KINGDOM OF CAMBODIA

NATION RELIGION KING

Ministry of Health

STANDARD OPERATING PROCEDURES FOR HIV TESTING AND COUNSELING (HTC)

September 2012

National Center for HIV/AIDS Dermatology and STD

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LIST OF ACRONYMS

ANC	Antenatal Clinic
ART	Antiretroviral Therapy
ARV	Antiretroviral
BCC	Behavior Change Communication
BSS	Behavioral Sentinel Surveillance
CENAT	National TB Program
CoC	Continuum of Care
CoPCT	Continuum of Prevention to Care and Treatment
C/PITC	Community/ Peer Initiated Testing and Counseling
CQI	Continuous Quality Improvement
CUP	Condom-Use Program
DDF	Department of Drugs and Food
DSW	Direct Sex Worker
EE	Entertainment Establishment
FEW	Female Entertainment Worker
HAART	Highly Active Antiretroviral Therapy
HC	Health Center
HIV	Human Immunodeficiency Virus
HPITC	Health Provider Initiated Counseling and Testing
HSP	Health Strategic Plan
HSS	HIV Sentinel Surveillance
HTC	HIV Testing and Couseling
IBBS	Integrated Behavioral and Biological Survey
IDSW	Indirect Sex Worker
IDU	Intravenous Drug User
IEC	Information, Education & Communication
IPT	Isoniazid Prevention Therapy
MARP	Most At Risk Population
MCH	Maternal Child Health

MMM	Mondol Mith Chouy Mith
MoH	Ministry of Health
MSM	Men who have Sex with Men
MTCT	Mother-to-Child Transmission [of HIV]
NBTS	National Blood Transfusion Service
NCHADS	National Center for HIV AIDS Dermatology and STIs
NGO	Non-Governmental Organization
NIPH	National Institute of Public Health
NMCHC	National Maternal Child Health Centre
OD	Operational District
OI	Opportunistic Infection
PASP	Provincial AIDS and STI Program
PHD	Provincial Health Department
PLHIV	People Living with HIV
PEP	Post Exposure Prophylactic
PMTCT	Prevention of Mother-to-Child Transmission [of HIV]
QC	Quality Control
RH	Referral Hospital
RPR	Rapid Plasma Reagin
SSS	STI Sentinel Surveillance
STI	Sexually Transmitted Infection
SW	Sex Worker
TB	Tuberculosis
VCCT	Voluntary Confidential Counseling and Testing
WHO	World Health Organization
TG	Trans-Gender
PWID	People Who Inject Drugs
PWUD	People Who Use Drugs

ព្រះរាជាណាចក្រកម្ពុជា

ជាតិ សាសនា ព្រះមហាក្សត្រ

ក្រសួងសុខាភិបាល

លេខ..០៤០០...អបស..

រាជធានីភ្នំពេញ, ថ្ងៃទី២៥ ខែ កុម្ភៈ ឆ្នាំ២០១១...

លិខិតបង្គាប់ការ

យោង: លិខិតលេខ ០១៧២ មជអសក ចុះថ្ងៃទី ៨ ខែ កុម្ភៈ ឆ្នាំ ២០១១ របស់មជ្ឈមណ្ឌលជាតិប្រយុទ្ធ នឹងជំងឺអេដស៍ សើស្បែក និងកាមរោគ។

អស់លោក-លោកស្រី ដែលមានរាយនាមខាងក្រោម ត្រូវបានចាត់តាំងជាសមាជិក-សមាជិកានៃអនុគណៈកម្មការ សំរបសំរួលការងារផ្តល់ប្រឹក្សានិងធ្វើតេស្តឈាមរកមេរោគអេដស៍ ដោយស្ម័គ្រចិត្តនិងរក្សាការសំងាត់នៅកម្ពុជា:

