



**Islamic Republic of Afghanistan**

**Ministry of Public Health**

**Director General of Preventive Medicine**

**Communicable Disease Control Directorate**

# National Guidelines for HIV Testing and Counseling Services

Entry point to HIV prevention, treatment, care and support in  
Afghanistan



**2013**

**National AIDS Control Program**

## **Foreword**

A major contribution to achieving the stated objectives of Afghanistan HIV National Strategic Framework (NSF-II) is to empower individuals with self-awareness of HIV sero-status, as well as, to enable them to adopt protective behaviors against HIV infection and refer those who need to further related services. HIV Testing and Counseling (HTC) services are among the most successful interventions to any effective HIV response.

Almost ten years since the establishment of the National AIDS Control Program (NACP) in Afghanistan with the overall objective to maintain a low HIV level of epidemic among general population. In response to that, HTC services were first introduced in the country, in 2005, in the form of Voluntary Counseling and Testing (VCT) model. The Ministry of Public Health (MoPH) acknowledges the recent developments of HTC services that go beyond the classic VCT services. This document sheds light on the up-to-date approaches and modes of HTC services in accordance with current trends and international standards. MoPH in Afghanistan aims to place a high-quality HTC services that are accessible, acceptable, and effective to the selected target populations.

With a diversified approach and continued prioritization of HTC, it is the interest of the NACP/MoPH to facilitate the provision of optimal HTC services by regularly updating, disseminating, and implementing its national HTC guidelines.

NACP/MoPH share its sincere encouragement to all those who will be utilizing the guidelines put forth in this document.

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## Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ANCs	Antenatal Clinics
ART	Anti-retroviral Therapy/Treatment
ELISA	Enzyme-Linked Immunosorbent Assay
FSWs	Female Sex Workers
HBV	Hepatitis B Virus
HBHTC	Home-Based HIV Testing and Counseling
HCV	Hepatitis C virus
HIV	Human Immunodeficiency Virus
HTC	HIV Testing and Counseling
MIS	Management Information System
MoPH	Ministry of Public Health
MSM	Men who have Sex with Men
NSF-II	National Strategic Framework-II
OST	Opioid Substitution Therapy/Treatment
PMTCT	Prevention of Mother-To-Child-Transmission
PWIDs	People Who Inject Drugs (PWIDs)
QA	Quality Assurance
QC	Quality Control
STIs	Sexually Transmitted Infections
TB	Tuberculosis
UNICEF	United Nations Children's Fund
WB	Western Blot
WHO	World Health Organization

## Definitions used in this document

### Anonymous HIV testing

HIV test that *does not* require any client's personal identification data

### Confidential HIV testing

HIV test that *does* require some client's personal data e.g. name. In this case, only service providers with direct role in HIV management should have access to medical record.

### HIV Counseling

*“A confidential dialogue between a client and a counselor aimed at enabling the client to cope with stress and take personal decisions related to HIV/AIDS.”*

### HIV-negative

A person who is HIV-negative shows no evidence of infection with HIV on a blood test (e.g. absence of antibodies against HIV). Synonym: sero-negative. The test result of a person who has been infected but is in the window period between HIV exposure and detection of antibodies will also be negative.

### HIV-positive

A person who is HIV-positive has had antibodies against HIV detected on a blood test or gingival exudate test (commonly known as a saliva test). Synonym: seropositive. Results may occasionally be false-positive, especially in infants up to 18 months of age who are carrying maternal antibodies.

### HIV Testing

The process by which blood or body fluids are screened for the presence of antibodies or antigens produced in response to HIV infection.

### Informed Consent

In the context of HIV Testing and Counseling, the client should be made aware of all implications knowing his/her HIV sero-status in a manner in which he/she can understand, and eventually accepting or declining, with no coercion whatsoever, to be tested for HIV. In most cases the informed consent is obtained through verbal communication with the client.

### Negative predictive value

The probability that when the test is negative, a specimen *does not* have antibody to HIV.

### **Positive predictive value**

The probability that when the test is reactive, the specimen *does* contain antibody to HIV.

### **Referral**

The process by which client needs for further HIV prevention, treatment, care, and support are assessed and prioritized and clients are provided with assistance in accessing his/her needed services.

### **Sensitivity of the test**

The probability that a test will be positive when infection is present (i.e. the sensitivity of a test is the percentage of those identified by the test as having the infection who actually have it).

### **Sero-prevalence**

As related to HIV infection, sero-prevalence is the proportion of persons who have serologic evidence of HIV infection, i.e. antibodies to HIV, at any given time.

### **Sero-status**

Is a generic term that refers to the presence/absence of antibodies in the blood. The term is often used to refer to HIV antibody status.

### **Specificity of the test**

The probability that a test will be negative when infection is not present (i.e. the specificity of a test is the percentage of those identified by the test as not having the infection who are actually free of infection).

### **Window period**

The interval between the time of HIV infection and the ability of the test to detect HIV antibodies. This period, with the advanced technologies in sensitivity and specificity, is about 4 weeks.

## Introduction

HIV Testing and Counseling (HTC) services take a cornerstone position of any successful response to HIV and support the universal access to HIV treatment and prevention. The counseling component of HTC services is an opportunity to empower individuals/couples to learn about their HIV sero-status and, eventually, adopt measures to prevent transmission and/or acquisition of HIV infection. Furthermore, testing provides access to other HIV-related prevention and treatment services e.g. Prevention of Mother-To-Child transmission (PMTCT), prevention of Tuberculosis (TB) and Sexually Transmitted Infections (STIs), harm reduction, behavioral prevention, and Antiretroviral Treatment (ART).

There are different approaches and modes of HTC services that are currently available in Afghanistan (*See chapter 1 for details on HTC approaches and modes*). Up to date, there are 16 Voluntary Counseling and Testing (VCT) centers, 28 Drop-in Centers (DICs) and a number of Antenatal care and TB clinics that provide HTC services to their clients.

The objective of this national HTC guideline is to provide practical standardized guidance on the implementation of HTC practices including VCT. This guideline is divided into five chapters; **Chapter 1** gives an overview on different approaches and modes of HTC while **Chapter 2** refers to HTC principles and ethical practices that should be maintained throughout the HTC process. HTC procedures/protocols are discussed in **Chapter 3** while HTC infrastructure, human resources, training requirements and target populations are covered under **Chapter 4**. And **Chapter 5** covers quality assurance needs of HTC services. **Chapter 6** Includes annexes.

This national guideline of HTC is intended to all clinicians and public health physicians who are involved in prevention and treatment services related to HIV at both central and provincial levels. Stakeholders and policy makers in HIV planning, strategy, and policy decision-making positions are also targeted in this guideline.

It is worth mentioning that the process of updating this guideline was grounded by the 2012 World Health Organization (WHO) publication on service delivery approaches to HTC “*a strategic HTC program framework*”, as well as, the objectives stated in the NSF-II 2011-2015. It also takes into consideration the HIV epidemic context of Afghanistan as by September 2012.

## Chapter 1 Approaches to and modes of HIV Testing and Counseling (HTC)

There is no single perfect approach and/or mode of HTC exists. Now, with the wide range of HTC service delivery models, HIV programming to select the best combination out of these varieties should be strategic and evidence-based. Nature of the epidemic, cost-effectiveness, equity of access, and resources are key criteria for selecting this best combination. Description of these different approaches and modes of HTC service delivery are given in this chapter.

### I. Approaches to HTC

Four approaches can be distinguished, when an individual, or his blood, can be tested for HIV. Each has different target population, requirements, and procedures. These are: **1)** voluntary counseling and testing, **2)** provider-initiated testing and counseling, **3)** surveillance and research HIV testing, and **4)** mandatory HIV testing.

#### 1) Voluntary Counseling and Testing (VCT)

VCT was the first programmatic form of HTC. It is also called Client-Initiated Testing and Counseling (CITC). In this approach clients make the conscious decision out of their own will to actively seek HIV testing with no external coercion. VCT clients are given pre-test counseling based on their needs, offered HIV-testing after an informed consent, and then they are given the test results during a post-test counseling session. Referral to other HIV services, based on the HIV test result, is always required for both HIV negative and positive clients.

VCT has been an integral part of any HIV response as an entry point for prevention, treatment, care, and support. However, the low uptake of VCT services has led to the introduction of other innovative service delivery modes and approaches for the purpose of increasing the utilization of HTC and eventually achieving a universal access to prevention and treatment of HIV infection.

The first introduction of VCT approach in Afghanistan was in 2005 in a form of stand-alone VCT site in Kabul city. Currently, there are a number of eight VCT sites distributed over eight provinces (**Annex A**).

#### 2) Provider-Initiated Testing and Counseling (PITC)

In this approach, health care providers actively recommend HIV testing with their clients and/or patients for the purpose of diagnosis and, eventually, better clinical outcome (**diagnostic HIV testing**) or to offer an antiretroviral prevention e.g. PMTCT (**routine HIV testing**):

**Diagnostic HIV testing:** is indicated to all individuals with HIV-related signs and symptoms with the objective to aid clinical diagnosis of HIV for better care and management.

