual Canadian Conference on HIV/AIDS Research (Toronto, April 26-29, 2007) highlighted the value and importance of POCT as an important development in HIV prevention efforts.

In November, 2005, Health Canada approved the INSTI™ HIV-1/HIV-2 Rapid Antibody Test for use in health care facilities or doctor's offices. Sensitivity and specificity are comparable to current laboratory screening tests (99.6% sensitivity and 99.3% specificity). The INSTI™ kit uses a blood specimen from a finger prick and produces results in 60 seconds. The test is performed by adding the specimen to a vial of diluent, which lyses the red blood cells. This specimen/diluent solution is then poured onto the well of a membrane unit. If HIV antibodies are present in the specimen, they are captured by proteins on the filtration membrane. A color developer is then added to the membrane unit and reacts with the captured antibodies to generate a distinct blue dot at the location of the control spot and, in the case that HIV-1/HIV-2 antibodies are present in the specimen, a blue dot also appears at the location of the test spot on the membrane. One blue dot is **non-reactive**<sup>1</sup>, two blue dots is **reactive**<sup>2</sup>, a blue dot and a blue ring is **indeterminate**<sup>3</sup> (if no blue dots appear, the test is invalid). In the final step, a clarifying solution is then added to the membrane to decrease background color in order to make the control and test spots more distinct.

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<sup>1</sup> No HIV antibodies were found.

<sup>2</sup> The test has detected the presence of antibodies to HIV.

<sup>3</sup> There are various reasons why a HIV antibody test may produce an indeterminate result, including early seroconversion (the production of antibodies in response to an antigen), inadequate specimen sample, delayed specimen transportation and specimen processing problems. When a client's test result is indeterminate, the nurse will encourage the client to have a repeat HIV test performed.

In the fall of 2007 Nine Circles and the Health Sciences Centre HIV Program met with the Minister of Healthy Living to discuss mechanisms to improve access to HIV testing for Manitobans. POCT was highlighted as an opportunity to increase the uptake of HIV testing, and a possible tool for supporting testing among high-risk groups as well as in remote communities. These initial discussions evolved to Ministerial support for a Nine Circles demonstration project of POCT in Manitoba with a tentative start date of February, 2008 to coincide with Sexual Health Awareness Week (February 11 – 15, 2008).

## **Implementation Process**

The work of planning the introduction of POCT to Manitoba began in the spring of 2007. Nine Circles met with representatives from several provincial and federal government health agencies and the University of Manitoba to discuss the possibility of demonstrating POCT in northern Manitoba in order to assess: the uptake of testing, appropriateness of a point-of-care HIV test in this population, and the effectiveness of POCT testing in a non-urban clinical setting.

Subsequently, in September of 2007, Health Living Minister, Kerri Irvin-Ross, announced Manitoba's government was investing \$1.3 million to formally create a Manitoba HIV Program. Also, additional spending was earmarked to expand access to STI testing services by increasing operating hours, expanding service locations in high-demand areas and introducing new testing options including Anonymous and Point-of-care testing for HIV, this was the inception of the POCT Demonstration Program.

An HIV POCT Working Group, formed by Manitoba Health, was charged with planning the introduction of Point-of-Care testing (POCT) for HIV in Manitoba with the intent to have POCT testing introduced in Manitoba in early of 2008. The initiation of the POCT Demonstration Program in Manitoba was a 3-month long process of several intensive meetings of this group. The Working Group included appointees from: Cadham Provincial Laboratory, Manitoba Health's Public Health (Communicable Disease Control Branch) and Healthy Living, Winnipeg Regional Health Authority (WRHA), Rural Manitoba Regional Health Authorities, the University of Manitoba HIV Program, Health Canada's First Nations and Inuit Health (FNIH), and the College of Physicians & Surgeons of Manitoba (CPSM). Nine Circles Community Health Centre representatives began meeting with the Working Group in December of 2007 with the objective of becoming the choice site to demonstrate POCT in Manitoba.

Initially, not all delegates of the Working Group felt POCT was advisable, points of concern included: the accuracy of POCT tests, the workability of it in a community health care setting, standards and consistency of POCT testing procedure, and the pitfalls of anonymous POCT. Anonymous HIV testing is done by taking no identifying information from the client (e.g. no name, Manitoba Health card number, contact information, etc. is asked of the client or recorded); the client gets only a code and returns in 2 weeks to the testing site, and then presents the code and receives their result. Anonymous POCT testing was subsequently ruled out by the Working Group as an option to be offered, for there were too many ethical and

public health concerns to feel secure in offering it (e.g. if a POCT was reactive and the client left the premises before receiving their result, it is impossible to contact them and inform them of the result, or facilitate entering them into care). It was also recommended during the meetings that nominal<sup>4</sup> testing be used for a POCT, but the Working Group ultimately decided that both nominal and non-nominal<sup>5</sup> POCT testing were suitable since good tracking mechanisms for the codes are in place already.

Others noted that POCT test kits are available, desired by many sites, are aggressively marketed, and would infiltrate into the province, possibly in an undesirable way. For example, rapid HIV test kits for home use can be purchased by the general public online from the United States. The Working Group felt it would be prudent to be proactive and introduce POCT within a clinical setting to make sure it is carried through appropriately.

By the end of November of 2007, the Working Group had decided to move to the implementation phase and meet with a potential site to review the Working Group decisions with them. Nine Circles was the site selected to carry out the Demonstration Project.

At a November, 2007 meeting<sup>6</sup> hosted by the Deputy Minister of Healthy Living, it was decided that POCT testing would begin at Nine Circles Community Health Centre with a start date of February 14, 2008 to coincide with Sexual Health Awareness Week (February 11 – 15, 2008). Nine Circles was selected, as the agency was motivated to begin offering POCT testing, the site offers specialized HIV care and services, and would have ample opportunity to trial the POCT testing at a weekly STI Drop-In Clinic. Training in the use of the POCT kit was organized and facilitated by Cadham Laboratory. It would begin in January of 2008 so service providers would be well supported and knowledgeable on POCT testing in preparation for the intended start date.

It was also decided that Nine Circles would create an evaluation framework for the demonstration project which would include examining items such as: determinants of POCT use and clients and Service Provider satisfaction with POCT (further discussion of the evaluation component follows on page 6).

Concerns of the Working Group arose over the impact of delivering immediate results of an HIV test, as some people simply may not be ready for a (possible reactive) result so quickly. This trepidation was quelled as Nine Circles clinicians would use clinical judgment to determine a client's readiness for proceeding with the POCT testing option. The Nine Circles nurses are equipped to draw on their training and experience and use discretion to determine if a client is

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<sup>4</sup> Name-based testing; the client's name is assigned to their test specimen when sent to the lab for analysis.

<sup>5</sup> Code-based testing; a code is assigned to the test specimen when it is sent to the lab for analysis, but the testing site retains the client's information.

<sup>6</sup> Also in attendance at the meeting were representatives from Manitoba Health & Healthy Living, the College of Physicians & Surgeons of Manitoba, Nine Circles Community Health Centre, the Winnipeg Regional Health Authority HIV Program, and a representative for the Minister of Healthy Living.

ready to receive an immediate HIV result. If it is the nurse's perception that a client is overly-anxious, or otherwise unprepared, then a POCT is not done in this case.

A common objective of the Working Group was that of assurance of quality and accuracy. As such, it was decided upon that parallel testing<sup>7</sup> would be conducted for one year (or first 1,000 tests) to monitor the effectiveness of POCT tests.

Nine Circles also addressed the standard of care and quality assurance concerns by creating and implementing the Nine Circles POCT Procedures (see Appendix 1 for the Nine Circles POCT Procedures) and the Nine Circles HIV Testing Procedures (see Appendix 2 for the Nine Circles HIV Testing Procedures). Also, the Clinic Coordinator and all Clinicians adhere to the Policies and Procedures for Quality-Assured Conduct of Rapid HIV Point-of Care Testing in Manitoba Manual developed by Manitoba Health and Healthy Living.

The first POCT test was conducted at Nine Circles Community Health Center on March 3, 2008. This shift from the February start date related to timelines for completion of staff training, shipping of kits and the need to get testers certified. The next Manitoba site POCT to be introduced was in the Labour & Delivery ward at Winnipeg's Women's Hospital in February, 2009.

The 3 objectives of the POCT Demonstration Project were to:

1. Determine whether POCT is an acceptable alternative to standard testing.
2. Determine clients' level of satisfaction with POCT testing at Nine Circles.
3. Determine service providers' satisfaction with POCT testing at Nine Circles.

## Evaluation Framework

In order to assess the appropriateness of POCT through the Demonstration Program, 3 objectives of the program and an evaluation framework were developed (see Appendix 3 for the evaluation framework). The framework was created by Nine Circles in consultation with, and final approval by, Manitoba Health. Out of the 3 Program objectives grew 5 evaluative items, which were asked of the Demonstration Program. They were:

- Comparison of results from rapid and standard HIV testing.
- Determinants of POCT use.
- Client experiences with POCT at Nine Circles
- Client motivation to have a POCT versus a standard HIV test.
- Experience of nurses in offering POCT at Nine Circles

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<sup>7</sup> For clients who had a POCT, whether it be a reactive or a non-reactive result, blood would also be drawn and sent for a conventional test to confirm the accuracy of the result.

Comparison of the POCT results to the confirmatory results was essential to the evaluation plan, as the accuracy of a POCT was of great concern to the Working Group. For example, a site in San Francisco discontinued the use of an oral fluid rapid test due to an excess of false reactive tests (Wesolowski et al, 2006). All POCT results and the results of the confirmatory tests would be tracked for the first year (or first 1,000 tests) and compared for any discrepancies.

Gathering information on the determinants of POCT use would serve to establish who is utilizing this service and assess whether POCT is helping to facilitate testing for groups who may otherwise find it challenging to access HIV testing.

Evaluating client experiences with POCT was needed to be sure they received the necessary supports such as, adequate education about POCT. The evaluation also sought to capture whether clients will utilize this new testing method, if they are pleased with it, and if it is appropriate and practical to continue to offer. Also, client motivation to have a POCT versus a standard test was to be assessed in order to be sure the introduction of POCT was filling a gap in services, rather than it being the novelty of the new form of test that was drawing people to have a POCT.

Evaluating nurse satisfaction levels with POCT through the demonstration project was imperative as to ensure that staff felt well-supported in offering and administering this new form of testing. Galvan, Brooks & Leibowitz (2004) assert, when an organization begins to offer point-of-care HIV testing, this poses a substantial shift in the skill set and need for emotional and psychological preparedness of service providers. This was also a point of concern for the Working Group, that nurses were confident with literally conducting the test, but also the challenge of now having to deliver the results of an HIV test almost instantly.

## **Program Setting & Population**

Nine Circles Community Health Centre holds an STI Drop-In Clinic, which operates each Wednesday from 1:00 p.m. to 7:00 p.m. This nurse-managed STI drop-in clinic offers testing and treatment to those most at risk for STIs in and around Winnipeg. The nurses ensure excellence in clinical care and treatment through ongoing education, training and the development of clinical practice guidelines. There are also Pre & Post Test Educators (P&P Educators) who work alongside the nurses and offer invaluable support at the STI clinic. The P&P Educators are Nine Circles volunteers; they are thoroughly trained in confidentiality and other ethical procedures, sexual health (particularly STIs/HIV), safer sex, gender and sexual identity and harm reduction information largely by members of the Nine Circles Health Promotion team and other organizations (e.g. Rainbow Resource Centre, Canadian Aids Treatment Information Exchange).

## Study Design

Before testing, clients attend a Pre-Test Education Session with a P&P Educator which includes: intensive health education, taking of sexual health, STI history and risk assessment. During this time P&P Educators explain the process and features of both a POCT and a standard test (as well as nominal, non-nominal and anonymous testing). This enables the clients to make an informed choice about their subsequent HIV testing method. During this education session a Client Demographic Form is completed by the P&P Educator (see Appendix 4 for this form). This captures information on age, gender, ethnicity and risk factors for transmission. This data collection tool was developed by the Nine Circles Clinical Program Manager and the Research & Evaluation Coordinator in consultation with members of the Health Promotion team. Discussion on how the information collected with this tool was utilized for the POCT evaluation will follow.

Subsequent to the education session, the nurses then conduct the STI screening, testing, treatment and follow-up<sup>8</sup> as required on a case-by-case basis. As well, if a POCT was done, blood is drawn for standard serological testing on the first 1,000 POCTs.

All clients with positive HIV/STI results are contacted for follow up if they do not voluntarily return within 2 weeks after testing. At this visit, test results are reviewed by an STI Nurse and clients receive additional education focused on harm reduction and behavior change in order to implement safer sex practices (e.g. using condoms).

## Data Collection

Four sets of data were utilized in the POCT evaluation:

1. Total number of HIV tests. This being all of both the POCT and standard tests conducted from March 3, 2008 – March 31, 2009, including the number of confirmatory parallel tests results.
2. Client Demographic Form. As discussed above, this form is administered by the P&P Educators during the Pre-Test Education Session clients attend prior to having STI/HIV testing.
3. STI Drop-In Clinic Client Satisfaction Survey. This is a voluntary, anonymous survey asking clients to rate their satisfaction with their visit to the STI Drop-In Clinic, and also includes questions specifically related to the POCT testing experience (see Appendix 6 for the STI Drop-In Clinic Clients Satisfaction Survey tool). This survey was originally intended as a quality assurance measure for the running of the STI Drop-In Clinic, but was expanded to include questions regarding POCT as the evaluation plan required measuring levels of client satisfaction with POCT. This survey does not gather any demographic or risk factor information, but rather, is solely focused on client satisfaction and quality of service delivery.

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<sup>8</sup> Nurses deliver any reactive HIV or other positive STI test results to clients, not P&P Educators



4. Focus Group with Nine Circles Nurses. Two focus group interviews were held with Nine Circles nurses in order to assess items such as service provider satisfaction and perceived client satisfaction with the POCT testing process (see Appendix 7 for the Service Provider focus group interview questions).