១.	លោកវេជ្ជ.	មាន ឈីវុន	ប្រធានមជ្ឈមណ្ឌលជាតិ (NCHADS)	ប្រធាន
២.	លោកវេជ្ជ.	មាស វុឌ្ឍី	អនុប្រធានមជ្ឈមណ្ឌលជាតិ (NCHADS)	អនុប្រធាន
៣.	លោកវេជ្ជ.	សំរិត សុវណ្ណរិទ្ធិ	មន្ត្រីមជ្ឈមណ្ឌលជាតិ (NCHADS)	សមាជិក
៤.	លោកវេជ្ជ.	សេង សុភាព	មន្ត្រីមជ្ឈមណ្ឌលជាតិ (NCHADS)	សមាជិក
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៧.	លោកស្រីវេជ្ជ.	ទូន សុវណ្ណា	មន្ត្រីមជ្ឈមណ្ឌលជាតិ (NMCHC)	សមាជិក
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៩.	លោក	ម៉ម សុជឿន	ប្រធានផ្នែកពិគ្រោះជំងឺនិងទំនាក់ទំនងសាធារណៈ ការិយាល័យមន្ទីរពិសោធន៍ (NIPH)	សមាជិក
១០.	លោកស្រី	គង់ វិសាលរតនៈ	មន្ត្រីផ្នែកមន្ទីរពិសោធន៍មន្ទីរពេទ្យបង្អែកចំការមន	សមាជិក
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១២.	តំណាងអង្គការ UNICEF			សមាជិក
១៣.	តំណាងមូលនិធិ CHAI			សមាជិក
១៤.	តំណាងអង្គការ FHI			សមាជិក
១៥.	តំណាងអង្គការ KHANA			សមាជិក

ទីស្តីការរដ្ឋមន្ត្រីក្រសួងសុខាភិបាល ,លេខ ១៥១-១៥៣ វុក្ខវិថី កម្ពុជាក្រោម ភ្នំពេញ ទូរស័ព្ទ-ទូរសារ: (៨៥៥-២៣) ៤២៦ ០៣៥/៤២៦ ៨៤១ ទូរស័ព្ទ: (៨៥៥-២៣) ៧២២ ៩៣៣

១៦.	តំណាងអង្គការ WHO		សមាជិក
១៧.	តំណាងអង្គការ US-CDC		សមាជិក
១៨.	តំណាងអង្គការ RHAC		សមាជិក
១៩.	តំណាងអង្គការ HACC		សមាជិក
២០.	តំណាងអង្គការ CPN+		សមាជិក
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២២.	លោកវេជ្ជ. ជា ច័ន្ទកុសលមុនី	មន្ត្រីមជ្ឈមណ្ឌលជាតិ (NCHADS)	លេខាធិការ

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ជ.រដ្ឋមន្ត្រី

រដ្ឋលេខាធិការ

សាស្ត្រាចារ្យ អេង ហួត

ចំលងជូន:

- អគ្គនាយកដ្ឋានរដ្ឋបាលនិងហិរញ្ញវត្ថុ
- អង្គភាពពាក់ព័ន្ធ
- សាមីខ្លួន
- ឯកសារ

PREFACE

The Standard Operating Procedures (SOP) for HIV Testing and Counseling (HTC) is the achievement of the hard work of the National Center for HIV/AIDS, Dermatology and STD (NCHADS), and the VCCT sub-committee.

The SOP for HTC was developed based on the laws on the prevention and control for HIV/AIDS in 2002, the guidelines for implementing VCCT in 2004, and the guidelines for establishing VCCT in 2005, the SOP for implementing the quality assurance, and quality control for VCCT services in 2006, and the policy and strategy for HIV counseling and testing in 2007.

The SOP for HTC is very important in providing specific recommendation and guidance to increase the access to HTC services through the integrated services into the public, private and NGO's clinic, and to move these services to be closer to the community, to ensure the quality of services though monitoring, supervision as well as continuous quality improvement.

The Ministry of Health endorses this SOP for HTC, and recommends all HTC's services at public health facility, NGOs' Clinic, and private clinics to use this document as reference in their work.

Phnom Penh, 28 September 2012

Prof. ENG HUOT
SECRETARY OF STATE

AKNOWLEDGEMENT

On behalf of the National Center for HIV/AIDS, Dermatology and STD (NCHADS), I would like to express my appreciation and gratitude to the VCCT Sub-Committee on Voluntary and Confidential HIV Testing and Counseling (VCCT) for its efforts in developing the Standard Operating Procedures (SOP) for Implementing HIV Testing and Counseling (HTC) in Cambodia.