**Routine HIV testing:** can be offered to populations who are vulnerable to or at risk of HIV infection but who are asymptomatic e.g. STI patients, key populations such as People Who Inject Drugs (PWIDs), and pregnant mothers in certain epidemic circumstances.

In PITC, the pre-test counseling session should be tailored to the needs of each target population and adapted to the setting and nature of the service delivery in which HIV testing is being offered. PITC also should ensure a good referral to more advanced post-test counseling services, whenever needed.

Either “**Opt-in**” or “**Opt-out**” strategies can be used for PITC; “Opt-in” generally refers to counseling and testing where a client explicitly consents to the test. With the “Opt-out” approach, individuals may specifically decline the HIV test having received pre-test information, without this decision affecting their clinical care

As in VCT approach, clients and/or patients who offered HIV testing in a PITC approach should always retain their right to opt out of a systematic of HIV testing.

### **3) Research and surveillance HIV testing**

HIV testing for research purposes should be done on a voluntary basis i.e. all research participants should give an informed consent prior to testing accompanied with appropriate pre and post-test counseling. As a general principle, study/survey subjects should be offered all necessary pre and post-test prevention and treatment referral services, as needed. Example of HIV testing in research studies includes bio-behavioral surveillance surveys conducted among key populations at higher risk e.g. PWIDS, MSM, and FSWs. The recommended approach to HIV testing in these studies is the “*linked anonymous testing with informed consent*”. In this approach, participants choose to have their blood tested for HIV; however, no personal identifiers or names are collected. Instead, each study subject is given a unique, non-identifying code so that all individuals obtain their test result.

Other approach to HIV testing is the “*unlinked anonymous testing without informed consent*”. This approach can be used for sentinel surveillance where testing is done on specimens of blood collected for other purposes (e.g. syphilis testing) and individual may or may not be aware that HIV testing will be performed. The purpose of HIV testing in sentinel surveillance is to track the prevalence of infection by person, place or time. It is important that all information that could personally identify the subject is destroyed and only routinely collected data (e.g. socio demographic and behavioral data) is collected for the purpose of determining HIV prevalence by sub-population. The major disadvantage of this approach is that individuals do not get their test results.

### **4) Mandatory HIV testing**

Mandatory HIV testing is only needed when blood or blood products are destined for transfusion. HIV testing, in these cases, is performed only on blood or blood products and not on the person who donates blood. Mandatory testing of individuals is deemed to be unethical and violates the human rights. In addition, it has been proved that mandatory testing has no public health impact in response to HIV in terms of behavior change and adherence to ART.

Blood transfusion should no longer be a risk of HIV transmission. All blood donations should undergo mandatory screening for HIV and other blood-borne viruses, such as Hepatitis C Virus (HCV) and Hepatitis B virus (HBV), in order to ensure safe blood transfusion.

## II. Modes of HTC

Both CITC/VCT and PITC approaches can be provided through different modes of service delivery settings (Table 1). A selective combination of approaches and modes among all of these varieties is required for an effective outcome of HTC services (WHO, 2012).

Table 1 Different modes of HTC service delivery, WHO, 2012.

HTC mode		
Clinical setting	Other facilities	
ANC	Stand-alone VCT	Home-based index
TB, STI clinics, OST, NSP	Drop-in centers	Outreach and mobile
General and other specific clinics		Home-based door to door
		Events
		Campaigns
		Workplace, schools

WHO, 2012.

### 1) Facility-based HTC

HTC can be offered in health facility-based settings or other non-health facility based settings. Health facility-based HTC involves PITC in Antenatal clinics, TB, STI clinics, specific HIV-related settings (OST and NSP). Stand-alone VCTs and DICs can be examples of non-health facility-based HTC service delivery.

#### *PITC in Antenatal Clinics (ANCs)*

ANCs are where HTC services can be provided to pregnant women and their children. PITC has been implemented widely among pregnant women in settings where HIV prevalence is generalized<sup>1</sup>. This strategy is intended to further provide access to PMTCT services and has contributed to almost universal access to HTC among pregnant women and has been an important component of successful PMTCT programs.

For countries with low-level and concentrated HIV epidemics, like Afghanistan, a cost-effective needs assessment is always needed before any decision to expand HTC among pregnant

<sup>1</sup>UNAIDS classifies HIV epidemic states into **three** levels; **low level** where HIV prevalence is less than 1% in any defined sub-population, **concentrated level** where HIV prevalence consistently exceeds 5% in at least one defined sub-population while remains below 1% in pregnant women in urban areas (general population), and **generalized level** where HIV prevalence consistently exceeds 1% in pregnant women (UNAIDS, 2000).

women.NACP, with the support of United Nations Children’s Fund (UNICEF) and the collaboration of AFGA (NGO), has selected a number of ANCs in different provinces (**Annex A**) with the purpose to provide PMTCT of HIV to pregnant women at these sites.

### ***PITC and routine HIV testing in TB, STI, Opioid Substitution Therapy (OST), and other specific clinical settings***

The decision of providing HTC services in any of these settings; TB, STI, OST sites, should be guided by the epidemiologic pattern of HIV in any subpopulation or locality. World Health Organization (WHO) recommends conducting a routine HIV testing, through a PITC approach, to all TB patients.

STI patients and other key populations e.g. PWIDs can be offered HTC services at their facilities e.g. STI clinics, OST, and Needle-Syringe Programs (NSP). Provision of HTC services to these populations at their facilities was found to be effective in improving care and reducing loss to follow-up among them.

In some specific clinical care settings, such as infectious disease hospitals, where patients can be presented with symptoms and signs suggestive of HIV infection or Acquired Immune Deficiency Syndrome (AIDS), it is recommended to inaugurate HTC services. Patients, based on their HIV test results, are then subject to further HIV follow-up prevention, treatment, care, and support services as identified by their health care providers. In some settings e.g. OST sites, the needed follow-up services can be provided within the same site. However, in some other settings, a referral system should be in place to ensure appropriate connection to further follow-up services, whenever needed.

### ***HTC in non-health facilities***

HTC can be offered in stand-alone sites, usually, outside the health-care facilities. This HTC mode; VCT, was the predominant mode in the first two decades of the HIV response. VCT requires personal motivation to seek HTC which may face some contextual barriers in some circumstances e.g. stigma and discrimination. Also, it was found that VCT mode, alone, is not enough to achieve universal access to HTC services and other complementary approaches and modes of HTC are always needed.

## **2) Community-based HTC**

Community-based HTC can be implemented in a variety of settings, outside the health-based facilities. In contrast to the facility-based HTC, community-based HTC services help reduce structural, operational, logistic, and social barriers such as stigma, discrimination, punitive laws, and policies and, therefore, maximize knowledge of HIV status and make universal access attainable.

### ***Home-based HTC (HBHTC)***

Based on HIV pattern of certain geographic areas and the structural context of communities, it is effective to outreach the intended target population in their familiar environments such as their homes. HBHTC can be delivered as door-to-door approach, which was found successful in high-prevalent settings, or in a form of index-case HBHTC. An index case can be either HIV infected person, TB patient, or an individual whose behavior is at higher risk of HIV exposure. In all cases, consent of the index case must be obtained prior to a home visit.

HBHTC can be provided by well-trained lay counselors or community health workers and can also be integrated into other home-based health services, if any. HBHTC mode was found to be more convenient in terms of removing structural and logistical barriers to HTC and ensuring that individuals and families at increased risk of HIV infection are offered HTC services.

Despite some challenges associated with HBHTC implementation, such as confirmation of positive results, quality assurance to ensure accurate test results and providing linkages to other services, HBHTC mode can identify a high proportion of the couples who are sero-discordant.

### ***Mobile and outreach HTC***

HTC services can be made accessible to remote communities either as outreach teams to their community sites or through mobile vans or tents. This mode should be strongly linked to well-functioning drop-in centers and other referral services such as testing confirmation facilities and treatment services. The effectiveness of mobile and outreach HTC mode is that it can be adapted to the time and locations of hard-to-reach populations, such as PWIDs, Female Sex Workers (FSWs), and Men who have Sex with Men (MSM).

Mobile and outreach HTC mode can integrate other health services along with HTC in order to cover stigma and discrimination associated with HIV and, therefore, increase service uptake.

### ***Workplace and school-based HTC***

In this mode, VCT is made available to employees and their spouses and students (adolescents who are sexually active) who find it hard to go to health facilities. Factors such as HIV epidemic pattern, acceptability, cost-effectiveness, community sensitization, and confidentiality issue should be taken into account before any scale-up of this HTC mode.

### ***HTC campaigns and events***

HTC services can also be delivered through national, regional, or provincial campaigns and events based on the program needs and priorities. It can also be offered as a single-HTC event (e.g. World AIDS Day) or can be integrated within other health service/disease campaigns.

## Chapter 2 HTC principles and ethical practices

### I. The guiding principles of HTC service delivery

“Mandatory or coerced testing is never appropriate, whether that coercion comes from a health-care provider or from a partner or family member” (WHO, 2012).