## Results

### **Objective 1: Is POCT an acceptable alternative to standard testing?**

As a total of 766 HIV tests were done at Nine Circles during the sample timeframe and 438 (57.2%) of the total tests were POCT. Five (5) reactive tests were identified by POCT and the remaining 433 were identified as non-reactive, all but one of the results of the POCT tests were confirmed as accurate by Cadham Provincial Laboratory. This 1 non-reactive POCT was not confirmed by a parallel test, because the Cadham Laboratory deemed there was insufficient blood to conduct the standard test as the sample had hemolyzed; attempts were made to contact the client and have them return for a standard test, but Nine Circles was not able to connect with the client. Also, there were no POCT tests with indeterminate results, all but 1 generated an accurate either reactive or non-reactive result. Hence, the POCT tests showed a 99.8% accuracy rate; the only reason there failed to be a 100% accuracy rate was due to spoilage of a blood specimen. There were also no invalid tests due to a faulty kit, any invalid tests during this timeframe were due to human error<sup>9</sup> and a new test was performed.

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<sup>9</sup> E.g. Spillage of kit solution, not enough blood drawn into pipette.

**Table 1:** Results of all HIV tests performed at Nine Circles<sup>10</sup>

	<i>Frequency</i>	<i>Percent</i>	<i>Confirmed</i>	<i>Percent</i>
Total number of <b>all HIV tests done</b> <sup>11</sup>	<b>766</b>	<b>100%</b>	<b>765</b>	<b>99.9%</b>
Total number of <b>reactive standard tests</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>
Total number of <b>non-reactive standard tests</b>	<b>328</b>	<b>42.8%</b> <sup>12</sup>	<b>328</b>	<b>100%</b>
		<b>100%</b> <sup>13</sup>		
Total number of <b>POCT tests done</b>	<b>438</b>	<b>57.2%</b> <sup>14</sup>	<b>437</b>	<b>99.8%</b>
Total number of <b>reactive POCT tests</b>	<b>5</b>	<b>0.7%</b> <sup>15</sup>	<b>5</b>	<b>100%</b>
		<b>1.1%</b> <sup>16</sup>		
Total number of <b>non-reactive POCT tests</b>	<b>433</b>	<b>56.5%</b> <sup>17</sup>	<b>432</b>	<b>99.8%</b> <sup>18</sup>
		<b>98.9%</b> <sup>19</sup>		
Total number of <b>indeterminate POCT tests</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>

Demographics of STI Drop-In Clinic clients (March 3, 2008 – March 31, 2009)<sup>20</sup>

A general, overall picture of the demographics, reasons for testing and risk factors of the entire sample of 702<sup>21</sup> STI Drop-In clients will be presented. Discussion examining how this sample of clients utilized POCT will follow.

The sample is made up of mostly **Caucasian** people (71.5%) followed by **Aboriginal** (14.3%), **Asian** (6.4%), **Black** (4.2%) and **Other**<sup>22</sup> ethnicities (3.6%).

<sup>10</sup> From March 3, 2008 – March 31, 2009.

<sup>11</sup> All standard and POCT.

<sup>12</sup> Of total HIV tests.

<sup>13</sup> Of standard tests.

<sup>14</sup> Of total HIV tests.

<sup>15</sup> Of total HIV tests.

<sup>16</sup> Of POCT.

<sup>17</sup> Of total HIV tests.

<sup>18</sup> Of non-reactive POCT tests.

<sup>19</sup> Of POCT.

<sup>20</sup> See Appendix 5 for data tables.

<sup>21</sup> There are only 702 cases as compared to all 766 HIV tests, as on occasion, nurses conduct the Pre-Test Education Session with a client and they do not utilize the Client Demographic Form as the P&P Educators do.

<sup>22</sup> Includes other (nothing specified), and also several other client-identified ethnicities, such as: Latino, East Indian, and mixed race.

Over half (53.3%) of the sample were **30 years-old or younger**, and 9.7% of the clients in the sample were **51 years or older**, and the average age was **32.9 years**.

**Males** made up the majority (66.5%) of clients visiting Nine Circles for testing, **females** accounted for 32.3% and a further 1.1% were **transgender**.

The greater part of the sample identified as **heterosexual** (69.0%), 20.1% are **gay/lesbian**, and 10.9% **bisexual**.

The majority (51.9%) of the clients reside in Winnipeg's **inner city** area, followed by those who live in **non-inner city**<sup>23</sup> areas of Winnipeg (39.5%), and 8.7% were from **rural Manitoba** or **outside of Manitoba**.

The specific target populations of the Nine Circles STI Drop-in Clinic are those at risk<sup>24</sup>. Among this population, self reported risk factors for transmission included:

- 23.9% **men who have sex with men (MSM)**.
- 7.1% involved in **high risk sexual contact**<sup>25</sup>
- 4.7% **sex trade workers (STW)** and/or have sexual contact with STWs.
- 2.6% **injection drug users (IDU)** and/or have sexual contact with IDUs.

It is important the STI Drop-In Clinic also saw a number of young, straight men utilizing this service as, **heterosexual males, ages 16 – 30** make up nearly one-quarter (22.9%) of the clients testing. It is a success of the program that this group is monitoring their sexual health and learning how to prevent passing or getting an STI/HIV, as they often do not see themselves as vulnerable or at risk of contracting STI/HIV, even when they are engaging in risky activities such as unprotected sex (Flood, 2003). Another achievement of Nine Circles programming is the AIDS/STI Infoline which provides callers with information on many issues, such as: STI testing sites and hours, STI symptoms, sexuality and sexual identity, and harm reduction strategies. The majority of the calls to the Infoline<sup>26</sup> are by males calling in regards to information on STI testing sites, times and the testing process.

### **Determinants of POCT use – by demographics**<sup>27</sup>

Overall, POCT was chosen more often than a standard HIV test, as 438 (57.2%) of the 766 total tests performed<sup>28</sup> were POCT.

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<sup>23</sup> E.g. St. James, St. Vital, Transcona, St. Boniface

<sup>24</sup> Injection drug users, MSM, sex trade involved and high risk sexual contacts

<sup>25</sup> E.g. unprotected sex, anonymous sex, multiple sex partners

<sup>26</sup> See the Nine Circles AIDS/STI Infoline 2008-2009 Year-End Summary (see Appendix 8)

<sup>27</sup> Note that n varies as there must be information for both items in a crosstabulation for a respondent to be included in the calculation. For example, if one had a POCT, but did not provide their sexual orientation, they are left out of the crosstabulation of POCT use by sexual orientation.

*Age* – Age did not appear to be a determinant in choice of test, as those in all of the age ranges chose a POCT at about the same rate as a conventional test.

**POCT use by Age**

	Point of Care Test (POCT) done?		Total
	Yes	No	
30 and under	183 50.6%	179 49.4%	362 100.0%
31-50	134 53.4%	117 46.6%	251 100.0%
51+	34 51.5%	32 48.5%	66 100.0%

*Gender* – Both **Males** and **Females** were about as likely to choose a POCT as they were a standard test, but **Transgender** persons chose a POCT more often<sup>29</sup>.

**POCT use by Gender**

	Point of Care Test (POCT) done?		Total
	Yes	No	
Male	237 51.8%	228 48.2%	465 100.0%
Female	112 49.6%	114 50.4%	226 100.0%
Transgender	7 87.5%	1 12.5%	8 100.0%

<sup>28</sup> Between March 3, 2008 – March 31, 2009.

<sup>29</sup> There were few trans individuals in the sample, the 8 made up only 1.1% of the entire sample. Possibly there would have been a different result in POCT vs. standard choice by trans people if there had been a greater representation of them.

*Ethnicity* – Ethnic background does not appear have a major effect on one choosing a conventional test over a POCT. Those identifying **Aboriginal, Asian, Black** or **Caucasian** or **Other** all had a POCT about as often as a standard test.

**POCT use by Ethnicity**

	Point of Care Test (POCT) done?		Total
	Yes	No	
Aboriginal	49 51.0%	47 49.0%	96 100.0%
Asian	23 53.5%	20 46.5%	43 100.0%
Black	14 50.0%	14 50.0%	28 100.0%
Caucasian	248 51.7%	232 48.3%	480 100.0%
Other	13 54.2%	11 45.8%	24 100.0%

*Sexual Orientation* – Those who identified as **bisexual** and **heterosexuals** chose a POCT test about as often as a standard test. Clients who indicated they were **gay/lesbian**, chose a POCT more often than a standard test.

**POCT use by Sexual Orientation**

	Point of Care Test (POCT)		Total
	Yes	No	
Gay/Lesbian	78 56.9%	59 43.1%	137 100.0%
Heterosexual	230 48.9%	240 51.1%	470 100.0%
Bisexual	39 52.7%	35 47.3%	74 100.0%

*Area of residence* – In this category, clients from Winnipeg’s **inner city** chose a POCT more often than a conventional test, as nearly 60% of chose a POCT. Those who live in **non-inner city** areas of Winnipeg and those who live in **rural Manitoba** or **outside of Manitoba** chose POCT at about the same rate they did conventional tests.

**POCT use by Area of Residence**

	Point of Care Test (POCT) done?		Total
	Yes	No	
Inner City/Downtown	143 57.0%	108 43.0%	251 100.0%
Non-Inner City	88 46.1%	103 53.9%	191 100.0%
Rural Manitoba/Outside of Manitoba	22 52.4%	20 47.6%	42 100.0%

The **gay/lesbian** group in this sample is made up of mostly homosexual men (92.7%) this is a high-risk group as unprotected receptive anal intercourse is a very efficient route for transmission of the HIV virus (Canadian Aids Society, 2004). Regular testing and receiving results quickly, would help to closely monitor their serostatus in order to prevent transmission to other sexual partners.

A POCT test is an advantageous choice for the **inner city** group, as they may have difficulty readily accessing medical care, so a POCT is a quick and convenient way for them to learn their HIV status. In a February, 2008 report from the Community Health Advisory Councils Winnipeg’s North End was identified as having many walk-in clinics in the area, but residents find it difficult to find family physicians who are accepting patients. This group may not wish to use a general walk-in clinic for HIV/STI testing and POCT at a sexual health-focused clinic was an ideal choice for their situation.

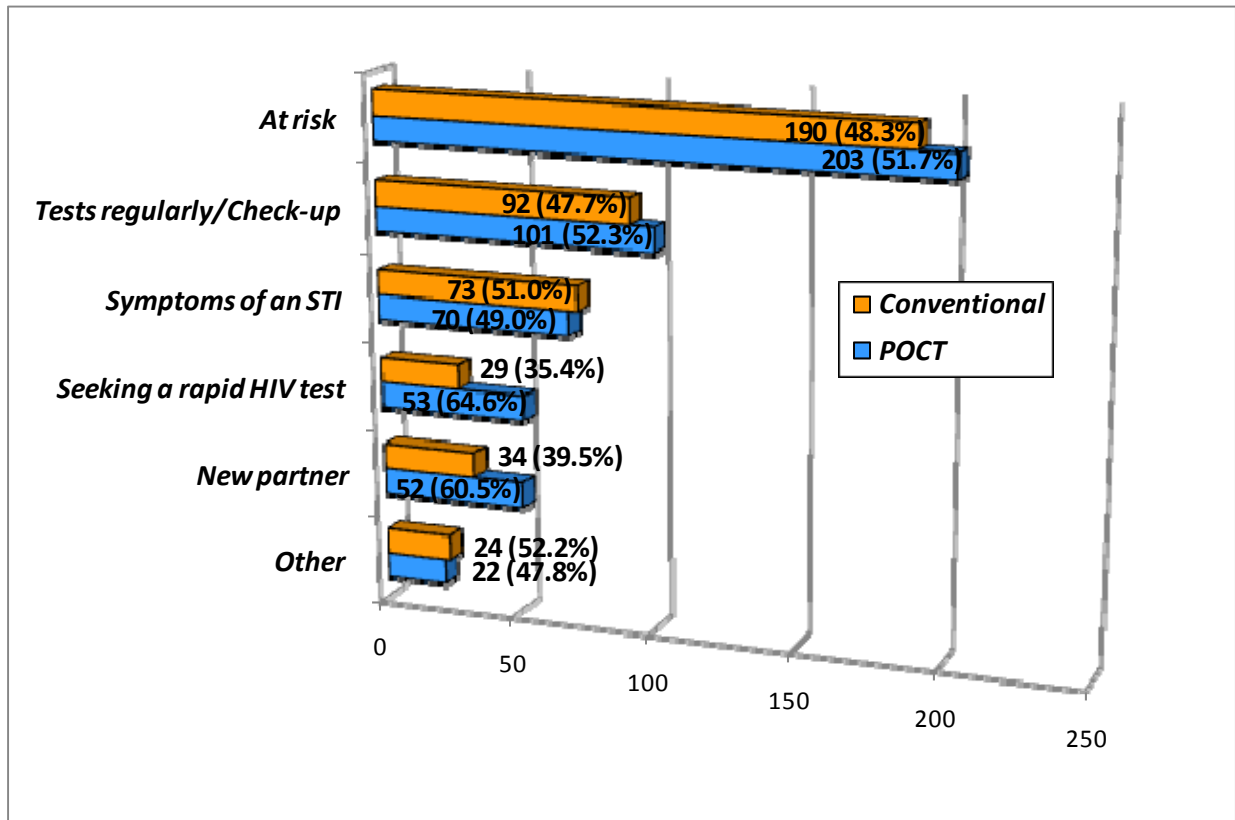
**Determinants of POCT use – by reason(s) for testing**

Figure 1 shows reasons indicated by clients for HIV testing and their choice of POCT or standard test within each of those categories.

Those testing because they were **at risk, test regularly/check-up**, were having **symptoms of an STI**, and **other**<sup>30</sup> all had POCT tests about as often as conventional tests.

There were 2 areas where POCT was chosen more commonly than standard serological testing. They are, those **seeking a rapid HIV test**<sup>31</sup> and those testing because they have a **new partner**.