I appreciate the efforts made by staff of the VCCT Unit of NCHADS in coordinating with all concerned partners during the development of this document. My thanks go to experts from development partners, particularly Dr. Perry Killam, US-CDC expert, and Dr. Fujita Masami, WHO expert, FHI 360 and UNICEF, who provided technical assistance in developing this SOP.

Phnom Penh, 28 September 2012

DR MEAN CHHI VUN
Director
National Center for HIV/AIDS,
Dermatology and STD

1 VOLUNTARY CONFIDENTIAL HIV TESTING AND COUNSELING(VCCT)

HIV TESTING AND COUNSELING (HTC) REFERS TO ALL FORMS:

- ***Voluntary and Confidential HIV Testing and Counseling (VCCT)***
- ***Health Provider Initiated HIV Testing and Counseling (HPITC)***
- ***Community and Peer Initiated HIV Testing and Counseling (CPITC)***

In Cambodia, HIV was first detected in 1991 among blood donors and reached a peak prevalence in 1998 of approximately 1.7% among the general population aged 15-49 years old. The estimated adult HIV prevalence has fallen to 0.8% for 2010 with declines in new infections attributed largely to increased condom use in brothels through initiatives like the 100% Condom Use Program, which provided Sexually Transmitted Infection (STI) education to Female Sex Workers (FSW) through outreach workers and monthly STI check-ups. Cambodia still has a high prevalence of HIV among high risk groups: Female Entertainment Workers with > 2 sex partners/ day was 10.7% in 2010 [1], injecting drug user 24.4% in 2007, MSM living in the capital city 8.7%. In 2011, Cambodia is estimated to have 73,760 adult PLHIV 15 years and older of whom approximately 50,927 were in need of ART (defined as CD4 < 350 cells/ mm^2). [2]

To respond to the rapid spread of HIV, the Ministry of Health (MoH) established a series of Strategic Plans for the prevention and care of HIV/AIDS and STD, within the Ministry of Health's Health Sector Strategic Plan. For VCCT the initial focus was on expanding the number and quality of VCCT sites. The first VCCT Center was established in 1995 in Phnom Penh at the Pasteur Institute. NCHADS, with support from Government and health development partners, has extended and expanded these services to 246 VCCT sites in all 24 provinces by the end of 2010. The Strategic Plan for HIV/AIDS and STI Prevention and Care 2011-2015 includes new priorities and approaches relevant to VCCT including:

1 *2010 HSS presentation, July 2011*

2 *2010 HSS presentation, July 2011*

- integrated HIV, sexual and reproductive health package under the Continuum of Prevention Care and Treatment (CoPCT) to promote early STI and HIV testing and health seeking behaviors among general and most at risk populations (MARPs). The initiative will require an expanded, integrated counseling approach.
- expansion of MARP friendly services where MARPS are concentrated
- strengthening and supporting linkages between health care services, the community and the CoC through new public health approaches such as Linked Response.

VCCT for HIV is the process whereby an individual receives counseling to make an informed choice, voluntarily tests for HIV, understands the results, makes a plan for reducing risk of transmission to self or others, and receives appropriate referrals. VCCT is not a separate, stand-alone but instead a key component of a comprehensive HIV/ AIDS prevention and care system. The objectives of VCCT are to:

- prevent new HIV transmission through reduction of risk behaviors and promotion of protective behaviors
- identify HIV infected individuals and provide rapid entry into the continuum of care and treatment

The 2002 law on HIV Prevention and Care HIV Testing and Counseling upholds that consent to testing be voluntary, results of testing and counseling be confidential, and that counseling accompany all HIV testing, consistent with the "Three Cs" (Consent, Counseling and Confidentiality) principle promoted internationally (UNAIDS/WHO 2004).

1.1 ESTABLISHING VCCT CENTERS

1.1.1 STEPS IN ESTABLISHING AND MAINTAINING A VCCT SERVICE

NCHADS plans to expand the number of VCCT sites from 246 sites in 2010 to 350 by 2015. New sites will be prioritized to locations central to target populations but distant from other VCCT sites and for sites with adequate staffing available. The opening of new VCCT sites through Public Private Partnerships will be discussed in detail in Chapter 11.

