1. **Purpose**
   1.1. To increase human immunodeficiency virus (HIV) screening and testing for:
       - Marginalized and underserved populations,
       - Known or suspected contacts to HIV, and
       - Populations with a higher than average prevalence of HIV infection.

2. **Scope & Goal**
   2.1. HIV point-of-care-testing (POCT) may be offered to street involved clients who meet **HIV POCT Screening Eligibility Criteria** when clients may be lost to follow-up, that is, to clients who are less likely to return to get their HIV testing results when traditional HIV testing is provided.
   2.2. This guideline is applicable to Registered Nurses working with the Population and Public Health Program’s Healthy Sexuality and Harm Reduction (HSHR) team who have the competency to perform these practices.

3. **Definitions**
   3.1. HIV Point-of-care testing "refers to the practice, undertaken by health professionals, for providing pre and post-test HIV counselling, modified to suit POC settings; and HIV testing using rapid HIV tests in the POC setting" (Public Health Agency of Canada (PHAC), 2007, p. 6)

4. **Background**
   4.1. HIV POCT is not intended to replace traditional HIV testing
   4.2. PHAC estimates 26% of HIV positive people in Canada are unaware of their status (PHAC, 2010). Marks, Crepaz, and Janssen, (2006) found that transmission of HIV is over three times higher for people unaware of their HIV infection compared to individuals aware of their HIV infection. According to the Manitoba HIV Program, over 50% of newly diagnosed individuals in Manitoba had a CD4 count under 350 cells/mm3 in 2010, and 64% in 2011, indicating that late HIV detection is a significant local issue. Late HIV detection is associated with higher morbidity, mortality, and increased health care costs (Chadbourn, Delpech, Sabin, & Sinka, 2006).
   4.3. POCT for HIV demonstrates the ability to increase screening rates, case finding, and facilitate earlier detection of HIV (Ashby et al. 2012, Guenter et al. 2003, Herbert et al. 2012) and eliminate some of the barriers to traditional laboratory based HIV testing such as, clinical wait times, hours of availability, need for follow up appointments, venipuncture, and anxiety associated with awaiting results (Dewsnap & McOwan, 2006, Forsyth, et al. 2008).
4.4. Post test counselling provides an opportunity to discuss the implications of the test result, the next step of action that will be taken including recommendations for follow up testing, or referral to HIV services, and HIV prevention/ risk reduction strategies. Post test counselling checklists are appended on WRHA HSHR Practice Guideline “Blood Testing for HIV, Hepatitis C virus, Hepatitis B virus, Hepatitis A virus, syphilis, and Communicating Test Results”

5. Procedure

5.1. RN Competency

5.1.1. An RN must attain the following competencies before conducting a POCT with clients:

- Competency in conducting a POCT as indicated by a certificate of training
- Competency in performing the HSHR team’s Practice Guideline “Blood Testing for HIV, Hepatitis C virus, Hepatitis B virus, Hepatitis A virus, syphilis, and Communicating Test Results”
- Competency in the HSHR team’s Practice Guideline “HIV Case and Contact Management”

5.1.2. In order to provide HIV POCT in a setting where only one tester/test interpreter is present (outreach settings), the RN must have interpreted a minimum of 25 HIV POCTs.

5.2. Continuing Competency for Staff

5.2.1. Staff deemed competent for conducting HIV POCT must participate in continuing education as arranged by the CD Coordinator, PHN Lead, CNS, Team Manager, or Medical Officer of Health (MOH).

5.2.2. To ensure ongoing competency in performance of tests, the HSHR team will implement the Quality Control (QC) and Quality Assurance (QA) program as set out in the WRHA HSHR procedure “HIV POCT Handling, Storage, and Quality Assurance”.

5.2.3. Weekly internal quality control testing will be performed by PHNs who are deemed competent to provide HIV POCT. Responsibility will be delegated to an appropriate PHN by the #1 PHN every Wednesday. Running internal quality controls provides an ongoing learning opportunity to observe reactive and non-reactive test results.

5.2.4. Continuing competency of those staff deemed competent for performing HIV POCT will be monitored by quarterly blind external quality control testing of all qualified POCT testers on a rotating basis. External quality
5.2.5. Records of staff training, competency, quality control measures, and on-going education will be maintained by the CD Coordinator and kept in a central “HIV POCT Quality Assurance” file.