**Figure 1:**



Logically, those seeking a rapid HIV test were more likely to ultimately chose a POCT test, although, over one-third (35.4%) of those who were seeking a rapid test chose to have a conventional test instead; reasons for clients declining a rapid test are discussed in the Service Provider feedback section (page 22).

<sup>30</sup> Other refers to: named as contact, seeking anonymous testing, and other (nothing specified). These categories were collapsed into “other”.

<sup>31</sup> Rapid HIV test denotes at POCT.

### **Determinants of POCT use – by risk factor(s)**

Figure 2 shows client self-reported risk factors for HIV transmission and their choice of POCT or standard test within each of those categories.

Clients who tested because they engage in **heterosexual sex** and **other**<sup>32</sup> chose a POCT about as often as a conventional test. **MSM** chose a POCT slightly more often than a conventional test, and those who tested because they currently **have an STI or contact with an STI/HIV case** were more likely to choose a standard HIV test rather than a POCT.

Those who identified as **MSM** are considered a high risk group for contracting HIV/STIs (Centres for Disease Control and Prevention, 2007). Being able to get quick results to keep abreast of their HIV status is important for theirs and their sexual partner's health. As we know, fear and stigma can be reasons for avoiding testing and/or returning for results (Hutchinson et al, 2004). The anxiety experienced while waiting for standard test results may deter MSM from testing at all, and Van Loon and Koevoets (2004) assert that a rapid point-of-care test motivates MSM to test as the rapid results eliminate the long waiting period.

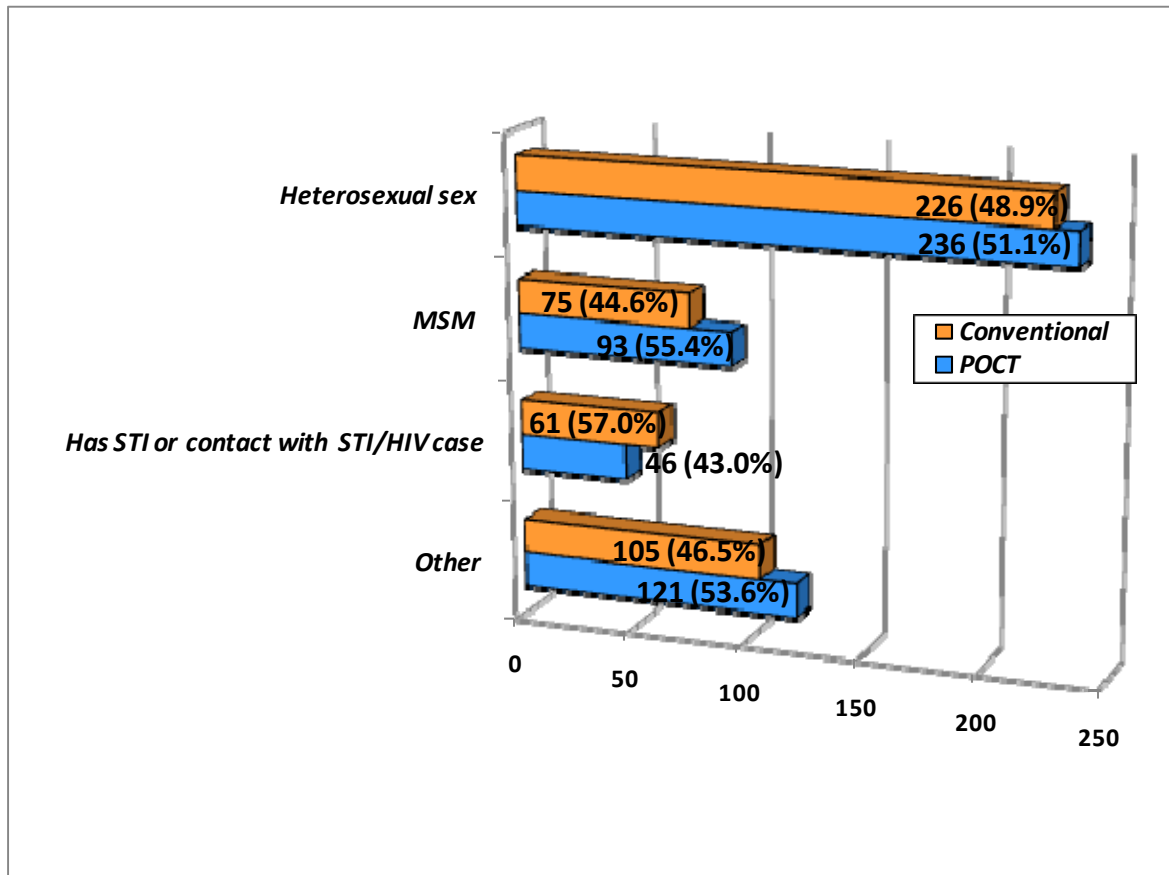
Clients who tested because they currently **have an STI or contact with an STI/HIV case** chose a standard more often. Nursing feedback (gathered as part of the evaluation process of the POCT Demonstration Program) suggests that some clients who already required a blood draw for other STI tests, preferred to test for HIV through standard means over the extra "poke" of POCT. Also, because these clients may have been more anxious presuming a higher likelihood of possibly contracting HIV (Canadian Aids Society, 2004) the POCT may not have been done at the discretion of the clinician.

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<sup>32</sup> Refers to: pregnant, born to HIV infected mother, victim of sexual assault, immigration requirement, STW, IDU, occupational exposure, recipient of blood/blood products prior to 1985, emigrated from HIV-endemic country, and/or other (nothing specified). These risk factors were collapsed in to the category of "other".



**Figure 2:**



**Objective 2: Client satisfaction with POCT**

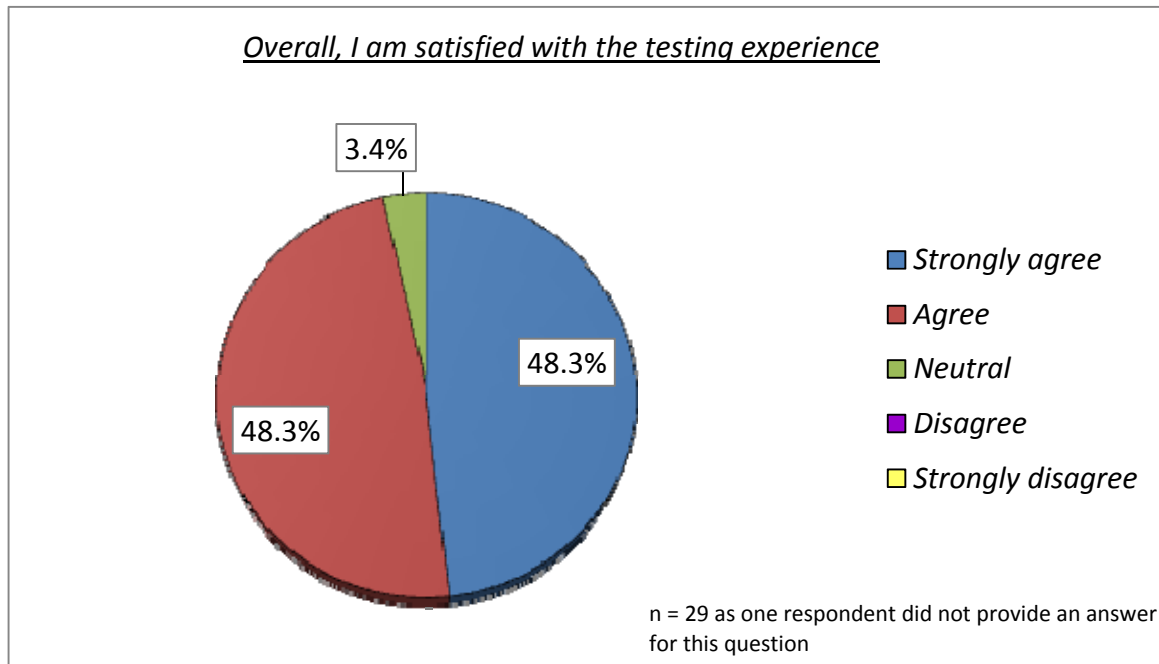
Data pertaining to client satisfaction with POCT was gathered during the Nine Circles STI Drop-In Clinic, in the form of a self-administered survey filled out by Drop-In Clinic clients. At check-in, the Medical Receptionist offers the survey to clients for completion, if they choose to participate, they fill it out after their STI Drop-In appointment; there is a drop-box in the Clinic waiting area for clients to leave their survey to maintain confidentiality. The survey also contains questions about other aspects of the Drop-In Clinic<sup>33</sup>, but for this report, only data from the responses relating to level of satisfaction of clients who had a POCT is presented.

Between April 1, 2008 and March 31, 2009, the client satisfaction surveys were administered during 7 STI Drop-In Clinic days at Nine Circles (approximately every 6 – 8 weeks; one in April, May, July, September, December, February and March). STI Drop-In Clinic clients were asked to assess their satisfaction level with the testing experience. Fifty-four clients completed satisfaction surveys during this timeframe and of that 54, 30 (55.6%) received a POCT, the following is a description of the level of satisfaction of those 30 clients who had a POCT.

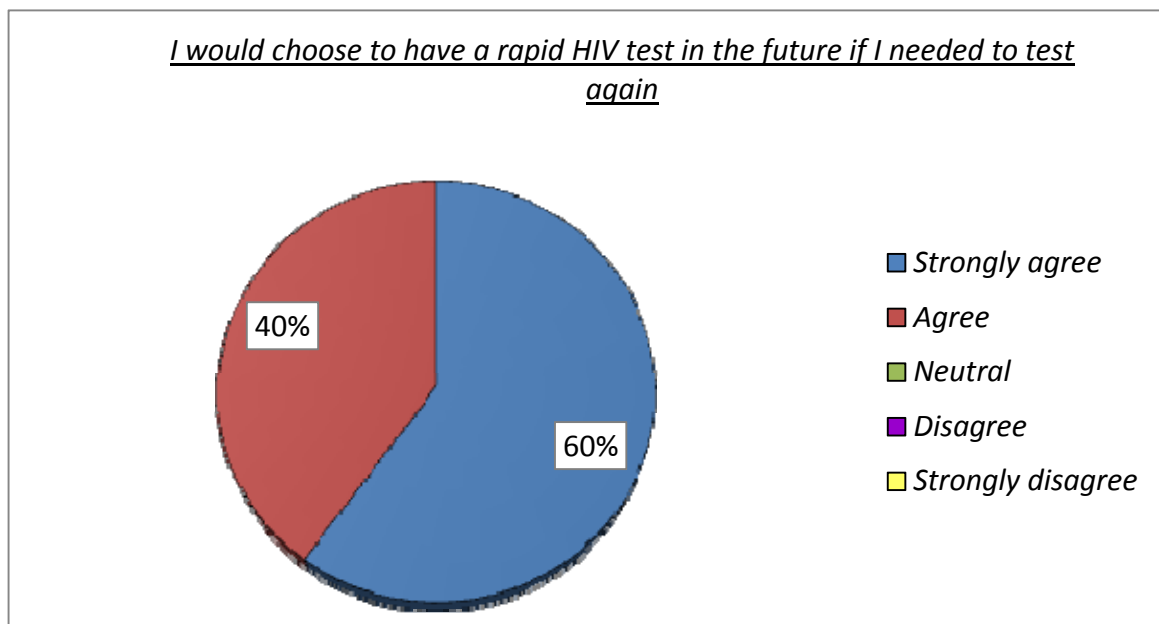
<sup>33</sup> Convenience of Drop-In Clinic hours of operation, suggestions for improving Clinic service delivery, etc.

From this client feedback, we can see there was very high overall satisfaction with POCT. Virtually all (96.6%) of the clients in the sample indicated they were **satisfied with the POCT experience** (see Figure 3). Moreover, all (100%) of the clients who had a POCT indicated that it would now be their chosen method for HIV testing. Every respondent who had a POCT, **would choose a POCT in the future** if they needed to test again (see Figure 4).