There are a number of steps in establishing and maintaining a VCCT service. The main ones are:

- Site Selection and Renovation or Construction
- Registering the Center
- Equipping the Center
- Staffing the Center with trained staff
- Providing regular supplies and consumables
- Running the Center
- Reporting, monitoring and supervision including quality assessments

1.1.2 INTEGRATED FAMILY HEALTH CLINICS:

A new VCCT site design integrating the Family Health Clinic and VCCT service has been built in 3 Referral Hospital sites and is planned for 2 additional sites in order to increase the integration of these services and make the site more attractive to MARP groups and youth. The scope of integrated services includes:

- STI diagnosis and treatment services and counseling for prevention
- VCCT
- Birth Spacing services for condoms, pills and injectables or referrals to the Family Planning (FP) clinics for long acting methods such as IUDs or implants
- Counseling and referral for Safe Abortion and post-abortion care services
- Pregnancy counseling and referral to ANC in case of pregnancy and choice to deliver

The new design will have counseling rooms, patient examination rooms and a library/ meeting place which can serve as a "Drop in Center" for MARPS groups. The laboratory will be integrated into the RH lab, which will perform the HIV, syphilis, and other STI lab tests. Architectural plans are available through NCHADS. The integrated sites are more fully described in the SOPs for STI/ RTI prevention and care service delivery at the Family Health Clinics. This new design is a physical integration of STI, VCCT and RH.

1.2 REGISTERING THE CENTER

All VCCT services* must be registered and licensed by the Ministry of Health.

The procedure is:

1.2.1 SUBMIT THE APPLICATION: THREE DOCUMENTS ARE NECESSARY (SEE ANNEXES 2,3):

a. Licensing Application Form - contains location and other details of the VCCT
b. List of staff who will work in the VCCT and their qualifications (part of the Licensing Application Form)
c. Letter of Avowal - is an affirmation of responsibility for the VCCT

1.2.2 NCHADS OR THE PHD WILL MAKE AN OFFICIAL OBSERVATIONAL VISIT, USING THE STANDARDIZED CHECKLIST (ANNEX 4).

1.2.3 NCHADS RECOMMENDS THE REGISTRATION AND LICENSING OF THE VCCT TO THE DIRECTOR GENERAL OF HEALTH SERVICES.

The application form with all other required documents should be first submitted to NCHADS which will review and recommend to the Director General of Health Services for licensing. The registration process will not be longer than 15 days from submitting the application to issuing the license. Licensed VCCT centers can conduct outreach VCCT.

* (VCCT services include public sector, private and NGO clinics that offer the combined package of HIV testing and counseling. This requirement for registration as a VCCT service does not apply to sites such as linked health centers which perform HIV counseling only or laboratories which perform HIV testing only.)

1.3. STAFFING REQUIREMENTS AND TRAINING

1.3.1 STAFF OF A VCCT

The staff of the VCCT should generally include two counselors and one or two laboratory technicians, but there is some flexibility in staffing based on client volume and local circumstances. One of the counselors can also be trained to perform HIV testing. Currently, health care workers (nurses or doctors) can provide HIV testing after completing the HIV testing course. In the future, non-health counselors will be trained to provide HIV testing. One of the staff members will be assigned to be the data management officer. These staff members have a collective job description in Annex 5. Staffing and training for pediatric HIV testing is addressed in section 6.

1.3.2 TRAINING

1.3.2.1 Basic, required trainings for HIV Counseling and Testing:

Two sets of basic training are organized for new VCCT staff: one for counseling and one for testing. All staff providing counseling (including peer counselors at C/PITC sites) or testing in VCCT sties must pass the Basic Counseling or Testing course. In urgent situations counselors or testers can receive on-site training until they are able to take the next available training course.

- The counseling training is a five day course using the standard curriculum developed by the VCCT Subcommittee of the Continuum of Care Steering Committee in 2005.
- The laboratory training is also a five day course with practice sessions using the standard curriculum developed by the VCCT Subcommittee.

The training curriculum for counseling will be revised in 2011.

1.3.2.2 Re-certification, continuing education, additional training

After the initial training and certification, counselors and testers need to maintain competency, build their skills, and refresh their knowledge on new approaches. Post training mentorship, supervision, proficiency testing, and counselor network meetings are important elements of ongoing quality of counseling and testing and will be discussed in detail in the section 5and 6.