5.3. **Client Counselling and Consent**

5.3.1. POC HIV testing will only be provided with pre-test counselling and informed consent. Standard and brief encounter HIV pre and post test counselling checklists are appended on WRHA HSHR Practice Guideline “Blood Testing for HIV, Hepatitis C virus, Hepatitis B virus, Hepatitis A virus, syphilis, and Communicating Test Results”. Pre-test counselling will be provided by the nurse performing the POCT.

5.3.2. A client’s agreement to participate in pre-test counselling is informed consent to be tested. It is not necessary to have clients sign an informed consent form.

5.3.3. Pre-test counselling must be modified for POCT to include the following information specific to the POCT:

- Point-of-care HIV testing is a screening test only.
- Results from the screening test are available within a few minutes.
- Clients who test negative will know immediately that they are negative (with considerations of window period).
- When the results of a point-of-care are reactive, indeterminate, or invalid, the client will be informed of such results and 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.
- Assessment of suitability of the client’s situation and environment to receive test results must be performed. If the situation is deemed unsuitable for provision of test results, POCT should not be performed.

5.3.4. The window period for antibody production/detection for an HIV POCT is considered the same as for traditional HIV testing (generally 3 months from exposure).

5.3.5. Concurrent testing for other sexually transmitted and bloodborne infections (STBBIs) is strongly recommended.

5.4. **Conducting the POCT**

5.4.1. Point of Care HIV Testing is only available nominally; however, confirmatory HIV testing by venous sample sent to CPL may be done nominally or non-nominally.
5.4.2. Follow the manufacturers’ instructions for obtaining the capillary blood sample. The insert will be updated regularly to include new information and should be reviewed. The RN should have in the room with the client:
- vial 1 and alcohol swab
- the safety engineered lancet
- the pipette
- The RN may also have a receptacle or test well in the room with the client in order to demonstrate that it has been labelled correctly with his/her name or number.

5.4.3. The blood sample will be obtained by finger prick. The test should not be performed using whole blood obtained through venipuncture. Only the lancet provided in the test kit can be used.

5.4.4. The sample and test well will be taken to the lab area, or separate testing space within the room to ensure that test analysis is done apart from the client (e.g. behind a partition, on test counter). If the test is performed in an outreach setting, efforts will be made to process the test outside of the client’s field of vision.

5.4.5. 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.

5.4.6. 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
- Vials 2 and 3 are not biohazardous and can be recycled.

5.5. **Interpreting the Point-of-Care Test (Biolytical Insti kit)**

5.5.1. It is recommended that two testers interpret all test results when possible (see 5.1.2 for providing HIV POCT in environments where only one test interpreter is available). Outreach workers within the HSHR team, although unable to perform tests, will be trained to interpret test results, so as to provide support for test interpretation in outreach settings.

5.5.2. Test results should be interpreted within 5 minutes of processing.

5.5.3. 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.

5.5.4. Anything other than an absolute negative in the test spot area is considered reactive, indeterminate, or invalid.
Reactive

Non-Reactive

Invalid

Invalid

Indeterminate

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5.6. Communicating Test Results and Post Test Counselling

5.6.1. 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 client, so the client can verify that the label is correct and see the result (“This is your test result …”). This should take place within 5 minutes of performing the test procedure.

5.6.2. Clients who test negative will receive post-test counselling and be advised that any other test results (if applicable) will be available in 2 weeks.

5.6.3. Once the client has been given their results, the RN will document the test results in the client’s chart, and complete the HIV point-of-care test log (S:\PUBLIC_HEALTH\HEALTHY_SEXUALITY_&_HARM_REDUCTION\Point-of-Care HIV Testing). File the testing log in the POCT cabinet at the completion of the shift, or as soon as possible afterward.

Negative Test Result

Negative or non-reactive HIV POCT results will be shared with the client and appropriate post-test counselling/education provided. Follow up or routine screening should be recommended on a case-by-case assessment of ongoing risk, last sexual exposure, or window period for HIV antibody production.

Reactive Test Result

Reactive HIV POCT test results will be shared with the client and appropriate post-test counselling provided. The RNs complete the Manitoba Health HIV Case and Contact Notification Form with the client.