**Figure 3:**

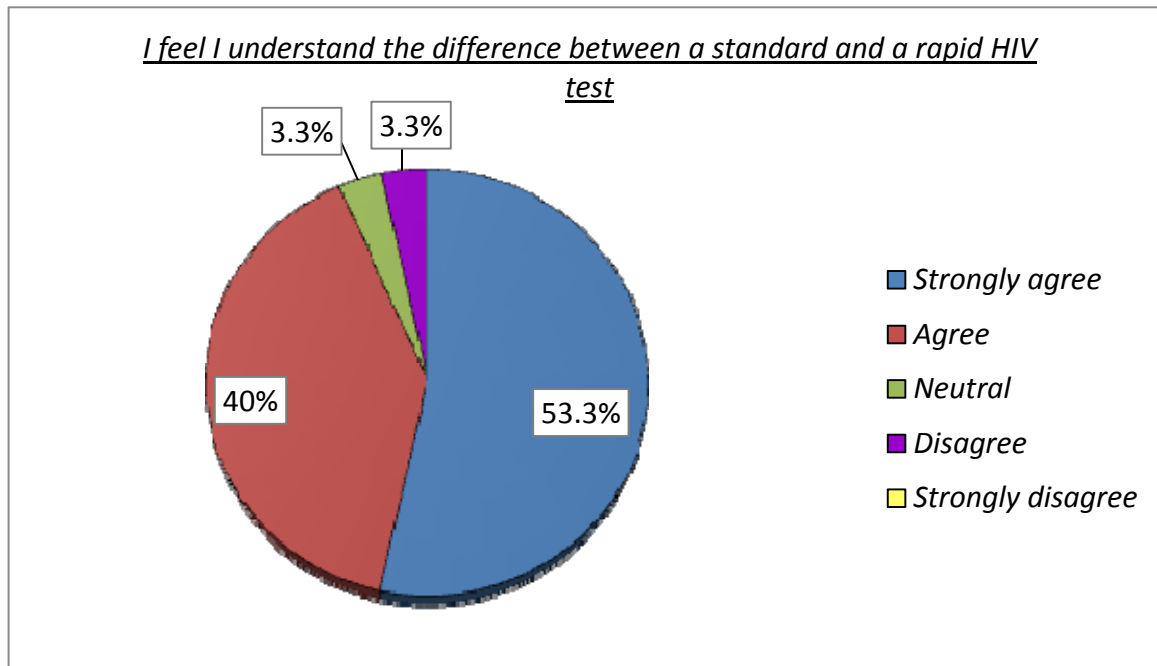


**Figure 4:**

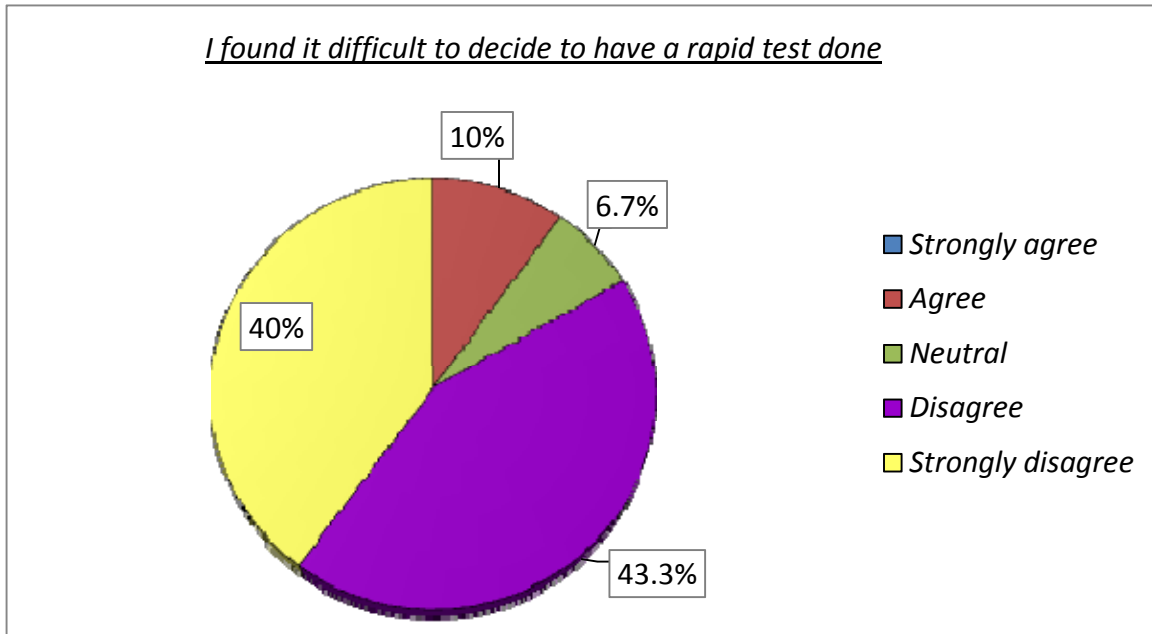


From this data presented in Figures 5, 6 and 7 we also observe that clients were able to make an informed choice about POCT. The POCT demonstration program illustrates that with sufficient pre-test education, such as that which Nine Circles P&P Educators provide, clients understand what a POCT test entails. The majority (93.3%) of clients felt they **understood the difference between a standard HIV test and a POCT**. Clients found it an easy decision as whether to have a standard test or a POCT, as only 10.0% of respondents found it **difficult to decide to have a POCT** done. This new form of testing did not appear to place undue stress or concern over learning about the POCT or having to make the decision between a POCT and a standard test. Clients also trusted the POCT results, as nearly all (96.7%) specified they were **confident that the result of the POCT was accurate**. This also can be attributed to the quality of the Pre-Test Education sessions and the extensive training of the P&P Educators. With sufficient education, the POCT experience is a beneficial, positive and well-informed one for clients.

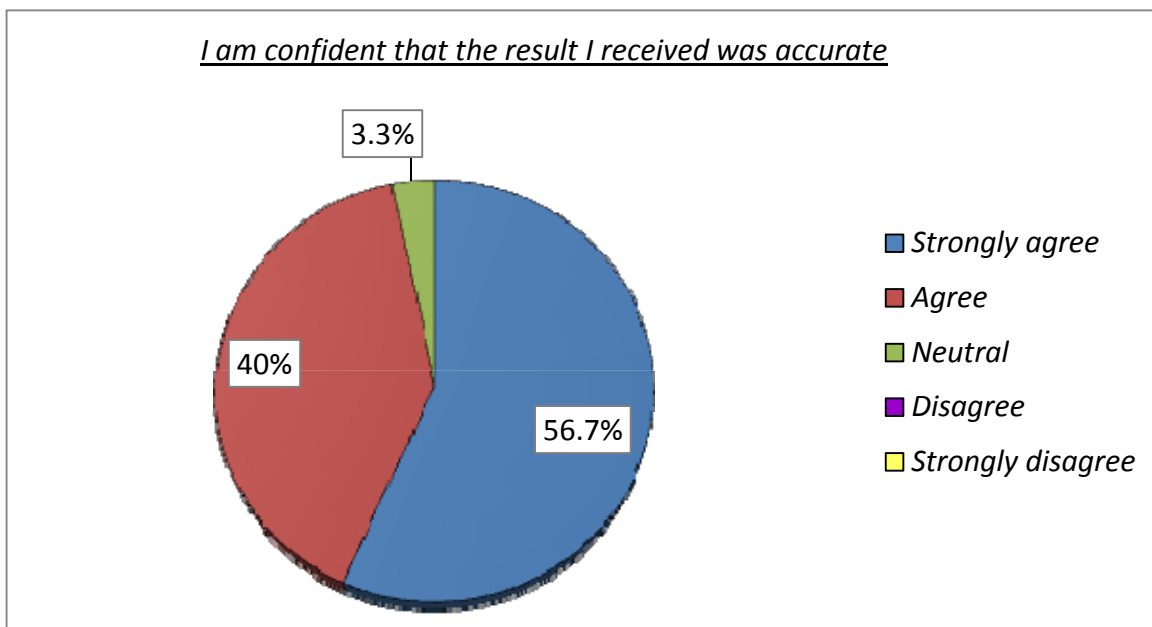
**Figure 5:**



**Figure 6:**



**Figure 7:**



### **Objective 3: Service Provider Satisfaction**

Two focus groups were held with Nurses from Nine Circles to gather information on their experiences, and client feedback, with POCT; the focus group was facilitated by the Nine Circles Research & Evaluation Coordinator. The interview questions were guided and developed by the Demonstration Program's evaluation plan.

#### **Perceived client response**

When asked to describe their perception of the client experiences with POCT testing, Nurses felt clients generally reacted in a positive manner and seemed to like the test, they approximated that 80-90% of client's experiences appeared to be favourable experiences.

#### **Perceived issues with POCT**

Some clients expressed **anxiety** over HIV testing in general, regardless of whether it was a POCT or a standard test. Some clients had **misperceptions about the nature of the test**. They thought it involved a quick needle stick, similar to a glucose tolerance test. This was not so, the needle stick tends to be **painful** for some clients (nurses estimate about 50% of clients complained about the pain). Also, there was a need to massage the finger to get enough blood; some clients indicated to the nurse "that's enough blood!" There was a challenge with needing to "poke" again after the blood draw (for hepatitis C and syphilis); a question the nurses posed was – "can the same blood be used from the tube for the POCT test?"

#### **Perceptions on choosing POCT**

The nurses identified several reasons clients gave for **choosing a POCT**. Clients spoke about the benefits of an **immediate result**, specifically, that this led to no, or at least less, anxiety around HIV testing. Whether a reactive or non-reactive result, clients could just 'get it over with' and know their HIV status without having to wait several days or weeks to learn their results. Clients also expressed the comfort they received from getting **reassurance** that they are HIV negative so quickly. Nurses also indicated, there is great client interest in this **alternative form of testing** because it is something new and different they would like to try. It sounds like "a cool test" and clients are often disappointed they cannot watch the process.

#### **Perceptions for declining a POCT**

Nurses were also asked to identify reasons why people **declined a POCT** and opted for a conventional test instead. They indicated that it is rarely a difficult decision for clients as to

whether to have a POCT or a conventional test. There were several scenarios articulated by the nurses where clients selected a standard test as opposed to a POCT.

On occasion a clients is simply **not prepared**, mentally and emotionally, to hear or deal with a reactive result. In cases such as this a POCT would be determined an unsuitable option from the view of both client and service provider or a POCT would not be offered at the discretion of the clinician.

Clients feel **they are such low risk** and will most likely be non-reactive, so they do not want to “bother” with a POCT (e.g. the finger stick, waiting at the clinic for the test to be performed). They are not anxious, so there is no hurry to receive a result right away.

They do not want the **finger poke or another poke** (i.e. since they have to have a conventional test regardless, they opt for just the one test)

Some clients **worry over the reliability** of the POCT and in turn decline it. But, we have seen this is not an area for concern, as we saw high trust in the accuracy of POCT from the STI Drop-In Clinic clients satisfaction data presented earlier. Conceivably once POCT is more well-established in Manitoba and becomes a regular fixture in clinical settings, this scepticism will be less of an issue.

### **Service Provider Experiences**

#### **Administering the Test**

Nurses expressed dissatisfaction around the **mechanics** of administering the test, for logistically there were some challenges. For example, the small lids, tubes and capillary can be awkward to handle and getting a good draw could be difficult. They indicated that a POCT is a messier and more risky test than any other (i.e. the exposed blood).

#### **Dealing with the paperwork**

The nurses also articulated some displeasure with the **paperwork** that accompanies the POCT. They felt there were many steps to go through when performing the test and found it, administratively, to be “a lot of extra work”. They identified there was much writing to do. The nurses found it difficult and time consuming to stamp the requisition in the specific way required, and the stamp was also easy to forget. They felt the procedure and process could be strengthened to improve efficiency and ease of conducting the test. They suggested the ending of parallel testing would eliminate the extra step of also conducting a conventional test.

## Nurses' experiences delivering the test results

Upon receiving a **non-reactive result**, nurses felt clients often did not stop to hear much else they had to say, in particular the regular post-test education assigned. Some nurses believed that this was a missed opportunity for further education and discussion around adoption of harm reduction strategies. Nine Circles will be exploring ways to respond to this concern including adjusting the pre-test session to contain more of the education that is usually given in the post-test session. This would include more information of harm reduction and transmission prevention strategies. Other agencies may also want to consider avenues for combating this, and imparting clients with as much knowledge as possible before they receive their result.

When clients received **reactive results** some exhibited disbelief and shock, but most who receive a reactive result expected it as they are high-risk, and they received the news calmly. This demonstrates that with adequate Pre-Test counselling and education, and the use of practitioner discretion as to who is “ready” to hear their result, a reactive test result can be delivered without excess trauma and emotional distress to the client.

In terms of their own emotions, nurses expressed that, on the whole, giving a reactive HIV result is difficult regardless of whether it is by a POCT or conventional test. When giving a client a reactive result, nurses indicated that it was somewhat easier for them to handle delivering such information when utilizing a conventional test. In such situations, providers have more opportunity and time to prepare themselves, as one of the nurses reported: “you’ve checked your emotions ahead of time”. Since the introduction of POCT is relatively new, service providers may simply need some time to adjust to delivering reactive results with the shortened timeframe. Conceivably, this will become part of their nursing skills as they have more experience with this testing format.

## Summary of main findings

Clients are just as likely, or more likely, to utilize a POCT. Also, we have achieved a picture of the determinants of POCT use. Overall, those in Winnipeg’s **inner city**, those who were **seeking a rapid HIV test**, those with a **new partner**, and **MSM** employed the POCT option more often than standard HIV testing.

On the whole, there is high satisfaction with the POCT testing process. Service providers are satisfied with POCT and are of the opinion it is a beneficial testing option in Manitoba. Also, clients who utilize POCT as an option are pleased with this method.

At-risk and marginalized groups testing needs are being further met with the availability of POCT, such as inner city clients and the especially high-risk group of MSM.

The high accuracy and reliability of POCT has been demonstrated, as POCT tests have shown to be accurate, and we can presume that parallel testing is no longer necessary.

## Conclusions

Nine Circles has demonstrated the successful introduction, uptake and client and service provider satisfaction with Point-of-Care HIV testing. POCT appears to be an acceptable, viable and desirable addition to HIV testing options in Manitoba. Overall, clients and service providers are highly satisfied with POCT testing. The accuracy of POCT testing is also high, for as we saw, all confirmatory results concurred with the POCT results.

Galvan, Brooks & Leibowitz (2004) emphasize that “the primary advantage of rapid testing is the ability to dramatically increase the number of individuals who become aware of their HIV status” (p. 15). It further supports more immediate connections with primary care and treatment when people are able to test for HIV and learn their results in the same session. So as to highlight another success of the demonstration project, let it be noted that **all (5) of the HIV reactive tests during the sample timeframe were identified by a POCT**, and all 5 clients were present at Nine Circles to receive these results because of the use of the rapid test. This enabled swift action on matters such as, the client entering into HIV care and notifying past and current sexual contacts.

Staff and clients need to be well supported where POCT is offered (Galvan, Brooks & Leibowitz, 2004). Staff should receive specialized training in administering the test. Also, there must be support during the adjustment period of now having to deliver results so quickly (e.g. debriefing sessions with peers or managers, learning new skill sets and strategies to respond to client’s reactions, and knowledge of resources and referral options for newly diagnosed clients).

The testing facility must also have the infrastructure and space in which to store, administer and conduct POCTs. The test kits must be kept at certain conditions in order to be effective. The process requires a stable place for the client to sit, while the clinician performs the “finger poke” and draw the blood up with the pipette for the test. A separate space dedicated to conducting the test is crucial, as the test is not to be performed in front of clients. We have also seen from the service provider feedback that handling the test while mixing the components can be a challenge, so an orderly and fixed area is needed. The testing facility, ideally, should also have the resources and space to conduct confidential pre-test education sessions.