Process for providing and attending the trainings:

Counselors of the VCCT unit should make a yearly plan for attending the counselor network meetings and attending the additional trainings to ensure both coverage of the site and attendance of the additional trainings. A refresher training should be attended one year after the initial training and then can be attended every 2 years thereafter for experienced staff. Additional trainings can be recommended by the supervisor based on monitoring reports and supervision. The training plan should be submitted to the Provincial AIDS and STI Program (PASP). NCHADS VCCT unit will make a schedule of trainings on a regular basis and will work through the PASP to invite participants.

Two optional, advanced trainings are also provided to VCCT staff: data management training and integrated counseling training. At least one VCCT staff per site should attend the data management training. Experienced counselors who have passed the basic training are eligible for the integrated counseling training. In the initial trainings, provincial and central level supervisors will be invited to the integrated training.

1.3.2.3: Data management training:

This five-day course is for the government staff tasked with data management, monitoring and reporting. The curriculum and materials have also been developed by the VCCT Subcommittee of the Continuum of Care Steering Committee.

1.3.2.4: Integrated Counseling Training for Staff Involved in HIV Counseling and Testing

Clients and patients accessing VCCT and the CoC have health needs beyond HIV counseling and testing. A relatively large proportion of the estimated 73,760 adult PLHIV are already in care or treatment, and many PLHIV continue to have sex and face reproductive health issues, such as unintended pregnancy and STIs, and well as possible onward transmission of virus to their sexual partners. FEWs are at high risk of HIV, other STIs and unintended pregnancies.

To meet these broader health needs of PLHIV patients, MARP client and general population clients; the integrated counseling strategy includes:

- Strengthening positive prevention for PLHIV by providing education and counseling about STI prevention, birth spacing/ reproductive health services, and ART adherence as well as providing free condoms to all PLHIV at OI/ART services
- Promotion of a high level awareness about HIV and STIs and promotion of early health seeking behavior for STI and HIV testing among MARPS, most at risk youth and the general population

In order for counselors to provide accurate and effective information about HIV, STI and dual protection for both STI and unintended pregnancy, an integrated counseling training was developed in 2011 and will develop not only the counselors' knowledge but also their capacity to provide quality integrated counseling. It must be stressed that the *goal of the patient education is expanded access and use of preventive measures.* Monitoring the outputs of integrated counseling will be covered under the monitoring and reporting (section 9).

Integrated counseling for strengthening positive prevention for PLHIV enrolled in the CoC:

Patient education and counseling for PLHIV already under care and treatment will focus on the positive prevention package expressed in the Guidelines for Implementation of Positive Prevention among PLHIV in Cambodia (2010) including:

- Adherence to ARV medication and appointment keeping
- STI prevention and case management, including safer sexual practices and contact tracing
- Correct and consistent use of condoms to prevent transmission of HIV and prevent acquisition of resistant strains of HIV. Condom use with regular partners is encouraged, and the counselor should allay possible suspicions between husbands and wives that might arise from condom use in marriage. Condom use should be demonstrated and condoms should be provided to PLHIV.
- Disclosure of HIV status to partners, family and others
- HIV counseling and offer of HIV testing of spouses and regular sexual partners if the partner's HIV status is un-known
    - HIV discordant couples (one HIV positive, one negative) should receive further counseling and education on preventing transmission to the uninfected partner through condom use

and safe sexual practices.

- Treatment as prevention among discordant couples. The HPTN 052 study demonstrated that providing HAART to patients not yet eligible for ART (based on CD4 between 350 and 550 cells/ mm^3) dramatically reduced HIV transmission by 96% to the uninfected partner. [3]The WHO is expected to issue guidance on Treatment as Prevention in early 2012. NCHADS and partners are developing a strategy for treatment as prevention among high impact discordant partnerships.

- HIV testing for children of HIV infected mothers
- Knowledge, access, and use of modern contraceptive methods to prevent unintended pregnancy
- Risks of pregnancy and methods to reduce transmission to the infant if pregnancy is desired including importance of early antenatal care, extended triple ARVs, and safe delivery in a health facility as encouraged in the recently revised 2011 National PMTCT Guidelines
- Availability of and access to safe abortion services
- Tuberculosis screening and infection control within the CoC setting

There will be additional modules on:

- Basic counseling skills
- Supportive counseling
- Intravenous and illicit drug use
- Co-infections such as viral hepatitis/HIV and TB/HIV

Tools and flip charts for patient education and counseling will be developed to assist counselors in providing clear and consistent messages.