To ensure voluntary utilization, effectiveness, and sustainability, HTC, must adapt and adhere to the following five C’s principles (WHO, 2012), regardless the model of service delivery:

#### 1) Consent

The client should voluntarily agree to have his/her blood tested for HIV. This consent should be based on sufficient, accurate, and clear information i.e. “**informed consent**”. The minimum package of information needed for an informed consent should cover the following main points:

- Reasons why HTC is being recommended.
- Details, risks, and implications of HIV testing and meaning of test results.
- The post-test follow-up prevention, treatment, care, and support services.
- Assurance of confidentiality and the right to opt-out at any stage of the process without any negative consequences.
- Disclosure strategy and any further inquiries by the client.

In most settings, verbal communication is normally adequate for the purpose of obtaining informed consent. In some other circumstances, a written informed consent may be required to protect rights of both counselor and client e.g. clinical settings.

Children (under 16) may be tested for HIV with the consent of a parent or a guardian. Consent may not be a requirement in cases of unconsciousness and HIV testing is recommended for a clinical diagnosis.

#### 2) Confidentiality

Anything that is discussed between the counselor and the client must be always kept confidential and not to be disclosed to a third party without prior consent of the client. HTC clients can be identified by code numbers, but names may be, sometimes, required to facilitate referral to other services. Breaching of confidentiality and disclosure without consent is allowed only under certain circumstances (**Chapter 3 for details**).

#### 3) Counseling

HTC services must be accompanied by appropriate, high-quality pre-test information/counseling and post-test counseling. Quality assurance mechanisms and supportive supervision and mentoring systems should be in place to ensure the high quality of counseling.

#### **4) Correct test results**

To ensure delivery of correct test result, and therefore effective HTC outcome, high-quality assurance mechanisms must be in place. High-quality assurance of HIT testing should include quality control measures and should be supported by national reference laboratory.

#### **5) Connections to prevention, treatment, and care services**

Connection to high-quality follow-up services to all HTC beneficiaries, regardless of whether they opt out to test, should be a guiding principle to HTC service delivery. Follow-up services should include all HIV prevention, treatment, care, and support services.

## **II. Ethical practices of HTC services**

HTC services must be executed within a “professional code of conduct” that stratifies the ethical counselor-client relationship.

- Respect and dignity to all HTC clients
- Anonymity and confidentiality
- High-quality counseling
- Informed consent
- Age of consent
- Encourage ethical partner counseling (partner notification)
- No stigma and discrimination against People Living with HIV (PLHIV)
- Religiously adapted and culture sensitive approach to HIV service delivery

## Chapter 3 HTC procedures/protocols

HTC work flow (**Annex B**) starts with community mobilization with the objective to promote HTC services. Interested clients are then registered using unique identifiers, followed by pre-test counseling or –pre-test information based on the mode and approach of HTC. Clients, at this point, may decline HIV testing i.e. opt-out of the service and may restart all over again. Some other clients may go further to undertake HIV testing that should be preceded by informed consent. The test result is then disclosed to the client during a post-test counseling session. Based on their needs, clients may then be referred for follow-up prevention and/or treatment services that can be on-site or off-site facilities.

### I. Community mobilization

Communities should be informed about the availability and role of HTC different modes and approaches through promotional activities. The design and planning process of the HTC promotional activities should be always prioritized and guided by the HIV epidemic pattern for each setting. Protocols that are content-specific and target-oriented should be developed and tailored to each HTC mode and approach.

Communication channels for HTC promotion is designed to be appropriate and culture sensitive to the target sub-populations. It may include targeted seminars, billboards, pamphlets, brochures, TV and radio spots, as well as home visits carried out by family health care providers.

### II. Client registration

For the purpose of HTC program planning, socio-demographic data are needed for all clients of HTC services. Based on the mode and approach of the HTC, client registration can be either anonymous (unique code identification) or confidential. Whenever the service is changed from anonymous to confidential the client should be well-informed about the implications of this change. For instance, referring a client to an off-site HIV-related service may require some identification; however, confidentiality must remain the most important guiding principle for successful sustainability and effectiveness of HTC.

A client registration log book (**Annex C**) should be available at all HTC service delivery points. The following data should be collected for each client:

- HTC site specifications (province, site name, site type)
- Serial numbers of all clients
- Date of first visit
- Unique code number/name of the client, and name of counselor
- Age and sex of the client
- Address (geographic location) of the client

- Marital, educational, and occupational status of the client
- Pre-test, test results, post-test counseling
- Sexual and drug use behavior
- Referral services

### III. Pre-test counseling/information session

Pre-test counseling can be provided to either one client (**individual counseling**), two partners (**couple counseling**), or a group of clients (**group counseling/information**). Accordingly, duration and content of the session differs by different type of counseling. There is no preferred type of counseling, however, the HTC mode/approach, availability of standard counseling setting, and client flow rate are main determinants of what type of counseling is to be delivered. In ideal situation, where ample time and place are available, the objectives of the pretest-counseling session are to:

- Assess client's understanding of HIV basics, fill gaps in knowledge if needed, and correct misconceptions, if any. This includes providing information about HIV modes of transmission, preventive methods, and treatment and care options.
- Assess client's risk behavior, including sexual and drug use behaviors.
- Develop, with the client, risk-reduction plan and maintain safe behavior to avoid future infection and/or to prevent further spread of HIV (through safe sex and change drug injecting practices).
- Explain process, meaning of results, and implications of HIV testing to an informed decision about whether to be tested.
- Help the client handle possible emotional reactions related to the HIV test results and discuss strategies for partner disclosure.
- Discuss coping strategies, referral, and ongoing treatment and support services whenever needed.

To help achieve the above mentioned objectives of pre-test counseling session, the following process guide can be used:

#### 1) Cross-check of client's code

Before starting the pre-test counseling session, the counselor should cross-check code numbers on ALL forms (e.g. registration, client-intake form, and test request form) against the client's code.

#### 2) Introduction and orientation

The interaction between the counselor and the client in the pre-test counseling session should be contained within a **confidential, convenient, and trustful relationship** in order to achieve the desired outcome. To break the ice and to establish rapport for the pre-test (first) session, the counselor should first greet the client, introduce himself and describe his role,

explain confidentiality with the client, and outline session process; topics, duration, testing procedures. The counselor should also inform the client that he will take down a few notes on at the end of the session for record keeping; however, it is preferable to complete the client intake form after the client leaves the counseling room.

### 3) **Demographic data collection**

These data are helpful for monitoring and evaluating HTC services, and eventually, for **program planning**. Demographic data such as age, marital status, education, and occupation can be collected with the purpose to further break the ice between the counselor and the client.

### 4) **Information about the service**

The counselor should ask the client how he/she learned about the site. This information is important for **social marketing of the HTC service**. Then ask about reason for visiting the site.

### 5) **Basic facts about HIV and AIDS**

Client's HIV knowledge may be incomplete or may have some misconceptions. It is important that the client receives **complete and correct knowledge about HIV and AIDS** in terms of modes of transmission, prevention, treatment options. Information given to the client should be simple, clear, and sufficient to enable informed decision about HIV testing.

### 6) **Risk assessment**

The counselor needs to explain why he is going to openly discuss sensitive issues with the client which may not be comfortable. The following good reasons may possibly be explained:

- To give realistic feedback about individual's risk of being infected.
- To ensure that the client knows how to protect him/herself and partner(s) safe in the future.
- To see if the client has other potential health problems that this test will not identify.
- To make appropriate treatment and care suggestions

Both self and partner's risk assessment should be conducted. **Self-risk assessment** includes: exposure to risk (when, where and how), sexual activity (vaginal, anal, and oral), experience of STIs, number and type of regular and non-regular partners, condom use, and risk triggers (alcohol, drugs, stress, loneliness, money). **Partner's risk assessment** includes: concerns about HIV in partner(s), partner risk triggers, living condition, if partner has other sex partners, knowledge of partner/s' HIV status and STI, and future plans with partner(s).

### 7) **Communication with partner(s)**

The counselor should also explore how the client is going to discuss about HIV, risk reduction, testing, and condom use with partner(s).

## 8) Risk reduction plan

A major focus of HTC process is the development of client-tailored risk reduction plan. The counselor should provide **risk reduction counseling** to help the client or couple identify a plan for the prevention of HIV transmission or acquisition that is specific to test result and personal life situation. In risk reduction counseling, the client can discuss the following points:

- Previous risk reduction attempts, if any. And details of successful and failed attempts.
- Condom use skills and safe injection practices.
- Re-visit risk triggers for high-risk behavior.
- Other risk reduction options.
- Risk reduction and testing of partner.
- Recap on the agreed risk reduction plan.