We can assume the interest in, and uptake of, POCT testing will grow when POCT begins to be more publicized. As we have seen, even without wide-spread public notice of POCT being available, clients were as likely, or even more likely, to choose a POCT. It is plausible the utilization of it will increase once the public becomes aware of its existence and availability in Manitoba.



## Future Directions & Recommendations

Keenan & Keenan (2001) assert that “rapid testing has a role to play in HIV outreach. It is useful in populations who are at high risk of HIV infection, who currently are not accessing HIV testing, and who have high failure to return rates” (p. 541). By expanding the availability of POCT marginalized and at risk people will have greater access to HIV testing. POCT may also be of value to individuals in Rural and Northern communities who may also have difficulty accessing HIV testing. Schulden et al (2008) assert that “by utilizing rapid HIV testing technologies, CBOs [Community Based Organizations] can provide clients with their results in a single visit” (p. 113) since, some may have a reactive result, but never return to receive that result.

Exploring the testing preference and needs of transgender people further would be helpful in tailoring information and education strategies the when POCT in more widely promoted and implemented.

Other clinics in urban settings in Canada and the United States have also reported rates of higher POCT choice over standard HIV tests and also high client and service provider satisfaction with the POCT testing experience (Greer, Stephen, Lin & Mitterni, 2007; San Antonio-Gaddy et al, 2006). POCT appears to be a desired option for the diverse group of clients seen at Nine Circles STI Drop-In Clinic and would conceivably have good uptake in the other varied clinical settings in Winnipeg, and eventually throughout Manitoba.

It would also be beneficial to ask POCT users about their likelihood of testing when POCT is a choice (i.e. they decided to test because they would get their results within minutes and would not have to contend with hurdles which may keep them from testing such as, the anxiety while waiting for test results). There would be value in asking POCT users questions such as – “Did knowing you would get your results today encourage you to be tested?” This would provide an even clearer picture of which populations would benefit most from the availability of POCT as a testing option. What groups that would normally avoid HIV testing altogether, are now testing because of the availability of POCT.

## Appendix 1 – Nine Circles POCT Procedures



### **POCT Handling and Storage Procedures**

The Clinic Coordinator is responsible for the ordering, handling, inventory, storage and quality control checks of all POCT kits at Nine Circles.

The Clinic Coordinator must be aware of the Policies and Procedures for Quality-Assured Conduct of Rapid HIV Point-of Care Testing in Manitoba Manual developed by Manitoba Health and Healthy Living.

### **POCT Kit Ordering Procedure:**

- Maintain inventory of no more than one-month POCT kits. This will minimize environmental failures.
- Calculate the approximate quantity of kits that will be required for the upcoming month. This figure can be determined by reviewing the total quantities of POCT kits handled in the previous month.
- Place orders for POCT kits and QC materials by contacting Cadham Provincial Laboratory
- Maintain a record of all HIV POCT kits ordered and used, this includes clients tests, QC samples, EQA samples, invalid tests and spoiled tests, using the POCT Kits Inventory Record. When orders arrive from CPL, check kit quantities against those ordered and the packing slip.

### **Inventory Management**

The Clinic Coordinator will:

1. Maintain a complete and updated record of the POCT kits using the POCT Kits Inventory Record.
2. Count actual stock monthly and compare the balance on the POCT Kits Inventory Record.
3. Check the stock on the first date of every month for expired kits. Remove expired kits from the storage location and record quantities expired on the POCT Kits Inventory Record.
4. Place kits with the shortest remaining shelf life in the front of the cupboard to prevent kit wastage due to expiry.

### **POCT Storage:**

- POCT kits must be stored in the designated cupboard in the clinic lab room.
- Any member of the support staff team may receive POCT kit shipment and notify the Clinic Coordinator of its arrival.
- Kits must be stored between 15 ° and 30 °.
- 

### **Environmental Monitoring**

- The storage location must have a minimum-maximum thermometer.
- All locations that store any POCT kits must be monitored by reading the minimum and maximum temperature daily:
  1. Using the thermometer indicate the current temperature on the POCT Kit Environmental Temperature Monitoring Chart by checking off the appropriate box on the “Celcius © Temperature Log” Sheet.
  2. Initial and record the time that the temperature was monitored at the top of the Temperature Log sheet.
  3. Each time the temperature is monitored, the thermometer must be reset.

### *CLEARING THE MAXIMUM AND MINIMUM READING OF THE THERMOMETER*

- Press the max/min button
- Then, press clear – this will clear the maximum temperature
- Again, press the max/min button (you may have to press twice for the minimum temperature).
- Then, clear – this will clear the minimum temperature.

In the event of an environmental failure, the following steps are taken:

- POCT kits exposed to temperatures outside the recommended range must be stored in a separate container marked: DO NOT USE until instructions have been received on what to do next.
- An incident form must be completed and the supervisor notified.
- Record the minimum and maximum temperature of the storage location upon discovery of the incident
- Document the cause of the failure and the last time the storage location was monitored between 15 ° and 30 °.
- Calculate the maximum length of time the POCT kits were exposed to a temperature outside of the 15 ° and 30° range.
- Seek immediate advice from the manufacturers on whether these products may be used or discarded.
- Dispose of any kits deemed unusable in a sharps container or returned for credit, where applicable.

## **POCT Internal Quality Control Procedures**

POCT kits must be checked regularly to ensure that they are performing properly. The Clinic Coordinator or her designate will run a routine quality control test every Wednesday prior to STI clinic.

The manufacturer will provide reactive and non-reactive control samples that the clinic can use to test the point-of-care HIV test kits. This process is called “running controls”.

All internal quality control results obtained from running controls as well as other relevant information (i.e., kit lot, tester, date and time) should be recorded. The Clinic Coordinator and/or Clinic Manager will monitor these results and records regularly (at least monthly).

Any incorrect QC results should be brought immediately to the attention of the Clinic Coordinator and/or Clinic Manager, who will investigate the incorrect QC result and document the results. If the problem cannot be identified or resolved (e.g., human error), the supervisor must stop all testing and notify CPL who will in turn notify the manufacturer.

### **How to run routine quality controls**

1. Set up the testing area for internal quality control testing.
2. Use one new device to test the reactive control material following the manufacturer’s instructions.
3. Record the internal QC result for the reactive control in the Quality Control Log.
4. Use another new device to test the non-reactive control material following the manufacturer’s instructions.
5. Record the internal QC result for the non-reactive control in the Quality Control Log.

### **Bioalytical Insti Kit In-house Control Procedure**

1. Remove a reactive and non-reactive control from the freezer. Let thaw.
2. Cut a piece of Parafilm approximately 10cm by 10cm.
3. Prepare two Bioalytical Insti kits for use.
4. Place the thawed controls onto the parafilm by taping the open tube upside down on the parafilm. A drop of control (approximately 150 µl) should well up on the parafilm.
5. Use the capillary pipette to obtain 50 µl of the control to add to vial number 1. Proceed with the development of the Bioalytical Insti kit.
6. Repeat the above step for the other control.

If the results of the internal QC are acceptable (i.e., the reactive produces a clear reactive result and the non-reactive produces a clear non-reactive result), testing of clients can proceed.

If the results are not acceptable – if the testing results in an INCORRECT or INVALID test result for either one of the controls – the person running the controls must NOTIFY THE SUPERVISOR IMMEDIATELY (see how to handle an unacceptable QC result below).

#### **How to handle an unacceptable QC result**

An unacceptable QC result indicates that there is a problem either with the testing process (e.g., human error), the control material, or the testing device. All follow-up action must be carefully documented and involve the tester and the supervisor.

1. Record the unacceptable result in the Incident Log. Be sure to describe the type of unacceptable result achieved and all of the follow-up activity.
2. Retain the devices used for the unacceptable QC testing.
3. Repeat the testing of both the reactive and non-reactive control material, using the same material and batch of kits. Ensure that the QC specimens are testing sequentially not simultaneously.

4. Record the results in the Quality Control Log and Incident Log.
5. If these results are acceptable, carefully consider what might have occurred during the process that resulted in unacceptable results (e.g., mixed up QC materials, failed to add a test component), and testing of clients can proceed.
6. If these results are again unacceptable, ALL HIV POC TESTING MUST STOP.  
Notify:
  - a. CPL
  - b. Site Management
  - c. CDC Unit
7. Retain all devices used when unacceptable results were obtained as they will be an important part of the investigation.
8. Compare the incident log fully and accurately because it will also be important in the investigation.
9. After consultation with other sites providing point-of-care HIV testing, the manufacturer will be notified and expected to respond immediately.

### **External Quality Control/Proficiency Testing**

To the extent possible, each site will participate in a proficiency testing program (using blind specimens sent once every 3 months from CPL).

All staff responsible for conducting point-of-care HIV testing will participate in proficiency testing on a rotating basis.

Any errors in proficiency will be investigated immediately, and corrective actions must be taken and documented.

The site/clinic will maintain all proficiency testing records in a quality assurance file.

## **Parallel Testing Procedures**

As part of quality assurance, point-of-care HIV test results should be compared regularly to the “gold standard” of HIV testing carried out by CPL. Parallel testing allows sites to compare point-of-care HIV test results directly with those obtained by standard HIV screening and confirmatory testing.

Parallel testing will occur automatically for all clients requesting HIV point-of-care-testing.

The results from point-of-care and laboratory testing should be documented and compared, and any significant discrepancies (point-of-care non-reactive – routine testing reactive) should be brought to the attention of the CDC and CPL.

CPL will tabulate parallel testing results for all sites monthly and will notify the CDC Unit at Manitoba Health and sites of any problems identified during data analysis.

Sites should also keep track of specific types of information locally including:

- The proportion of HIV-negative clients who have a reactive point-of-care test result.
- The proportion of invalid point-of-care tests.

If the data indicates that more than 0.5% of tests were falsely reactive, CDC & CPL must be notified. If the data indicates that more than 1% of tests were invalid CPL must be notified.

## **Procedures**

How to document and compare parallel tests, and detect and report discrepancies

1. For all specimens forwarded to the public health laboratory for additional testing, record the details in the logbook.

2. Record the public health laboratory results - including EIA, WB and p24 antigen (if done) – in the logbook.
3. Compare point-of-care test results and public health laboratory results.
4. **Report ANY false non-reactive result on point-of-care testing to the Clinic Manager, who will notify CPL immediately.**
5. Complete the Monthly Summary Charts provided in the templates and calculate the % of false reactive results and the proportion of invalid test results.
6. **If >0.5% of point-of-care tests are false reactive, notify the Clinic Manager, who will contact CPL.**

#### **POCT Documents and Records Procedures**

Nine Circles staff must document all quality assurance program procedures and maintain records for 10 years. The following documents must be maintained:

- Records of staff training and competency in POCT
- Client's results recorded in the client's chart (along with kit lot, date and parallel test information)
- A central log of testing results showing the date, kit lot, tester initials, clients chart number, relevant QC testing, as well as results on parallel testing done by CPL
- A monthly summary of the number of false non-reactive, false reactive, and invalid results obtained through point of care testing
- An inventory control system to monitor kit lot and product availability
- An incident log, where all incorrect QC or other discrepancies, investigations and corrective actions will be recorded
- Environmental monitoring log for areas where kits are stored
- QC results recorded in a QC log, and reviewed by manager at regular intervals



- If more than 1% of tests are invalid, notify CPL.

POC RESULT	HIV SCREEN 1	HIV SCREEN 2	P24 Ag	WB	CPL Result	Discrepancy?
Reactive	Reactive			Reactive	Reactive	No
<b>Reactive</b>	<b>Non-reactive</b>	<b>Non-reactive</b>	<b>Non-reactive</b>	<b>Non-reactive</b>	<b>Non-reactive</b>	<b>No, but indicates POC false reactive</b>
Reactive	Reactive		Reactive	Indeterminate	Reactive – Repeat	No
<b>Non-reactive</b>	<b>Reactive</b>		<b>+/-</b>	<b>Reactive</b>	<b>Reactive</b>	<b>YES, indicates POC false non-reactive</b>
Non-reactive	Non-reactive		Reactive	Non reactive	Advise repeat	No, but client likely HIV+

**Note: A reactive point-of-care result with a non-reactive HIV antibody laboratory result (i.e., false reactive) is not unexpected. Up to 5 out of every 1000 non-reactive people will test reactive on the point-of-care test even though they do not have HIV antibodies. This is NOT considered a discrepancy, but it is still important to track the occurrence of false reactive POC results. A non-reactive point-of-care result with a reactive HIV antibody laboratory test IS A SERIOUS DISCREPANCY. It means the point-of-care test produced a false non-reactive. This situation needs to be brought to the attention of the public health laboratory and the AIDS Bureau and, through them, to the manufacturer.**



## **HIV Testing Procedures**

Nine Circles Community Health Centre (Nine Circles) strives to ensure quality and consistency of HIV testing services.

clients of Nine Circles will be offered three types of HIV testing options: nominal, non-nominal and anonymous. Clients choosing nominal or non-nominal testing may also be offered either a point-of-care test (POCT) or standard blood test.

### **1. Counselling Procedures**

No HIV test will be done without pre-test counselling. All counselling will be done by a qualified service provider (trained volunteer, registered nurse or physician).

- In general, all pre-test counselling is offered by a trained volunteer. In some cases, clients may refuse counselling, in these cases the clients should be referred to a nurse. If the clients still objects to the counselling it may be appropriate to refuse testing at that time.
- Counsellors will use the Nine Circles Pre-test Counselling Guide to ensure that they cover the full range of pre-test information.
- A client's agreement to participate in pre-test counselling is considered to be informed consent to be tested. It is not necessary to have clients sign an informed consent form.

- Counsellors will sign and date the client’s counselling guide (this is a permanent part of the client’s chart) to confirm that the pre-test counselling was done.
- Counsellors should also ensure that any notes from the pre-test counselling session are complete and clearly written to assist the next staff person seeing the clients.