- If a POCT is reactive, the client will be informed by the PHN that the test is “reactive” and that confirmatory testing is required.
- Appropriate post test education is provided. A venous blood sample should be obtained and sent to CPL for confirmatory testing either nominally or non-nominally according to WRHA HSHR Practice Guideline with Delegation of Function “Blood testing for HIV, Hepatitis C, Hepatitis B, Hepatitis A, syphilis, and Communicating Test Results”
- If the client declines a confirmatory HIV test by venous sample, the client will continue to be supported by the HSHR team according to “HIV Case and Contact Management” guidelines until the client has attended an intake appointment with the MB HIV Program. The Manitoba Health Case Report Form for Rapid HIV Testing must be completed and sent to Manitoba Health.
Indeterminate or Invalid Test Results

Indeterminate or invalid test results will be shared with the client and appropriate post-test counselling provided. 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 test result is indeterminate or invalid, the client will be informed that the result is neither reactive nor non-reactive and the client should be offered a second HIV POCT.
- If the repeat HIV POCT is either indeterminate or invalid, the client will be informed of the result and advised that standard HIV testing is required to determine whether or not they have HIV, and arrangements made to share test results in two weeks time. Confirmatory testing can be done nominally or non-nominally according to Practice Guideline with Delegation of Function “Blood testing for HIV, Hepatitis C, Hepatitis B, Hepatitis A, syphilis, and Communicating Test Results”
- Invalid test results must be documented in the POCT incident log and the lead POCT PHN and CD Coordinator notified as soon as possible.

5.7 Completing the HIV Test Requisition Form

If confirmatory HIV testing is required (POCT reactive, indeterminate, or invalid) the POCT result must be provided on the CPL general requisition in the space in the bottom right labelled “other tests or requests”. The laboratory will not process the specimen if the test requisition form is not complete. The form must have the client’s full information.

6. Standards of Care The nurse providing HIV POCT will:

- Use routine precautions
- Be aware of the Protocol for Exposure to Blood or Body Fluids in Community Services Workers Exposed to Blood or Body Fluids
- Offer HIV, HCV, HBV, HAV, syphilis screening as per the HIV, HCV, HBV, HAV, syphilis Screening Eligibility Criteria
- Review risks of infection along with the risks/benefits of testing including the value of Primary Care for all health/STBBI needs
7. HIV POCT Screening Eligibility Criteria

All testing provided by the HSHR team is focused on priority populations and is not intended to be universally accessible. POCT is not intended to replace traditional HIV testing and should be reserved for situations where the client may be lost to care, or where client follow up may be challenging (e.g. residential instability, short stay settings). The following eligibility criteria apply to HIV POCT.

**AT LEAST 1 OF THE FOLLOWING 5 CRITERIA**

- Client did not attend a primary care provider for screening of HIV due to health, social or economic inequities
- Incarcerated persons to whom the Healthy Sexuality and Harm Reduction team is making a special effort to reach because they are members of a spread network. If client is expected to have a stay of greater than 4 weeks in the institution, traditional HIV testing should be encouraged.
• Persons to whom the Healthy Sexuality and Harm Reduction team is making a special effort to reach because they are patrons of venues with significant risk of STBBI transmission (e.g., bathhouse patrons)
• Contacts to HIV being followed up by the HSHR team
• Clients of the Street Connections program

AND
• Client is able to understand the information, benefits and risks that are relevant to making a decision to be tested. If there are any doubts about the individual's capacity to consent, the testing should not be performed by the PHN, and the client should be referred to a physician/nurse practitioner for assessment

AND
• Client is at least 16 years of age. Note: For those clients between the ages of 13 and 15, a reasonable attempt must be made by the nurse to obtain parental/legal guardian consent prior to testing. For street involved youth, the persistent refusal to disclose guardianship will be considered a reasonable attempt to locate parents/guardians, and the mature minor provision will be followed

AND
• Client has any one of the following risk factors
  o Sexual contact with someone whose HIV status is unknown or positive
  o Injection drug use or sexual partner of person who uses injection drugs
  o Uses cocaine, crack cocaine, crystal methamphetamine, or solvents
  o Current infection or history of sexually transmitted infections
  o Sex trade worker/client of sex trade
  o Street involved (involved in economy on the street e.g. drug trafficking, gang involvement; street based sex trade involvement, or spends time on the street for recreation or due to residential instability and/or poverty)
  o Male who has sex with men on the cruising scene (or partner on cruising scene)
  o Tattoo/body piercing/acupuncture/scarification
  o Incarceration/history of incarceration
Validation


Other References:


Clinical Practice Guideline

TITLE: HIV Point-of-Care-Testing (POCT)

APPROVED BY: Healthy Sexuality and Harm Reduction Working Group

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