Client education will specifically target common misperceptions to reinforce important messages:

- PLHIV can have a healthy and satisfying sexual relationship or get pregnant
- Condoms alone are not sufficient protection against pregnancy
- If husbands use condoms in a marriage, then this does not mean he is cheating on his wife
- Even if a person feels well, he or she can have HIV or an STI
- Personal hygiene practices such as vaginal douching should not be encouraged
- Modern contraception is safe but can have minor side effects (Also state what are not contraceptive side effects. For example infertility is not a side effect.)

Integrated counseling for target groups (TB patients, pregnant women) and MARPs will be covered in the sections on HPITC and C/PITC.

3 *Cohen MS, Chen YQ, McCauley M, et al. Prevention of HIV-1 Infection with Early Antiretroviral Therapy. NEJM 2011: 365: 493-505.*

2 IMPLEMENTATION MODELS OF HIV TESTING AND COUNSELING (HTC)

2.1. CLIENT INITIATED (TRADITIONAL) VCCT

In this model of HIV Testing and Counseling, the VCCT session is generally initiated by the client. In Cambodia, the prevalence of HIV among VCCT clients is low. VCCT clients generally do not have AIDS defining illnesses but instead are worried about possible exposures to HIV. The focus is on identifying the individual's HIV risks and making a practical plan for prevention. The pretest counseling session is performed one-on-one and contains the full risk assessment and risk reduction counseling. The HIV testing algorithm is the same for all implementation models of HIV Testing and Counseling (see section 6.1). The post-test counseling for all models should depend on the results of the HIV test and other identified risks, with appropriate referrals given for HIV care and treatment if HIV positive, STI services or reproductive health services if indicated (see Section 2.2.3).

2.2. HEALTH PROVIDER INITIATED HIV TESTING AND COUNSELING (HPITC)

2.2.1 INTRODUCTION AND RATIONALE

Despite the scale-up of VCCT to a large number of sites, the current reach of HIV testing services remains insufficient: few of those who need voluntary counseling and testing—because they may have been exposed to HIV infection—have access to it. In fact, 80% of those who visit health centers in Cambodia never receive an HIV test. Even when people have access to VCCT, the number of people who avail themselves of these services remains low. The possibility of stigma and discrimination, as well as a lack of information about HIV testing given to patients during routine visits to hospitals and health centers, continues to stop people from undergoing an HIV test.

Currently, many HIV-infected people are offered testing only when they present symptoms at advanced stages of their disease, often with severe opportunistic infections which have high morbidity and mortality. According to an NCHADS/ FHI study in 2010, the mean CD4 of patients enrolling in pre- ART was low - 167 cells/ mm^3, denoting severe immune suppression. HIV prevalence is higher among sick patients coming to the health facilities for treatment and care services, but many did not receive the information or offer of an HIV test. For example in 2010, only 145 patients were referred to VCCT from the Infectious Disease wards. Other high HIV prevalence target populations accessing health services include TB patients, STI patients, and in-patient department patients.

When an HIV diagnosis is made earlier in the course of the disease, appropriately timed interventions can lead to slower clinical progression and reduced mortality. Timely diagnosis of HIV infection can enable individuals to protect their partners and families and safeguard their own health, in particular through PMTCT and entering care before the immune system has been severely damaged. In several studies, reduced risk of death has been demonstrated when patients are routinely started on ART at higher CD4 values, prompting the WHO and Cambodia recommendation for starting ART at a CD4 < 350 cells/ mm^3 instead of a CD4 level of 200 or 250[4]. Early diagnosis also enables patients to receive care and treatment at the time when their immune system is not severely immune-compromised and affords PLHIV the opportunity to make a plan both for their own life and their family future, reduce risk of infecting others, to receive care and treatment and receive nutritional support if eligible.

To achieve a massive scale-up of HIV prevention, treatment, and care, and to ensure that people living with HIV are afforded the best care available, HIV testing and counseling must be expanded as a critical and core intervention in Cambodia's comprehensive country-level response to the epidemic. This includes an expansion of traditional, client-initiated Voluntary and Confidential Counseling and Testing (VCCT).