## **2. Types of Testing**

Counsellors will offer clients a choice of nominal, non-nominal or anonymous HIV test. They will provide information about the three testing options and help clients make an informed choice. The information about the three options will include:

### **Name-based (Nominal) Testing**

- Rapid HIV Screening Test available (same day results provided)
- Your health information is confidential, as legislated by PHIA (Personal Health Information Act). The Act governs all staff working at Nine Circles and Cadham Provincial Laboratory (CPL).
- A blood sample is sent to the Lab with your name on the test requisition and specimen, just like every other medical test you have.
- The confidential test results are documented in your medical chart.
- Because HIV is often transmitted sexually, it is highly recommended you are also tested for other Sexually Transmitted Infections. These tests can only be done with your name attached to them.
- A reactive HIV test result always requires that contact tracing be done.
- If your HIV test is reactive, you can receive treatment and services right away with a non-nominal test.

### **Coded (Non-Nominal) Testing**

- Rapid HIV Screening Test available (same day results provided)
- Your health information is confidential, as legislated by PHIA (Personal Health Information Act). The Act governs all staff working at Nine Circles and CPL.
- A blood sample is sent to the Lab using a code on the test requisition and specimen.
- The confidential test results are documented in your medical chart.
- Non-nominal testing affords adequate documentation needed for prenatal, immigrant or refugee applications, insurance purposes and workplace exposures.

- Because HIV is often transmitted sexually, it is highly recommended you are also tested for other Sexually Transmitted Infections. These tests can only be done with your name attached to them.
- A reactive HIV test result always requires that contact tracing be done.
- If your HIV test is reactive, you can receive treatment and services right away with a non-nominal test.

## Anonymous Testing

- Rapid HIV tests are NOT available using this testing option
- There is no link between the HIV test result and the identity of the person being tested.
- Your anonymous test chart, test requisition and specimen do not contain any personal identifying information: only a numbered sticker on each.
- You receive a card with an identical sticker that you must present to the clinic in order to receive results.
- Anyone who comes to the clinic with this card will receive the test result.
- Your test results are not kept permanently or indefinitely: Three months after your testing your anonymous chart is closed. Your test result is not made part of your regular medical chart where it can be referred to easily.
- Paper copies of anonymous results are never provided.
- Because HIV is often transmitted sexually, it is highly recommended you are also tested for other Sexually Transmitted Infections. These tests can only be done with your name attached to them.
- A reactive HIV test result always requires that contact tracing be done. If reactive, another HIV test (nominal/non-nominal) is required in order to access treatment and services

In addition, clients requesting nominal or nominal HIV tests may also be offered either standard HIV testing or point-of-care testing. They will be provided with information about the two types of testing. The information about the two types of testing which include:

- HIV testing consists of a screening test and a confirmatory test.
- **Standard HIV testing** is done by the provincial laboratory. The screening and confirmatory tests are done at the same time and it can take up to two weeks to receive the test results.
- **Point-of-care HIV testing** is a screening test only. It is done at the clinic. Results from the screening test are available within a few minutes. Clients who test non-reactive will know immediately that they are non-reactive. When the results of a point-of-care are reactive or indeterminate, a blood sample must be drawn and sent to the provincial laboratory for a standard HIV testing, and will take up to two weeks to receive the confirmatory results.

\*\* Note: As POCT is a new form of testing in Manitoba, the first 1000 POCT tests will all have a standard HIV test (parallel test) drawn and sent to the lab at the same time.

- Standard HIV testing requires drawing a vial of blood, while point-of-care testing can be done with a finger prick.

### **3. Test Results**

#### **Non-reactive Test Result**

- The P&P educator may give all **non-reactive** test results. Once the clients has been informed of the test result the Anonymous HIV Test envelope and all documents pertaining to the test (anonymous test form and lab requisition) will be returned to the chart room and placed on the RN cart.
  - The RN will review the documents, complete the anonymous HIV test log and then send the chart for archiving
  - All clients records must be kept for 10years.

#### **Reactive Test Result**

- The RN will give all **reactive** test results. The RNs complete the Manitoba Health HIV Contact Notification Form with the clients.
  - Once the clients has been given their results the RN will complete the anonymous HIV test log and then send the chart for archiving
  - All clients records must be kept for 10years.
  - The RN will encourage the clients to have a confirmatory HIV test done (nominally or non-nominally) and refer the clients to the HIV Program.

#### **Indeterminate Test Result**

- The RN will give all **indeterminate** test results.
  - There are various reasons why a HIV antibody test may produce an indeterminate result, including early seroconversion, inadequate specimen sample, delayed specimen transportation and specimen processing problems.
  - When a client's test result is indeterminate, the RN will encourage the clients to have a repeat HIV test performed (nominally or non-nominally)
  - All clients records must be kept for 10 years.

#### 4. Procedures for HIV Testing

- Nine Circles will provide a handout to all STI walk-in clients on the HIV testing options to be given by the receptionists along with the yellow intake sheet.
- If the clients expresses concern about filling out yellow intake with demographic information on it as they are only there for anonymous testing than the receptionist will ask the clients to put only “a name” on the sheet that the P&P counsellor can use to call them from the waiting room and to fill out the risk information.
- 

##### I. Anonymous HIV Testing

- Anonymous testing is not an adjective. Anonymous testing is a process for handling the lab requisitions and results and reporting. The test result cannot be linked to the clients.
- All clients that present for an anonymous HIV test will also be offered HCV and STI testing.
- The same care provider can provide testing for the anonymous HIV test and the STI and HCV tests. The care provider will explain that testing for these diseases is done nominally, but the chart with their HIV test result and the one for any other tests are kept separate and NOT cross-referenced or linked.
- If the clients chooses anonymous test, the P&P educator will complete the anonymous testing pre-test form and the anonymous testing requisition and place them in the anonymous testing envelope. One sticker from the requisition will be attached to the client’s anonymous testing form, one onto the anonymous test envelope and one on the blank card given to the clients. The P&P educator will emphasise that they must have their code/card to get their results.
- The P&P educator will place the anonymous testing envelope inside the clients chart and place it in the chart room for the RN
- The RN will complete anonymous HIV test. The RN will place one sticker from the requisition onto the tube of blood after it is drawn and one onto the anonymous testing log in the lab/med room. The RN will emphasise that they must have their code/card to get anonymous HIV test result. The RN will emphasise that it is the client’s responsibility to return for the test result as we will have no information with which to contact the clients regarding their HIV result. The RN should write the date that the clients should return onto the code card for the clients. The RN will write the date of the anonymous test on the outside of the HIV anonymous test envelope
- The RN will complete STI exam and test as per usual.
- The anonymous test envelope will be separated from the clients STI chart and placed in a designated area in the chart room.

## Anonymous HIV Test Results

It can take up to two weeks to obtain results from standard anonymous HIV testing.

- Anonymous test results that return to Nine Circles will be documented on the anonymous testing log and then placed in the anonymous test envelope.
- When the clients returns for their anonymous HIV test they must show the clinic receptionist their anonymous test card. The clinic receptionist will pull the client's anonymous test chart, attach a pseudonym card (b) to chart, give the clients the pseudonym (a) card and their anonymous test card. The RN will use the pseudonym card to identify the clients. The clients must show the RN their anonymous test card in order to get their HIV test result. At that time the anonymous test card will be destroyed.
- Once the clients has returned and received their anonymous HIV test result or after three months have elapsed the test results and the clients envelope with the anonymous testing pre-test checklist will be sent for archiving.

## II. Point-of-Care HIV Testing

With point-of-care HIV testing, the screening test is done on-site, while the clients waits. Results from the screening test are available within a few minutes.

**\*\* Note: As POCT is a new form of testing in Manitoba, the first 1000 POCT tests will all have a standard HIV test (parallel test) drawn and sent to the lab at the same time**

### Conducting the Point-of Care Test

- If the clients chooses point-of-care testing, the P&P educator will complete the CPL General Laboratory Requisition or a Non-Nominal HIV Testing Requisition and the Nine Circles Nominal and Non-Nominal Pre-Test Form and place them in the client's chart. One sticker from the appropriate requisition will be attached to the client's Nominal and Non-Nominal Pre-Test Form.
- The P&P educator will place the clients chart in the chart room for the RN.
- It is the RNs responsibility to review POCT procedures, explain that this test is a screening test only, discuss the possibility of false reactives and with the clients assess whether this is an appropriate test for them.

- The RN will complete HIV test:
  - The RN will follow the manufacturers' instructions that come with the point-of-care test kits for taking the blood sample and conducting the test. **NOTE: THE INSERT WILL BE UPDATED TO INCLUDE ANY NEW INFORMATION AND SHOULD BE REVIEWED REGULARLY.**
    - The RN should have in the room with the clients: vial 1, and alcohol swab, the safety engineer lancet, and the pipette. The RN may also have receptacle or test well in the room with the clients in order to demonstrate that it has been labelled correctly with his/her name or number.
    - Once the blood sample has been taken, the RN will take the receptacle or test well to the lab area to complete the test, or have the clients leave the exam room while the test is performed. **NO PART OF THE TESTING PROCEDURE SHOULD BE DONE IN FRONT OF THE CLIENTS.**
    - If there is any problem taking the blood sample (e.g., not enough blood drawn), discard the entire test kit and start again with a new test kit.  
**NOTE: ALWAYS USE THE LANCET IN THE KIT. NEVER SUBSTITUTE ANOTHER LANCET.**
    - After completing the test, the RN should dispose of the test equipment as follows:
      - Place the lancet in a sharps container
      - Dispose of vial 1, the pipette and the test well/membrane with biohazardous waste
      - Recycle vials 2 and 3 (**NOTE: vials 2 and 3 are NOT biohazardous and can be recycled.**)
- To ensure tests are done properly, Nine Circles will implement the Quality Control (QC) and Quality Assurance (QA) program as set out in the Policies and Procedures for Quality-Assured Conduct of Rapid HIV Point-of Care Testing in Manitoba manual developed by Manitoba Health and Healthy Living.



## Reading the Point-of-Care Test

- It is recommended that two testers interpret all test results. If there is a problem interpreting the test (e.g., shadows or rings), then two testers **MUST** interpret the test.
- If a control spot is not visible on the INSTI reaction well, the test should be considered **INVALID** and a second test repeated with a new test kit.
- Anything other than an absolute non-reactive in the test spot area is considered reactive or indeterminate or invalid.
- Prior to conducting the rapid test and venipuncture for conventional HIV testing, informed consent for both must be obtained. Written consent is not required but consent should be recorded in the chart. It is not necessary to have a signed consent form: the client's participation in testing implies informed consent.
- For the first year of implementation /1000 point-of-care tests conducted, all clients must be tested in parallel using conventional HIV testing procedures. During this period POCT should not be performed without first obtaining a blood sample for conventional HIV testing as well.

## *Giving Test Results*

- Test results from point-of-care testing will be given to clients at the time of testing. The tester should take the test well/membrane into the room with the clients, so the clients can verify that the label is correct and see the result. ("This is your test result ...")
- Clients who test non-reactive will receive post-test counselling and be advised that any other testing will be conducted offsite and the results available in 2 weeks.

- Clients who test reactive or indeterminate on the point-of-care test will be counselled. They will be told that standard HIV testing is required to determine whether or not they have HIV, and that they will have to return for the final test results in two weeks time.
- Once the clients has been given their results the RN will document the test results in the Client's chart (including the clients requisition sticker, the POC kit lot number and the result) and complete the Point-of-Care HIV test log.
- All clients records must be kept for 10 years

### *Completing the HIV Test Requisition Form*

Clinics will use the same test requisition form for point-of-care testing that they use to request nominal or non-nominal HIV testing, and will complete all the fields on the form.

With each point of care test, CPL will provide a stamp that sites will use on the test requisition form to communicate with the lab as follows:

- If the clients tests non-reactive on the point-of-care test, the tester will complete all fields on the HIV test requisition, stamp the requisition with the provided stamp and check off the non-reactive box on the stamp and forward the form to CPL along with a tube of whole blood (red top vacutainer).
- If the clients tests reactive on the point-of-care test, the tester will complete all fields on the nominal requisition, stamp the requisition with the provided stamp and check off the REACTIVE box on the stamp and forward the requisition to CPL along with a tube of whole blood (red top vacutainer).
- If the clients tests indeterminate on the point-of-care test, the tester will complete all fields on the nominal requisition, stamp the requisition with the provided stamp and check off the indeterminate box on the stamp and forward the requisition to CPL along with a tube of whole blood (red top vacutainer).

When completing the HIV testing requisition, it is important to include the following information:

- Facility number
- The site address
- The information required to complete all fields\*, including the Patient Identifier
- The completed POCT stamp
- The name of the ordering health care practitioner

A contact name if the tester is ordering a STAT test (i.e., a test to be given priority and completed quickly). It should be noted that HIV confirmation cannot be conducted on a STAT basis).

\*NOTE: The laboratory will NOT process the specimen if the test requisition form is not complete. The form must have the client's full information.

#### Quality Control and Quality Assurance

Health care providers will follow the instructions that come with the point-of-care test kit, and will follow the Quality Control and Quality Assurance program as set out in the Policies and Procedures for Quality-Assured Conduct of Rapid HIV Point-of Care Testing in Manitoba manual developed by Manitoba Health and Healthy Living.

### III. Standard HIV Testing: Nominal and Non-Nominal

Standard HIV testing, nominally and non-nominally is available to clients at Nine Circles. It can take up to two weeks to obtain results from standard HIV testing.

- If the clients chooses nominal HIV testing, the P&P educator will complete the CPL General Laboratory Requisition and the nominal and non-nominal testing pre-test form and place them in the client's chart. One sticker from the requisition will be attached to the client's nominal and non-nominal testing pre-test form.
- If the clients chooses non-nominal HIV testing, the P&P educator will complete the CPL Non-Nominal Laboratory Requisition and the nominal and non-nominal testing pre-test

form and place them in the client's chart. One sticker from the requisition will be attached to the client's nominal and non-nominal testing pre-test form.