The counselors should give correct instructions to their client on proper (male) condom use:

- Decide on the use of a condom beforehand.
- Always check the expiry date indicated on the condom package.
- Press the condom package with fingers to make sure it is intact.
- Identify the appropriate point to tear the package, push the condom downwards, and carefully rear the package. Do NOT use sharp objects.
- The condom should be put on, before any genital communication and after erection.
- Ensure proper direction of the condom i.e. the part to be unrolled is on the outside. Press and hold the tip of the condom with thumb and forefinger to keep out the air.
- Place the tip of the condom on the head of the erected penis, and use the other hand to unroll it to the base of the penis.
- Keep the condom on during the intercourse.
- After ejaculation, while the penis is still in erection, pull out of your partner holding the condom at the base.
- Wrap the condom in toilet paper and throw it away out of reach of anyone else.
- NEVER reuse the condom.

The counselors should also give correct instructions to their client on needle and syringe cleaning (e.g. the '2 by 2 by 2' method):

- Draw cold water (sterile or cool boiled is the best) into the syringe and flush it out (down the sink or into a different cup) twice.
- Draw bleach into the syringe and shake it for 3-5 minutes (minimum 30 seconds) and flush it out twice.
- Redo the first step (cold water) twice.

## 9) HIV testing

The counselor should first assess the HIV testing history of the client, if any, and the results obtained. Also, it should be clear to the client that HIV testing is optional and he/she has the right to decline the test. The counselor should discuss the following HIV testing points:

- The window period.
- Exact testing procedures and waiting time.
- Meaning of positive, negative, and intermediate results.
- Potential client's reaction to any of the three test results.
- What result the client is expecting today.
- Implications of results to self, partner, and family

## 10) Assessing support services

Part of the pre-test counseling session is to explore with the client potential follow-up support. As well as the available referral network to post-test prevention, treatment, care, services. The following points can guide the counselor to assess/discuss that:

- Partner notification, including counselor-assisted disclosure.
- Friend, relative, or family supporters
- Expected reaction and management of reaction

You can provide some Information, Education, and Communication (IEC) materials as needed by the client.

## IV. Consent for HIV testing

If the client wants to go for HIV testing, a verbal or written informed consent should be obtained (Chapter 2).

## V. HIV testing

Diagnosis of HIV infection is never clinical; and must be confirmed with laboratory detection of HIV antibodies in the blood of the infected person.

HIV tests have been evolved through four generations of testing technologies. **The first generation** is based on Enzyme-Linked Immunosorbent Assay (ELISA)/Western Blot technology. Compared to other recent technologies, ELISA/WB-based HIV testing is technically difficult, time consuming, expensive, and requires that reagents have kept at stable incubation steps of 2-8 °C. **The second and third generation** ELISAs were later developed with higher sensitivity and specificity, and, consequently, shorter window period.

Recently, HIV rapid tests, **the fourth generation**, emerged with a good number of advantages (Annex D) that made HTC objectives closer to achievements in regards to service uptake.

### 1) Specimens used for HIV testing

HIV testing can be done on many types of specimens e.g. plasma, serum, whole blood, Dried Blood Spot (DBS), and oral fluid. However, blood (plasma, serum, DBS) is the specimen of choice in many settings because it has a higher concentration of HIV antibodies than oral fluids and also allows for additional testing (e.g. syphilis, HBV, HCV), if needed.

The use of plasma, serum, or whole blood for HIV testing, however, requires invasive collection techniques (venipuncture), skilled technicians, and fully equipped clinical settings (e.g. centrifuge).

DBS can be prepared by collecting venous whole blood or finger-stick whole blood and dropping an amount onto a filter paper. DBS, using finger-pricks, do not require fully equipped laboratories and have the advantage of being easily transported to the referral sites for further testing. On the other hand, DBS require specific filter paper for preparation, modified procedure for DBS elution and HIV testing, and prolong the testing process.

The selection of type of specimen for HIV testing approaches depends on contextual factors, such as country policies, epidemic state, HIV prevalence in the population to be tested, human and financial resources.

### 2) Advantages of HIV rapid tests

- **Feasibility**; HIV rapid testing algorithm is more feasible than and as effective as ELISA/WB algorithms.
- **Decentralization of HTC**; when ensured high-quality standards, using rapid testing algorithm can reach higher proportions of clients.
- **Acceptability** to both clients and counselors.
- **Reduced cost**.
- **Ease of performance and ease of interpretation of test results**, and hence require less complex equipment and human resources.
- **Minimal facilities for storage and shelf-life**; rapid tests are suitable for limited-resource facilities and remote sites. Many rapid test kits do not require refrigeration; however, the recommended range of storage temperature is 2 °C up to 30 °C.
- **Flexibility in numbers of tests performed**; suitable for sites with less than 100 specimens.
- **Reduction in occupational exposure risk**, especially with finger-prick blood collection.

### 3) HIV testing strategies

The selection of the rapid HIV tests and test algorithms is a responsibility of national governments. The decision on which tests to use should be made following country-level technical assessments, involving national HIV reference laboratory and referral laboratories. An appropriate testing strategy takes into account the objectives of testing, the type of HIV epidemic, and the prevalence of HIV in the population to be tested. The development of the

testing strategy should also take into account: **1)** the overall positive predictive value (PPV) of 99% (i.e. all HIV assays used have a sensitivity of at least 99% and a specificity of at least 98%) and **2)** different antigen preparations to minimize the potential for shared false non-reactivity or false reactivity.

The following four requirements are indispensable to successful and effective HIV testing strategy in Afghanistan:

- The national HIV testing, policy and guidelines should be linked to the national laboratory policy and national laboratory strategic plan,
- The national testing algorithm should be validated, with back-up options, according to the WHO testing strategies,
- Quality assurance measures for testing, and
- Accurate forecasting to avoid stock-outs of test kits and consumables.

#### **4) National HTC and laboratory guidelines**

HTC and national laboratory guidelines should be interrelated at different strategic and operational levels, central, regional, and provincial. These links and shared responsibilities require joint effort of both NACP and the National laboratory in Afghanistan in order to establish effective HIV testing and, thereafter, the overall effectiveness of HTC services.

#### **5) HIV testing Algorithm**

This revised HTC guideline takes into consideration the recent WHO recommendations of HIV testing algorithms in settings with low or concentrated level of epidemic (*WHO, 2012*). In addition, the testing algorithm in this guideline is based on the diagnostics eligibility by WHO in 2012.

Waiting for the specified window period (one month) for HIV testing ensures accurate test results. The first HIV rapid test assays (A1), or so called the screening test, should have at least 99% PPV. All specimens with non-reactive A1 (A1-) are considered HIV-negative and reported as such. Specimens with reactive results (A1+) should be retested using a second assay (A2) different from the first one.

Discrepant test results of A1 and A2 i.e. A1 reactive and A2 non-reactive (A1+; A2-) may be a result of technical or clerical errors or errors inherent to the test device itself. In this case, the same two assays (A1 and A2) should be repeated using the same specimen (serum, plasma, or finger-stick whole blood). If second discrepancy (A1+; A2-), the specimen considered as HIV-negative. If A1 is an antigen/antibody detection assay and A2 is an antibody-detection-only assay, the second discrepant result is inconclusive, and re-testing should be performed with a second specimen taken after 14 days.

Specimens that are reactive on both assays (A1+; A2+) should be confirmed with a third assay A3 to confirm HIV infection. If three assays give reactive test results (A1+; A2+; A3+), the

specimen can be reported as HIV-positive. In rare cases, A3 result can be non-reactive (A1+; A2+; A3-) which means that the result is HIV inconclusive and the testing algorithm should be repeated after 14 days.

If the rate of HIV-inconclusive results is high, additional efforts to assure quality should be made, and the selection of assays might be re-considered.

*Annex E outlines the updated HIV testing algorithm in Afghanistan as recommended by WHO in 2012.*

## **VI. Post-test counseling**

Whether positive, negative, or indeterminate, HIV test results should be given to the client, or couple, through face-to-face post-test counseling session. The counselor must avoid providing the test results in groups, through third parties, or through distance communications such as mobile phones. Couples should be encouraged to be counseled together; however, they should be given the option to be counseled individually.

The laboratory staff should send the results to the requesting service provider and not give them to the patient without counseling. It must be noted that the foundation of good post-test counseling is laid during pre-testing counseling. If pre-test counseling is done well the counselor will already have a relationship with the client, laid the ground for any necessary changes in behaviors or planning for the future, and will know quite a lot about the client. The objectives of the pre-test counseling session, regardless the test result, are to:

- Prepare the client to receive test results and provide any further information required.
- Provide emotional support and assist the client to develop coping strategies.
- Emphasize risk reduction plan that was already discussed in the pre-test counseling.
- Provide the availability and resources for post-test services.

To help achieve the above mentioned objectives of pre-test counseling session, the following process guide can be used:

### **1) General consideration for post-test counseling**

- Cross-check all results with client files.
- Be aware of the manner in which you call the client from the waiting room.
- Provide results to the client in person.
- allow sometime for client's reaction

### **2) Provision of HIV-negative results**

Whilst the client is likely to feel relief, the counselor must also emphasize and clarify a few important issues:

- Check for possible exposure in window period and the infectiousness.
- Reinforce information on HIV transmission and personal risk reduction plan.
- Review and explore any constraints to practicing the risk reduction plan.
- Referral for anxiety i.e. for those people who fail to believe results are negative. These clients frequent testers. Reassure the client but ask about any significant risks within the window period.