In the HPITC approach, health care providers initiate HIV testing and counseling with individuals attending health facilities who will benefit from knowing their HIV status. Patients retain the right to decline HIV testing and thereby not participate in testing and counseling.

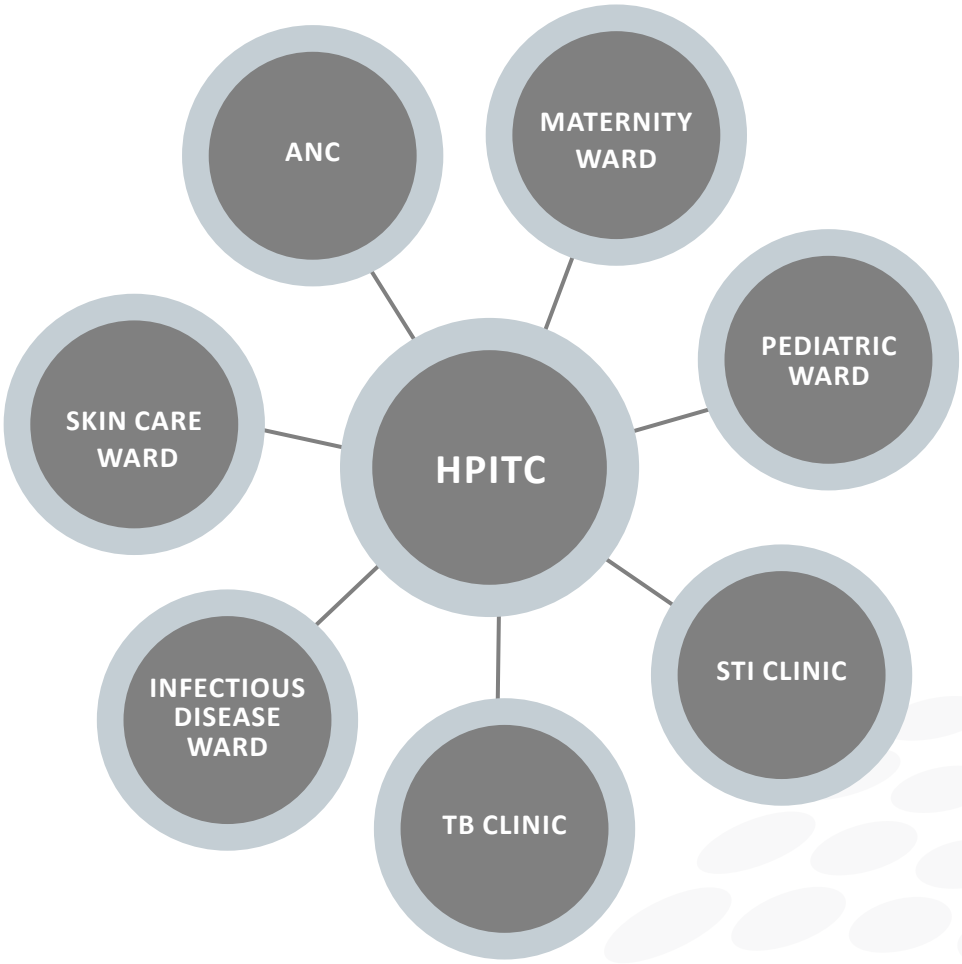
In HPITC, health care providers are NOT narrowly defined as clinicians. Rather, the term "provider" refers to all health care professionals, including midwives, nurses, clinicians, and community health workers. Information about the importance of VCCT is especially effective when given by health providers (clinicians, nurses, midwife…) to the clients coming forward for health care services. See also **Annex 6** Definitions and details of Components of HPITC.

2.2.2 THE MAIN OBJECTIVES OF HPITC ARE TO:

- Enable all patients at risk of HIV to receive the information about HIV/AIDS blood test, access prevention, care, and treatment services, and to reduce continued HIV transmission.
- Routinely offer the HIV test to patients at risk of HIV; patients can only be tested if they voluntarily agree to be tested. Although patients have the right to refuse HIV testing, most will accept.
- Help PLHIV to enter the continuum of prevention and care services and receive referrals for additional prevention and support services
- For the clients with negative test results, counseling on ways to protect themselves against HIV infection

4 *National Guidelines for Use of Antiretroviral Treatment in Adults and Adolescents. NCHADS February 2011*