- The P&P educator will place the clients chart in the chart room for the RN.
- The RN will complete HIV test. The RN will place one sticker from the requisition onto the tube of blood after it is drawn and one onto the clients chart. One sticker will also be placed on nominal/non-nominal HIV testing log in the lab/med room.
- The RN will complete STI exam and test as per usual.

### **Nominal and Non-Nominal HIV Test Results**

It can take up to two weeks to obtain results from standard HIV testing.

- Nominal and non-nominal test results that return to Nine Circles will be documented in the client's chart.

### **Non-reactive Test Result**

- The P&P educator may give all **non-reactive** test results. The P&P educator will document the counselling session in the clients record.
- All clients records must be kept for 10years.

### **Reactive Test Result**

- The RN will give all **reactive** test results. The RNs complete the Manitoba Health HIV Contact Notification Form with the clients. The RN will document the counselling session in the client's chart.
- All clients records must be kept for 10years.

### **Indeterminate Test Result**

- The RN will give all **indeterminate** test results.
  - There are various reasons why a HIV antibody test may produce an indeterminate result, including early seroconversion, inadequate specimen sample, delayed specimen transportation and specimen processing problems.
  - When a client's test result is indeterminate, the RN will encourage the clients to have a repeat HIV test performed (nominally or non-nominally)
- All clients records must be kept for 10 years.

Appendix 3 – POCT Demonstration Program Evaluation Framework

<b>Rapid Point of Care (POCT) HIV Testing Demonstration Program – Evaluation Framework</b>						
Program Objectives:						
<i>Program component or activity to be evaluated</i>	<i>Evaluative question</i>	<i>Data requirements</i>	<i>Data collection tools/methods</i>	<i>Who will gather data</i>	<i>When will data be gathered?</i>	<i>When and how will results be shared?</i>
1. Is the POCT an acceptable alternative to standard testing?	1.1. Comparison of results from rapid and standard HIV testing protocol.	1.1.a. # of rapid and standard tests done 1.1.b. # and proportion of true positive, false positive, true negative, false negative	1.1.a-b. Daily POCT log (Appendix 1). Completed logs will be entered into Excel to calculate monthly totals.	1.1.a-b. Practitioner will record test on daily log. Data entry clerk to transcribe completed logs to Excel.	1.1.a-b. Enter data on daily log after each POCT. Confirmatory results from Cadham (CPL) to be added upon receipt.	1.1. Counts and rates prepared on a monthly basis. Summarized in interim and final reports.
	1.2. Determinants of POCT use.	1.2.a. Client demographic information (age, gender, ethnicity, sexual orientation, postal area) 1.2.b. HIV related risk factors (as per standard CPL HIV test requisition).	1.2.a-b. Pre-test Education Client Demographic Form (Appendix 2).	1.2.a-b. Pre-test educator.	1.2.a-b. After pre-test education session.	1.2. Summary stats (counts, proportions and means) reported monthly.

<p>2.1. What are clients' experiences with POCT at Nine Circles?</p>	<p>2.1.a. Overall level of satisfaction with testing experience.</p> <p>2.1.b. Clients' reaction to results (negative POCT, positive POCT and follow up results in cases of positive or negative confirmatory test).</p>	<p>2.1. <a href="#">STI Clinic client survey</a> (Appendix 3; Questions 11-13).</p> <p>2.1.b. Service provider focus group question guide (Appendix 4; Questions x-x).</p>	<p>2.1.a. Nurse will ask all clients attending on survey date to complete a self-administered questionnaire. Clients who have had a POCT will be asked to complete the survey while they await results.</p> <p>2.1.b. Evaluator will conduct focus groups with counselors and nurses.</p>	<p>2.1. Starting February 20, 2008 and every 6<sup>th</sup> Wednesday thereafter.</p> <p>2.1.b. Two focus groups will take place with nurses. First focus group in July, 2008, second focus group in January 2009.</p> <p>2.1.b. Descriptive summary of provider's observations.</p>
<p>2.2. Client satisfaction with POC HIV testing at Nine Circles.</p>	<p>2.2.a. Stated reasons for seeking or declining rapid HIV test</p>	<p>2.2.a. STI Client satisfaction survey (Appendix 3; Question x)</p> <p>Service provider focus group question guide (Appendix 4; Question x).</p>	<p>2.1.a. Nurse will ask all clients attending on survey date to complete a self-administered questionnaire. Clients who have had a POCT will be asked to complete the survey while they await results.</p> <p>2.1.b. Evaluator will conduct focus groups with counselors and nurses.</p>	<p>2.1. Count and proportions to be calculated on total surveys completed.</p> <p>2.1.b. Descriptive summary of provider's observations.</p> <p>2.1. Starting February 20, 2008 and every 6<sup>th</sup> Wednesday thereafter.</p> <p>2.1.b. Two focus groups will take place with each group (nurses and pre-test educators). First focus group in July, 2008, second focus group in January 2009.</p>

3. Service provider (nurse and pre-test educator) satisfaction.	3.1. What is the experience of service providers (nurses and pre-test educators) in offering POCT at Nine Circles?	3.1.a. Feedback re: POCT testing policies and procedures 3.1.b. Feedback on the device itself.	3.1.a-b. Service provider focus groups question guide (Appendix 4; Questions x-x).	3.1.a-b. Evaluator will conduct focus groups with counselors and nurses.	3.1.a-b. Two focus groups will take place with each group (nurses and pre-test educators). First focus group in July 2008, second focus group in January 2009.	3.1.a-b. Descriptive summary of providers' experiences.
<b>Reporting Schedule:</b>						
<i>Report</i>	<i>Timing</i>		<i>Distribution</i>			
Quarterly activity summary	May 2008, Aug 2008, Nov 2008, Feb 2009		Nine Circles Mgmt, Provincial HIV Working Group			
Interim report	August 2008		Nine Circles Mgmt, Provincial HIV Working Group			
Final report	March 2009		Nine Circles Mgmt, Provincial HIV Working Group			
<b>Forms:</b>						
Appendix 1: <a href="#">Daily POCT Log</a>						
Appendix 2: <a href="#">Pre-Test Education Client Demographic Form</a>						
Appendix 3: <a href="#">STI Clinic Client Satisfaction Survey</a>						
Appendix 4: POCT Service Provider Focus Group Question Guide (to be developed)						



## Appendix 4

### Pre Test Education Session - Client Demographic Form

Please complete for each clients after pre-test counselling only (i.e. not for clients returning for results). DO NOT INCLUDE CHART NUMBER, CLIENT'S NAME OR ANY OTHER IDENTIFYING INFORMATION ON THIS FORM. **Questions 1 – 9 to be completed by pre-test educator.** Once filled in, leave attached to front of chart for clinician. **Question 10 to be completed by clinician.** Submit completed forms to Research and Evaluation Coordinator.

Test date: \_\_\_\_\_  
Day / Month / Year

1. Client's year of birth: \_\_\_\_\_

2. Gender

Male  Female  Transgender (M-F)  Transgender (F-M)

3. Ethnicity

Aboriginal  Asian  Black  Caucasian  Other \_\_\_\_\_

4. Sexual Orientation

Gay/Lesbian  Heterosexual  Bisexual  Two-Spirit  Unknown

5. **First three letters** of postal code: \_\_\_\_\_

6. First visit to Nine Circles?  No  Yes  Don't know

7. First HIV test?  No  Yes  Don't know

8. Reason for coming for testing (*check all that apply*)

Named as contact  New sexual partner  
 Has symptoms  Tests regularly (e.g. every 6 months or more)  
 Seeking anonymous HIV test  Seeking rapid HIV test  
 At risk (*indicate risk factors below*)  Other specify \_\_\_\_\_

9. Risk factors (*check all that apply*)

Pregnant  Sex with men  
 Sex with women  Sex trade worker  
 Has STI or is a contact of STI case  Injection drug use  
 Born to HIV infected mother  Occupational exposure  
 Victim of sexual assault  Recipient of blood/blood product prior to 1985  
 Immigration requirement  Emigrated from HIV-endemic country  
 Other \_\_\_\_\_

**10. To be completed by clinician once type of test is determined.**

HIV requisition:  Nominal  Non-nominal  Anonymous

Rapid Point of Care Test done?  Yes  No

Appendix 5 – Demographics of STI Drop-In clients sample of 702 individuals<sup>34</sup>

**Age**

Mean	32.9
Median	29.00
Mode	29
Minimum	7
Maximum	68

	Frequency	Percent
Under 15	2	.3
15-20	58	8.5
21-30	302	44.5
31-40	154	22.7
41-50	97	14.3
51-60	51	7.5
61+	15	2.2

**Gender**

	Frequency	Percent
Male	465	66.5
Female	226	32.3
Transgender	8	1.1

**Sexual Orientation**

	Frequency	Percent
Gay/Lesbian	137	20.1
Heterosexual	470	69.0
Bisexual	74	10.9

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<sup>34</sup> n varies as not all clients provided information for every question appearing on the data collection tool (e.g. some did not disclose their sexual orientation or age), deleting all incomplete entries would have resulted in a far smaller sample of clients

### Ethnicity

	Frequency	Percent
Aboriginal	96	14.3
Asian	43	6.4
Black	28	4.2
Caucasian	480	71.5
Other	24	3.6

### Area of Winnipeg clients reside

	Frequency	Percent
Inner City	251	51.9
Non-Inner City	191	39.5
Rural Manitoba/Outside of Manitoba	42	8.7

Appendix 6

**Nine Circles Community Health Centre**  
**STI CLINIC – CLIENT SURVEY**

Please take a few minutes to complete the following brief survey. The information will be used to help us improve our drop-in services. All surveys are completely anonymous. You may leave your completed survey in the marked box located in the waiting room. Thank you!

1. How did you hear about Nine Circles STI testing clinic? \_\_\_\_\_

2. Do you have a family doctor? No Yes Don't know

3. Did you see a Pre and Post Test Educator today? No (Skip to question 4) Yes

<i>Please rate the Pre Test Education:</i>	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
3a. I was able to spend enough time with the educator.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3b. I feel the information I received was accurate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3c. I was able to ask the questions I needed to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Did you see a nurse or doctor today? No (Skip to question 5) Yes

<i>Please rate the visit with the nurse:</i>	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
4a. I was able to spend enough time with the nurse/doctor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4b. I feel the information I received was accurate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4c. I was able to ask the questions I needed to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Did you have an HIV test today? No (Skip to question 15) Yes Don't know

6. What kind of HIV test did you have?

Nominal     Non-nominal     Anonymous     Don't know

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
7. I feel I understand the difference between nominal, non-nominal and anonymous testing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I found it difficult to decide on the type of test to have.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I would choose to have the same type of test again in the future if I needed to test again.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Did you have a rapid HIV test today? (i.e. Did you receive your results today?)

No (Skip to question 13)     Yes     Don't know

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
11. I am confident that the result I received was accurate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I found it difficult to decide to have a rapid test done.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I would choose to have a rapid HIV test in the future if I needed to test again.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I feel I understand the difference between a standard and a rapid HIV test.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
15. I received the information I needed about how to prevent passing HIV or STI to myself or others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Because of what I learned today, I plan to do something new or different to protect myself or others from HIV or STIs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Overall, the testing experience made me feel anxious.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Overall, I am satisfied with the testing experience.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. The time of today's drop in clinic was convenient for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I would recommend this clinic to a friend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. What can we do to improve our services?					

Thank you for taking the time to complete this survey!

Please leave your completed survey in the marked box in the waiting room.

## Appendix 7

### **POCT Evaluation –Service Providers Focus Group Interview Questions**

1. Describe your perception of the client's experiences with the POCT:
  - a) Do they like or dislike the test?
  - b) How easy is it for them to decide whether or not to have the POCT?
  - c) What reasons do they give for choosing to have a POCT?
  - d) What reasons do they give for declining to have a POCT?
  
2. Describe how clients have responded to their results:
  - a) Non-reactive results – Do they trust the result to be accurate? What are some of the reactions you have observed?
  - b) Reactive results – Do they trust the result to be accurate? What are some of the reactions you have observed?
  
3. Provide your own feedback on policies and procedures related to the POCT:
  - a) What works?
  - b) What doesn't work?
  