### 3) Provision of HIV-positive results

Clients react differently to HIV-positive results. Some of them may react with severe shock and obvious distress, some may respond with little reaction demonstrating blocked effect, and some may have anticipated the positive result and react with apparent calm acceptance.

- Be clear and direct when giving the result.
- Allow sufficient time to absorb the result and explore emotional reaction;
  - Check what the client understands by the results, and discuss the meaning, if needed.
  - Encourage expression of emotion.
- Concrete planning, if possible;
  - Support system and disclosure
  - Leaving the HTC center, going home
  - The next 48 hours,
  - Pre-existing coping strategies
  - Ethical partner disclosure
- Respond to enquiries raised by the client, if any
- Arrange follow-up sessions or referral, if required.

### 4) Provision of HIV-indeterminate results

Indeterminate test results may occur during sero-conversion or may indicate a cross-reaction with other antibodies (e.g. in case of arthritis or auto-immune diseases). Repeated HIV test is needed in one month, if persistent indeterminate test results, the blood sample should be sent to a reference lab. The counselor should:

- Explain what such a test result means.
- Stress the essential information related to the prevention of transmission.
- Arrange for a visit for repeating the test.

## VII. Disclosure

Disclosure is the process of revealing the HIV test result either to the source/primary client or to an approved third party. As mentioned earlier, disclosing HIV test result to the source client is conducted in a post-test counseling session, preferably by the same counselor who provided the

pre- session. Under no reason should the health care provider withhold HIV test result from him/her client.

Disclosure to a third party may only occur with consent of the person tested. All clients, with positive or negative test results, should be encouraged for ethical partner counseling and empowered to inform their sex partners (spouses) of their test result. **Counselor-assisted disclosure**, in which the counselor is present during the disclosure process and assists in clarifying HIV-related information, is a new and effective approach for supporting ethical disclosure, particularly in challenging situations such as discordant couples and pediatric disclosure.

Only in the following conditions may disclosure without consent be possible:

- Partner notification after making sure that:
  - Thorough counseling was provided to the client
  - Counseling failed to achieve appropriate behavior change
  - Client refused to notify or consent to notification
  - A real risk of HIV transmission to the partner
  - The identity of the HIV-infected person is concealed. This is very challenging in case of marital relationship.
  - Follow-up is needed to those involved
- Medical staff disclosure.
- Public safety.
- Legal requirements.
- If a counselor believes that the client is no longer able to take responsibility for his/her decisions and actions.

### **VIII. Follow-up counseling and referral network**

The post-test counseling session may not be appropriate for some clients to discuss everything. The counselor needs to carefully judge how much information should be provided at the post-test counseling session. The client may, at some point, need information on health, rest, exercise, diet (life style), safe sex or injection, infection control at home and dealing with family members. All these concerns may be covered in as many follow-up counseling as needed.

An effective HTC service requires good referral and linkages protocols. Referral is often needed for additional services that are not available at the testing site such as ART, family planning, STI and TB clinics. The provider should explain to the client the purpose of the referral and what takes place at the referral site. Mechanisms need to be established to encourage feedback between referral sites.

## Chapter 4 HTC infrastructure, human resource, training requirements, and target populations

### I. Infrastructure

People who wish to know their HIV sero-status have concerns about confidentiality and privacy. Evidence shows that confidential environment facilitates disclosure of risk behaviors. Consequently, adequate space to provide HTC services in a private and confidential manner should be ensured. Depending on client volume and financial resources, reception area, counseling rooms, and laboratory spaces should appear attractive and comfortable to clients.

The following minimum equipment is recommended for each room:

- Waiting area: television, two benches and enough chairs, and open display for educational materials.
- Reception room: desk and chairs, steel filing cabinets, office supplies, HTC data collection tools, computer for data entry, fan/heater (optional).
- Counseling room: three “easy” chairs, desk, secured filing cabinet, storage space for communication materials, fan/heater (optional), glass, water, tissues (optional).

*N.B. In case that the counselor is the one who perform the test in the same counseling room, the counseling room should be equipped with storage space for blood drawing equipment (e.g. syringes, needles), medical consumables and disposal container for sharp objects.*

- Laboratory: working counter, refrigerator, desk and chair, sink with elbow taps, running water (hot and cold), soap and towel, medical consumables (gloves, needles, and syringes or lancets, swabs, spirits, etc.), lockable storage for test kits, standard contaminated waste disposal facilities, adequate light source and ventilation, and fan/heater (optional).

In case that infrastructure or resources are not available to have a private room for counseling e.g. in hospital-based facilities, it is always recommended that confidentiality of the counseling process is ensured to all clients. Importantly, all clients’ records should be maintained in locked cabinet and only be accessed by those who are directly involved in the client’s care.

### II. Human resources

Depending on client flow rate, mode of HTC, adequate site spacing and infrastructure, and availability of resources, the following HTC staffing is recommended:

- HTC coordinator: can be the facility director/supervisor and has to assign at least 50% of his time to HTC activities.
- Receptionist: full time dedicated person to welcome clients, register clients, explain procedures, provide educational materials, and enter data
- Counselor: full time dedicated person
- Lab technician: full time dedicated person. This person may have the dual role of laboratory technician and counselor.

- Community coordinator: to link HTC services to other community and clinic-based facilities both for demand creation and support and care of HTC clients. It may be possible to combine this role with that of the HTC coordinator.

### **III. Training**

All HTC staff should be well-trained in order to produce high-quality HTC services to their intended clients. Training curriculum should be developed to help build capacity of HTC staff on the following topics:

- 1) Basic information on HIV and AIDS and HIV testing:
  - HIV epidemiology and implications for HTC.
  - HIV testing; different assays, algorithms, concepts of confidentiality and informed consent, and principles involved in the maintenance of the quality of HIV testing services.
- 2) Basic counseling skills:
  - Counselor values and attitude; self-awareness, different values, client-counselor relationship, importance of maintaining confidentiality.
  - Counseling microskills; listening and empathy, questioning, silence, and non-verbal behavior.
  - Risk assessment and risk reduction (chapter 3).
- 3) Counseling for specific target populations; targeted interventions for PWIDs, SWs, MSM, prisoners, PMTCT, and counseling for treatment adherence.
- 4) HTC service delivery and program management:
  - HTC modes and approaches.
  - Referral and network development.
  - Counseling supervision and support.
  - Monitoring and Evaluation (M&E) and Quality Assurance (QA).
  - Counselor records and data management.

### **IV. Target populations**

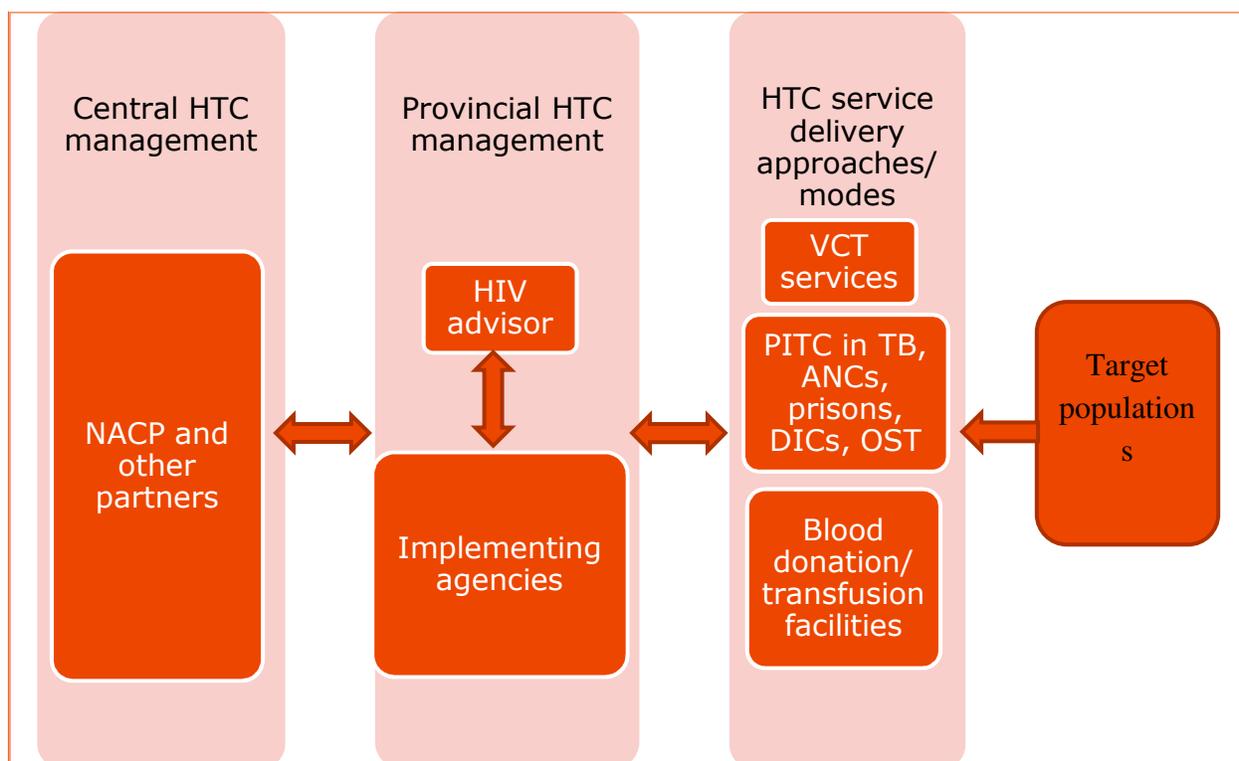
Clients who are most likely to benefit from HTC services and who should be actively targeted through promotional activities, community mobilization and outreach activities include:

- Client populations who are known to be at risk of HIV infection through past or present behaviors or potential exposure e.g. PWIDs, FSWs, and MSM.
- Clients with known sexual or needle sharing exposure to an HIV infected person.
- Clients who have clinical symptoms suggesting HIV infection e.g. unexplained prolonged fever, opportunistic infections including TB.
- Clients who have diagnoses suggesting increased risk of HIV infection e.g. STIs.
- Clients exposed to contaminated equipment.
- Sex partners (spouses) of HIV infected persons.

## Chapter 5 Monitoring and Evaluation (M&E) and Quality Assurance (QA)

HTC is a key element in HIV response in Afghanistan and should be supported by a well-established and effective QA and M&E systems. Quality is defined as “**doing the right thing right, at the right time**”. QA of HTC services can, therefore, be defined as the process of ensuring that performance is done according to a set of Quality Control (QC) standards throughout the HTC service delivery process; **promotion to the service, counseling and testing components, referral system, and logistics and data management.**

Figure 1 Implementation/administrative framework of HTC service delivery



M&E involves data collection, analysis, interpretation, and data use at all levels of HTC service delivery process; national, provincial, and facility levels. Figure 1 is a conceptual framework of how these different levels of HTC service delivery in Afghanistan should be all linked together in order to produce the “**High-quality**” HTC service. Quality control measures for each component of these three levels should be in place.

### I. Community mobilization

Only 0.16% of Afghani (men and women aged 15-49) know their HIV status (UNGASS, 2010). In order to attain higher service uptake, promotional activities must be utilized. These include: mass media, targeted community mobilization, and the development of IEC materials that are oriented for each target population.

In terms of QC of promotional activities, promotional strategies should be regularly reviewed and adapted using the up-to-date scientific and technological advances, national, provincial, and site-specific trends. In the context of Afghanistan, the HTC promotional activities should be targeted to the populations at higher risk of HIV (e.g. PWIDs, FWs, and MSM) and other vulnerable sub-populations as defined in the NSF-II (e.g. young populations, truck drivers, and pregnant women).

It is important also to monitor and evaluate the implementation and outcome of these promotional activities with some process and effectiveness indicators in terms of frequency, number and type of audience, and message content.

Promotional activities are conducted at the level of service delivery points and should be in coordination with the provincial HTC management unit and in accordance with the national strategic HTC framework and priorities.

## **II. QC of counseling**

Counseling is the basic component for HIV prevention, care, and treatment. It is therefore imperative that counseling component of HTC is comprehensive and effective. The prerequisite for comprehensive and effective counseling are quality training and supervision. Though duration of the counseling session is different for different HTC modes and approaches, the counseling session should involve open and non-judgmental interaction between the counselor and the client/patient and should seek emotional and social support outcome for all clients/patients.

At each level of HTC service delivery (Figure 1), the following QC standards should be always monitored:

### **1) Selection and training of counselors:**

A counselor can be health or non-health professional. Training will vary in duration and content based on the selected HTC model. The initial trainings should be monitored with appropriate post-training follow-up and supervision. All counselors should receive knowledge and skills training (**Chapter 4**) approved by NACP/MoPH.

### **2) Counseling environment**

It is challenging to find a suitable setting for an appropriate counseling environment, especially when resources are limited. However, it is important to have a comfortable environment for the client and the counselor.

### **3) Counseling process**

Should be guided by a standard protocol (**Chapter 3**) and adhered to HTC principles and ethical values (**Chapter 2**).

#### 4) Record keeping

- Information of the counseling session (client intake forms and test request/result form) should be consistent and comprehensive enough to allow for any further analysis.
- All clients' forms must be filed and stored.
- Only counselors and other staff directly involved with the client's care should have access to these records and files.
- Information on session forms must be entered correctly to the Management Information System (MIS).

### III. QC of testing

Testing services providing HIV testing should operate within a quality management system otherwise known as quality assurance. QA is the total process which guarantees that the final results reported by a laboratory are as accurate as possible.

#### 1) Testing personnel

Testing personnel should be selected on the basis of the following key aspects:

- **Qualifications:** sincerity and commitment, literacy (ability to read instructions and record results), organizational skills (if several test tasks are required), decision-making and communication skills.
- **Training:** in addition to the basic counseling training, test personnel should be trained on how to perform and interpret the test, how to label and record test results, and the use and importance of standard precautions and infection prevention and control measures.
- **Competency assessment:** assessing performance of tasks done through testing process i.e. before, during, and after testing (**Table 2**)

**Table 2 Quality control measures of testing process**

Before testing	During testing	After testing
Check storage and room temperatures daily*	Follow biohazard safety	Clean up and dispose of biohazardous waste
Check inventory and test kit lots, as needed	Collect the finger-stick specimen	Report results to client
Receive request for testing	Perform the test	Document results
Provide HIV/AIDS information to the test subject	Interpret test results	Collect, process and transport confirmatory test specimens
Set up test area, label test device		Manage confirmatory test results

\*Test kits and controls must be stored within the temperature ranges specified by the manufacturer. These ranges vary with different test kits. Place thermometers in refrigerators and monitor areas where kits are stored. Check and record temperatures of the storage area on a log sheet each day testing is performed.

**NOTE:** “Min-Max” thermometers maintain a record of the highest and lowest temperature recorded during the observation period and can be very helpful to monitor storage conditions.

## 2) Testing kits, types of HIV testing, and testing algorithm

Evaluation, approval, and registration of HIV test kits should be the responsibility of a national laboratory committee. In order to standardize HIV testing protocol, the committee should provide/approve HIV testing in accordance with national evaluation system and international standards. Only the nationally approved test kits be registered and used for HIV testing in Afghanistan to avoid duplication of efforts and ensure reliable and comparable sero-prevalence data overtime.

If national evaluation is not feasible, international approved test kits, such as WHO prequalification list should guide the test selection decision of the country.

HIV rapid testing algorithm is used in Afghanistan based on the international standards and recommendations and because of the feasibility and other operational characteristics of rapid tests (chapter 3). However, ELISA and/or WB testing technologies should be available for the purpose of External Quality Assurance Assessment (EQA).

## 3) Internal and external quality control

**Internal quality controls** are controls built into each testing device and verify that the specimen was adequate and the solution flowed through the device as intended.

**EQA** is one component of a laboratory QA program. The focus of EQA is on identifying laboratories or testing sites and technicians exhibiting poor performance. Any of the following three methods that can be used as part of a program to evaluate laboratory performance HIV rapid testing algorithm:

- **On-site evaluation:** regular review of QC testing process (**Table 2**) using standard checklists by any level of HTC management levels. Standard checklists and evaluation methods allow for collecting and comparing consistent information from multiple sites.
- **Proficiency testing:** distribution of small panel of well-characterized test samples comprising 6–10 specimens by the EQA scheme organizer (e.g. a national reference laboratory or another organizer) to all testing sites. The limitations of PT are that it usually involves only a few specimens and the test results may not represent the routine test performance. This may be due in part to the greater care in handling PT specimens.
- **Blinded rechecking:** Retesting a selected sample of specimens in a reference laboratory may be an option for assessing the quality of testing. This can be accomplished by forwarding all positive and 5–10% of negative specimens for retesting when a serum or plasma specimen is available. Alternatively, dried blood spots (DBSs) can be used for

blinded rechecking insituations where it is impractical to refer specimens for additional testing (e.g. whole blood finger-prick tests). DBSs are collected on filter paper when the testing of patients occurs and are transported to a reference laboratory. This method requires a laboratory that has demonstrated proficiency in eluting specimens and performing standard enzyme immunoassays (EIAs).

The choices for which type of EQA program to implement will depend on both the available resources and the ability to obtain additional resources as needed to support the EQA program.

#### 4) **Supply management**

HTC service delivery sites are expected to:

- Keep sufficient supplies at all times.
- Establish inventory management and regularly update stocks.
- Conduct regular stock tracking at all levels to ensure continuity of services.
- Track consumption and forecast needs for supplies
- Request test kits to respective offices ahead of time

#### 5) **HIV and universal precautions**

Universal precautions are based on the assumption that all blood and body fluids are potentially infectious, regardless of whether they are from a patient or a health care worker. The following are three principles of universal precautions:

- **Hand washing:** using the 6 steps for effective hand washing:
  - Wash palms and fingers
  - Wash back of hands
  - Wash fingers and knuckles
  - Wash thumbs
  - Wash finger tips
  - Wash wrists
- **Use of protective barriers:** Appropriate barriers should be worn where exposure to blood and other potentially infectious fluids is anticipated. The protection selected will depend on the type of exposure. Where supplies of protective barriers are limited, priority should be given to procedures involving a high risk of exposure to blood.
- **Prevention of accidents through safe handling and disposal of sharp objects:** The greatest risk of blood borne pathogen transmission in health care settings is through percutaneous exposure. Efforts to prevent transmission must focus on preventing injury from contaminated sharp instruments by encouraging safe handling and disposal of sharps. Most sharp injuries associated with blood borne transmission involve deep injuries with hollow – bore needles. These injuries frequently occur when needles are recapped, cleaned disposed of, or inappropriately, e.g. used needles left on trolleys or beds.

### **Good practice for the safe handling and disposal of sharps:**

- Always dispose of your own sharps.
- Never pass used sharps directly from one person to another.
- During exposure – prone procedures, the risk of injury should be minimized by ensuring that the operator has the best possible visibility, e.g. by positioning the patient, well-adjusting of light source and controlling bleeding.
- Protect fingers from injury by using forceps instead of fingers for guiding suturing.
- Never recap, bend or break disposable needles
- Directly after use, place needles and syringes in a rigid container until ready for disposal.
- Locate sharps disposal containers close to the point of use, e.g., in patient’s room, on the medicine trolley and in the treatment room.
- Dispose of used sharps in a puncture – resistant container.
- Never place used sharps in other waste containers.
- Keep all sharps and sharps disposal containers out of the reach of children.
- Prevent overflow by sending sharps disposal containers for decontamination or incineration when three – quarters full.

### **Proper use of disinfection and sterilization techniques**

As HIV and other blood borne infections can be transmitted via needles, syringes and other equipment contaminated with body fluids, these items should be cleaned and sterilized, or appropriately disinfected before each use. The method for decontamination of instruments and equipment depends on what they are used for and the associated level of risk.

<b>Level of risk</b>	<b>Decontamination method</b>
<b>High</b>	Instruments which penetrate the skin and the body <ul style="list-style-type: none"><li>▪ Sterilization</li><li>▪ Disposable item</li></ul>
<b>Moderate</b>	Instruments which come into contact with mucous membranes or non – intact skin <ul style="list-style-type: none"><li>▪ Sterilization</li><li>▪ Boiling</li><li>▪ Chemical disinfection</li></ul>
<b>Low</b>	Equipment which comes into contact with intact skin <ul style="list-style-type: none"><li>▪ Thorough washing</li></ul>

### **Management of contaminated environment**

Be careful to carry out all procedures with gloved hands. Spills of blood or body fluids should first be covered with a paper towel or other absorbent material. Pour 0.5 % sodium hypochlorite and leave for at least 10 minutes before remove. Then wipe up the whole spill with fresh absorbent material and place in a contaminated – waste container. The surface should then be wiped with soap and water

#### **IV. Coordination of HTC services at all levels**

All HTC coordinators should have a good know-how of HTC service delivery and preferably be a trained counselor.

##### **1) Site management level**

- The site coordinator should be selected from the site of service delivery,
- Collect and submit regular MIS reports,
- Supervise all HTC site services,
- Function as a link to higher HTC management level,
- Plan, mobilize, and organize resources, training, and capacity building of HTC site,
- Collaborate and network with other HTC partners (referral network),

##### **2) Provincial level and central levels**

Supervisors and coordinators at both provincial and central levels should be counselors who have been well-trained in HTC supervision and conduct quarter HTC coordination and monthly site-supportive-supervision mechanisms. These mechanisms should work on comparing current performance to set standards (for each HTC step) and identify gaps as well as report issues that require action by central management team. Activity documents of all quarterly and monthly coordination mechanisms should be always kept for planning and management objectives.

#### **V. M&E of HTC services**

An essential component to ensure effective and efficient provision of HTC services is to establish an M&E system that is able to review the program logic model for the service. Based on the approach/mode of HTC service, a core number of selected national indicators should be developed in order to monitor the goals, objectives and outcomes of the service.

Though M&E detailed concepts are beyond the scope of this guideline, the following are some examples of indicators for the VCT programs:

- Supplies and commodities:
  - No. of condoms procured
  - No. of rapid test kits procured
- Training
  - No. of people trained in counseling
  - No. of staff trained on HIV testing
- Service delivery:
  - No. of clients visiting VCT center
  - No. of return clients
  - % of clients seen at VCT site who received pre-test counseling
  - % of clients who agreed to be tested
  - % of clients who received their test results

- % of clients who tested positive for HIV
- % of clients who tested positive for HIV and who intended to share their test results with their partner
- No. of condoms distributed
- No. of IEC materials distributed

Each one involved in the provision of VCT service (e.g. site manager, counselor, lab technician, and coordinator) should have a clear role and responsibility in the effective implementation of the site M&E system. Details on site-specific M&E system should be developed and made available to support the follow-up of this guideline.

## VI. Data quality principles

HTC data needs to be of “**High-quality**” in order to guide decision making and planning activities towards an effective HIV response in Afghanistan. The High-quality data should adhere to the six “**data quality principles**” which are:

**Precision:** data should be collected, analyzed, and interpreted at a level that allows effective monitoring and evaluation of HTC program and informs program management planning and decision. A precise question should be able to answer an important monitoring question like, for example, “How many HIV female tested HIV positive and who are married?”

**Reliability:** reliable data should produce the same, or very similar, results when the measurement is repeated. This requires standard and systematic data collection and processing procedures.

**Validity:** a measure is valid when it measures what it is intended to measure. For example, a confirmed HIV positive case should be based on the national HIV testing algorithm and not only based on a one-rapid test result.

**Integrity:** data integrity concerns the preservation of accurate data for their intended use from the time they are collected to the time they are analyzed and reported.

**Completeness:** data should be collected, entered, and submitted in a manner that maximizes the completeness of the data set and minimizes missing values. The variable, therefore, should be prioritized and reported based on NACP planning needs and national indicators.

**Timeliness:** data collection, entry, analysis, reporting, and using should be conducted on a regular basis as identified by HTC management units in order to inform decisions about resource allocation.