4. Other comments/suggestions/feedback.

## Appendix 8

### Nine Circles AIDS/STI Infoline Activity:

April, 2008 – March, 2009

#### Summary

- There were a total of **324** calls to the AIDS/STI Infoline <sup>35</sup>
- **Males** made up the majority of callers (60%)
- Most callers (83%) were from the **Winnipeg** region
- Callers were most often inquiring about **testing** (e.g. hours, locations, the test process); 61% of requests for information were in regards to testing
- **HIV/AIDS** was the STI/STD most often asked about; HIV/AIDS made up 32% of requests for information about STI/STDs
- Callers were most often referred to **medical care**<sup>36</sup>; 74% of referrals made were to medical care

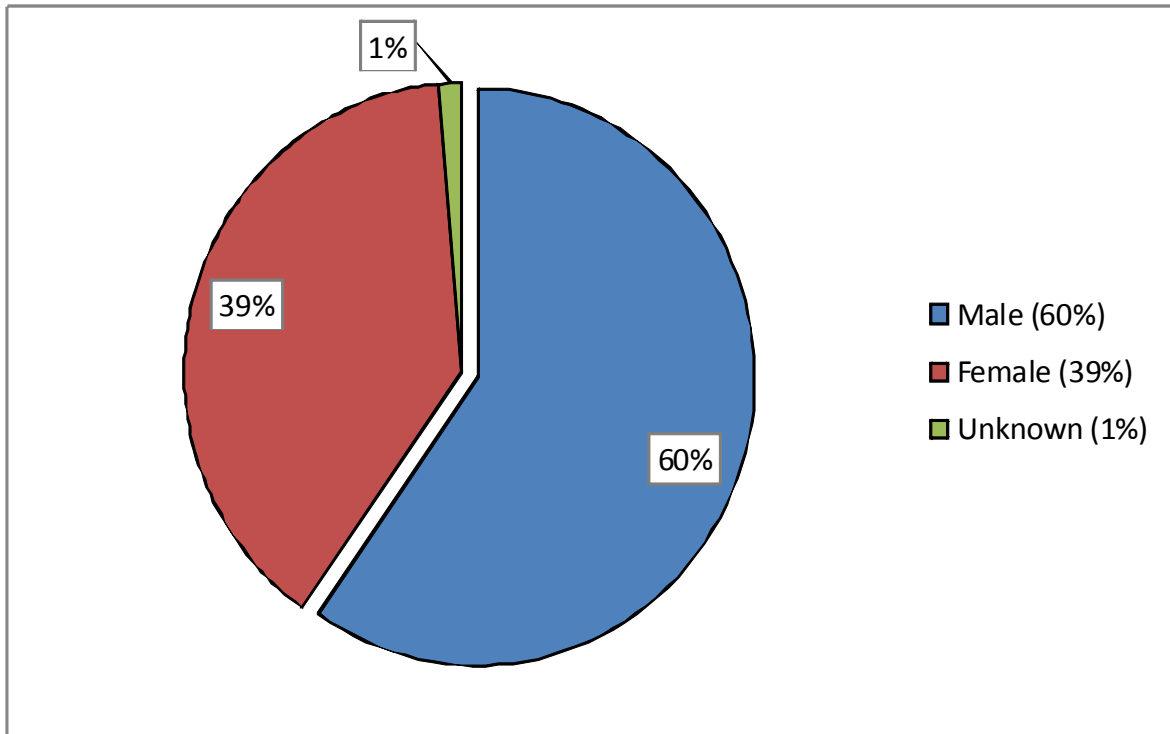
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<sup>35</sup> This number excludes missed calls, wrong numbers and 'prank' calls

<sup>36</sup> This includes: Nine Circles medical, their family physician, the hospital or another community health clinic (e.g. Klinik)



Callers by gender



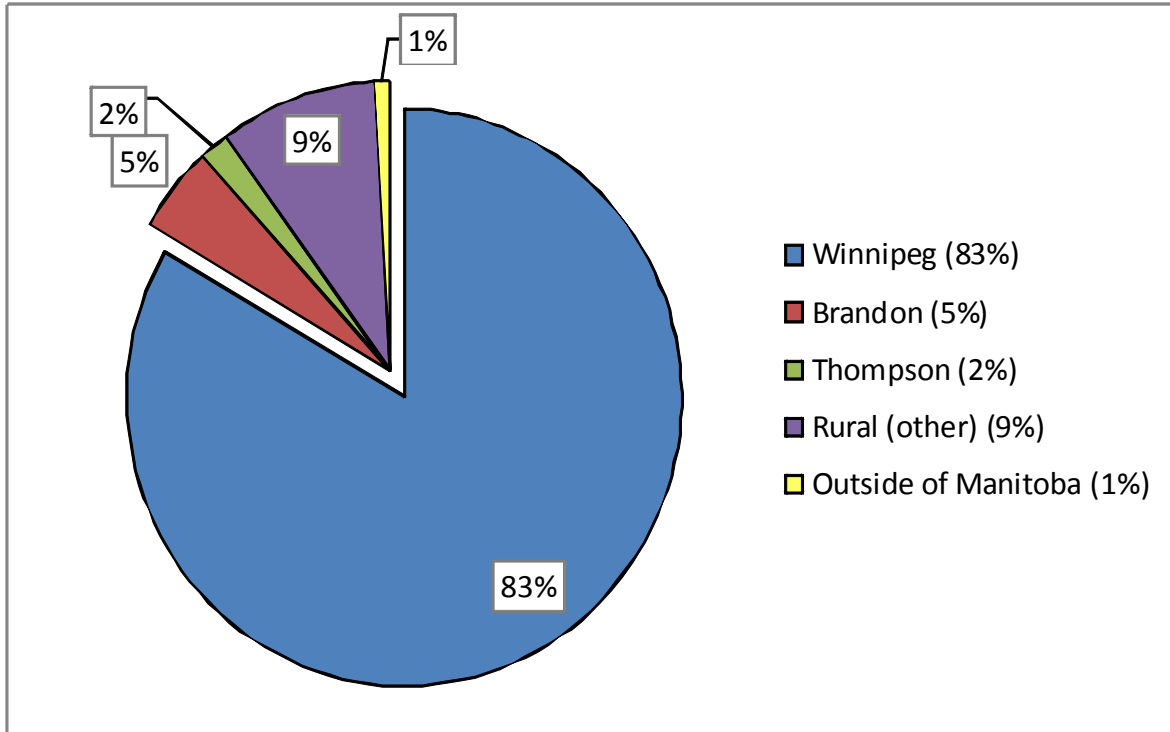
<sup>37</sup>  
<sup>38</sup>

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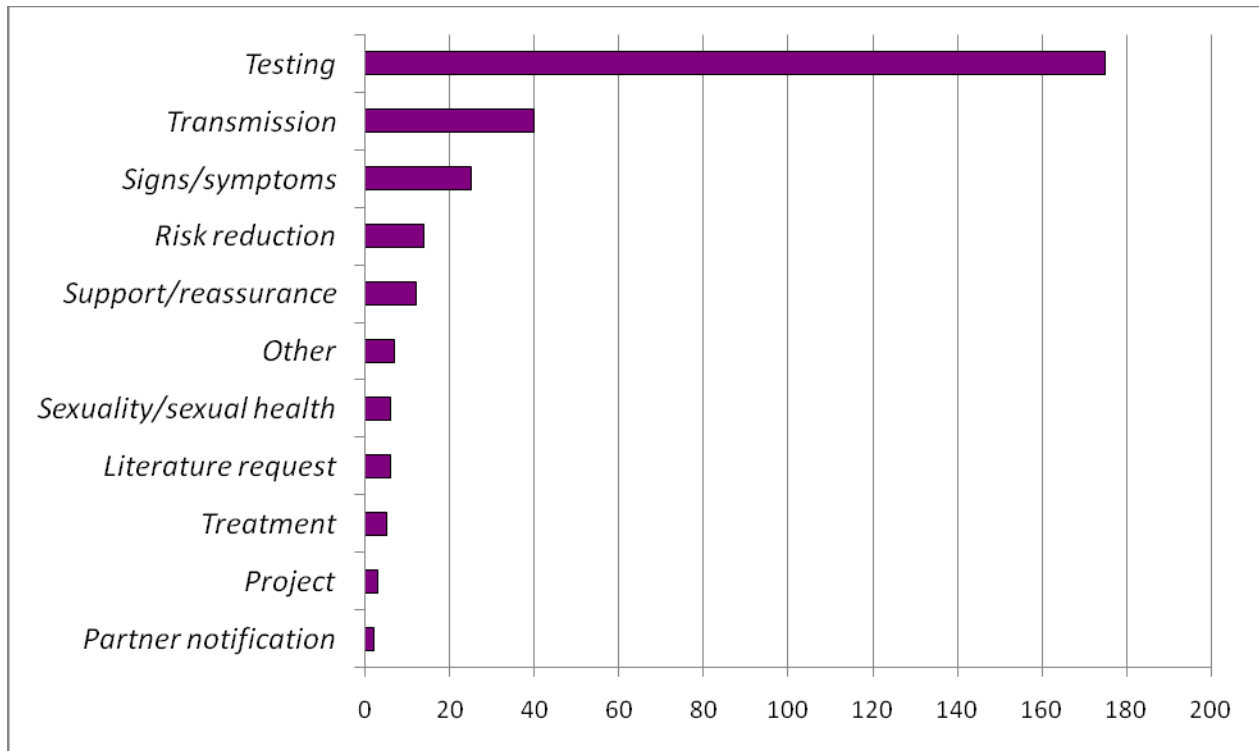
<sup>37</sup> "Unknown" = gender of caller was unknown to call answerer

<sup>38</sup> No callers identified as transgender

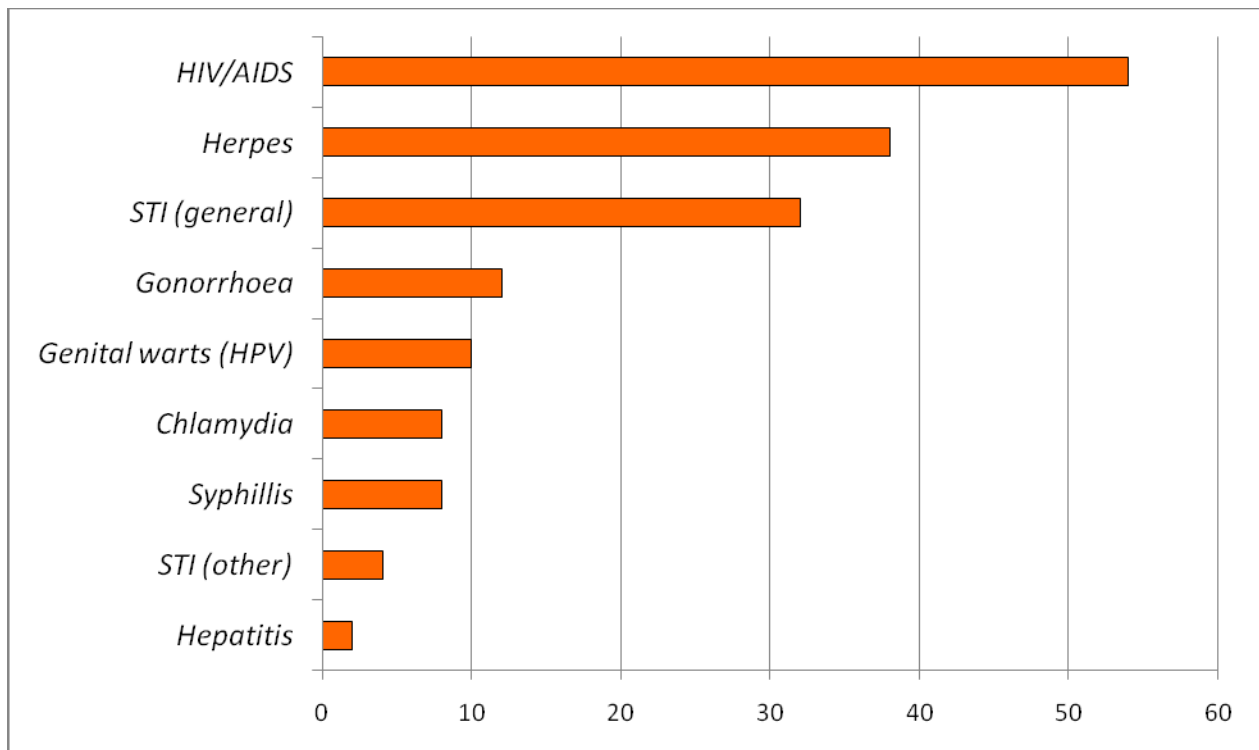
Callers by region



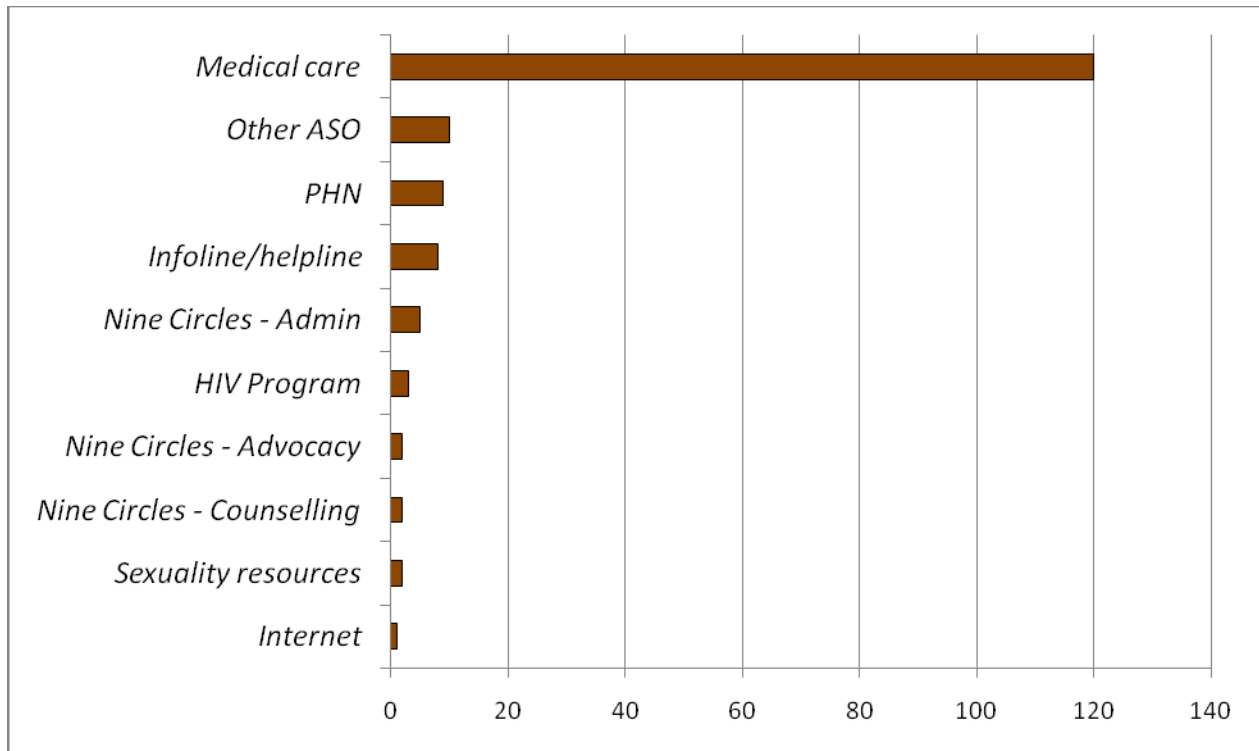
Information requested



STI/STDs asked about by caller



Caller referred to



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