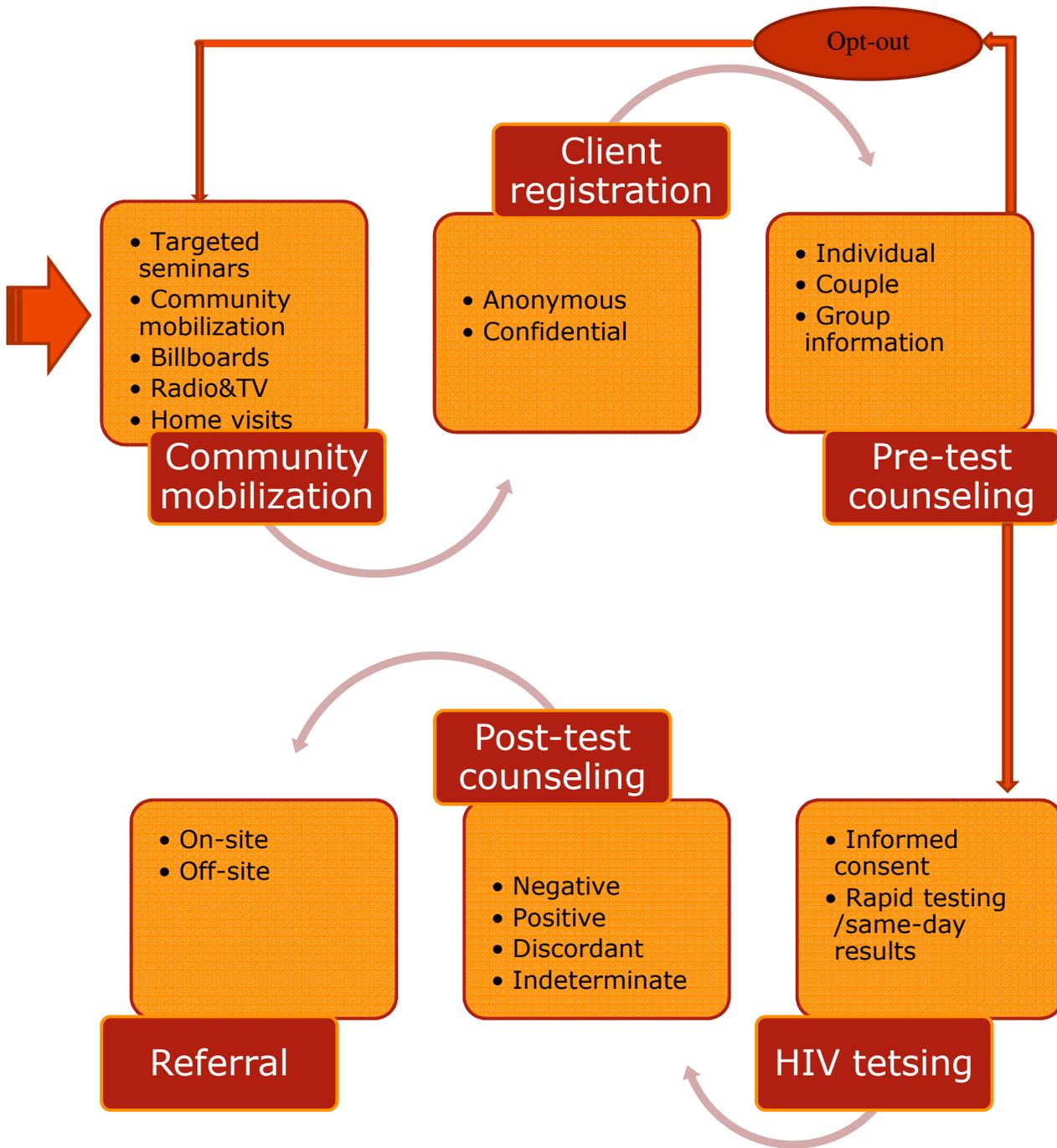
## Chapter 6 Annexes

### Annex A: Distribution of HTC approaches/modes by province, funding source and implementer

#	Province	Total population	HTC service			Funding source (WB/GFATM/UNODC)	Implementer (NGO/governmental)
			Location	Approach (VCT/PITC)	Mode		
1	Kabul						
2	Nangrahar						
3	Herat						
4	Balkh						
5	Kundoz						
6	Kandahar						
7	Ghazni						
8	Badakhshan						

*NACP, 2013*

**Annex B: HTC protocol and work flow**



## Annex C: HTC client registration log book

Province: _____				Name of HTC site: _____				HTC type: _____									
Ser. no.	Date	Code		Age	Sex	Marital status	Education status	Employment status	Received pre-test counseling (Yes/No)	Test result				Received pre-test counseling	Referred to		Counselor name
		Client	Couple							1st	2 <sup>nd</sup>	3 <sup>rd</sup>	final		Yes specify	No	

**Code:**

Unique number

**Age coding:**

1= <16  
2=16-  
3=25-  
4=35-  
5=>35

**Sex coding:**

0= female  
1= male

**Marital status coding:**

1= single  
2= married  
3= separated/divorced  
4= widow/widowed

**Education status coding:**

1= illiterate  
2= primary  
3= secondary  
4= university  
5= higher

**Employment status coding:**

1= unemployed  
2= clerk  
3= professional

**Received pre-test counseling**

0= No  
1= Yes

**Test result:**

0= non-reactive (negative)  
1= reactive (positive)  
2= indeterminate

**Received post-test counseling**

0= No  
1= Yes

**Referred to**

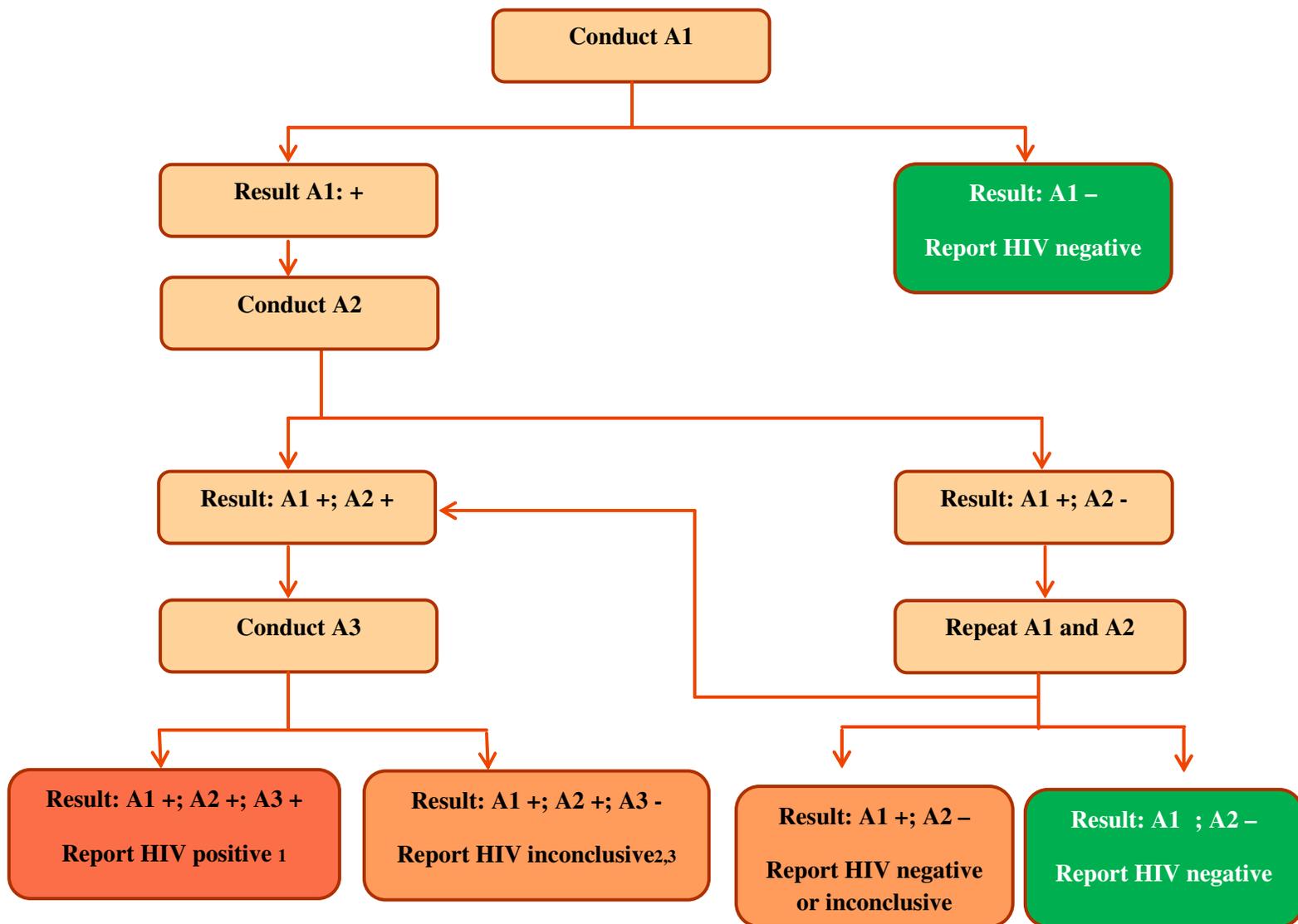
A= ART  
Ad= Admission to inpatient ward  
FC= Follow-up counseling  
FP= Family planning  
OI= opportunistic infection management  
P= PMTCT  
S= support groups  
TB= TB screening/treatment

## Annex D: General and operational characteristics of ELISAs and rapid tests

	ELISAs	Rapid tests
<b>Detection</b> (sample type/specimen)	HIV antibodies in plasma/serum	Several can detect HIV antibodies in whole blood (finger-prick samples) as well as in serum/plasma.
<b>Accuracy</b> (sensitivity, specificity)	Varies with the test; ELISAs and rapid tests give similar diagnostic performances	
<b>Laboratory equipment</b>	Micropipette, washer, incubator, spectrophotometer	None to minimal (micropipette)
<b>Laboratory personnel</b>	Skilled laboratory technician	Can be performed by any health care worker who has been adequately trained, including counsellors.
<b>Ease of performance*</b>	Level 4	Level 1–3, depending on test type
<b>Time to perform</b>	>2 hours	Mostly 10–30 minutes
<b>Shelf-life</b>	Usually 12 months	Usually 12 months
<b>Storage conditions</b>	2–8 °C	Some 2–8 °C; most 2–30 °C.
<b>Cost per test**</b>	US\$ 0.40–1.20	US\$ 0.47–2.0
<b>Volume of tests</b>	Mostly suitable for medium-volume to large-volume testing, i.e. >40–90 samples per testing tray.	Most kits are suitable for small-volume and large-volume testing, i.e. 1–100 samples per day.

*WHO, 2012*

## Annex E: HIV testing algorithm in HTC services in low prevalence settings



### Notes:

“Assay A1”, “A2”, “A3” represent three different assays (of any test format). “Report” = result may be reported.

1 For newly diagnosed individuals, a positive result should be confirmed on a second specimen to rule out laboratory error.

2 Re-testing should be performed with a second specimen taken after 14 days to rule out potential seroconversion.

3 If A1 is an antigen/antibody detection assay and A2 or A3 is an antibody-detection-only assay, re-testing should be performed with a second specimen taken after 14 days.

*WHO, 2012*

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