Diagram 1: Linking HPITC with Relevant Services to Increase HIV Testing



2.2.3 Implementing HPITC

- Provide referral cards to all clinicians in referral hospitals, health centers, and other locations where providers will initiate HIV testing and counseling.
- Orientation workshop on HPITC for all health care providers working in referral hospitals; particular emphasis on referral mechanisms involved
- Training for clinicians and other health care providers about the basics of HIV (including when to suspect patients at risk of being infected by HIV), referral process and the specific protocol for HPITC

2.2.3.1 Steps for Implementing HPITC

HPITC should be implemented in the public and private sector, especially in referral hospitals (RH), former district hospitals, health centers (HC) and VCCT testing centers. Implementation of HPITC in the NGO and private sector should follow the same protocol as in the public sector. VCCT services can be delivered in various ways: counseling may be conducted at one place (for example a Health Center) and a sample of blood sent to the laboratory at the RH; or Counseling and testing may be done together at a VCCT Center. VCCT services may be established and run by a number of partners: the Ministry of Health, NGOs, the private sector, etc. But it is very important that the various components form a single coherent procedure or network - even if they are divided up by time and place.

2.2.3.2 Types of PITC

a. Routinely-offered HPITC

- This form of HIV testing and counseling is for patients attending health facilities who do not have obvious HIV-related signs or symptoms, yet who could benefit from knowledge of their HIV status. This includes patients assessed for a sexually-transmitted infection (STI), those seen in antenatal care (ANC) clinics, tuberculosis (TB) clinics, drug treatment facilities (targeting injection drug users (IDUs)), and pediatric malnutrition wards. The patient is informed of the HIV test and has the right to decline it.
- In particular, HPITC should be implemented for all pregnant women in high HIV burden settings in order to identify those who are HIV infected and refer them to PMTCT services
- In addition, HPITC should be implemented for all TB patients in order to target this key group that often presents underlying HIV infection.

b. Diagnostically-indicated PITC

- This form of HIV testing and counseling is part of the clinical process of diagnosis and management of an ill person (for example on infectious disease wards or skin care wards) and is indicated whenever a person has a medical condition or symptom which suggests possible underlying HIV. The HIV test is recommended as a regular part of diagnosis, and like any medical consultation, involves confidentiality and the provision of information. Based on this, the patient consents to testing and treatment.
- HIV/AIDS blood test for HIV diagnosis without patient consent should not be practiced in Cambodia. Although health providers should routinely offer HIV testing to aid in clinical diagnosis and management, the patient must know that an HIV test is being performed and consent to HIV testing.

c. The following examples of HIV testing without patient consent (Diagnosis Indicated method), is not supported in Cambodia:

- routine pre-employment HIV testing is not supported
- routine pre-operative HIV testing without the patient knowing the HIV test is performed is not supported
- routine test on admission to a hospital or clinic is not supported

Two special situations around knowledge and consent are:

- Screening of blood for HIV and other Transfusion Transmitted Infections (TTIs) before medical transfusion; however, donors should be informed that their blood will be screened for TTIs
- HIV testing of infants/ young children; however, the parent or legal guardian must provide written consent on behalf of the infant. For older minors (<18 years old) HIV testing can be done with minor's consent if the test is deemed beneficial to the minor. (HIV law, Chapter 4, Article 19)

2.2.3.3: Pre-Test Information

a. All providers serving in different services of a hospital, health center or clinic—including ANC, TB, operational, inpatient, outpatient, maternity, and pediatric wards—should provide detailed information about HIV testing to the patient, especially regarding the importance and benefits of HIV testing and knowing one's HIV status. The emphasis on pre-test counseling is to ensure that patients are given enough information to enable an informed decision should they want to opt-out.

b. Health care providers must indicate to the patient why testing is recommended. This simplified counseling process consists of brief targeted messages such as
   - "HIV is common among patients we serve, and care and treatment works best if the disease is identified sooner rather than later" (for routinely-offered HPITC);
   - "Your symptoms are consistent with HIV and knowing your HIV status will enable you to receive good care and treatment" (for diagnostically-indicated HPITC), and
   - "Knowing your HIV status and understanding the counseling provided with the HIV test will enable you to make important and safe sexual decisions" (for all HPITC).

c. Pre-test information provided to all patients consists of:
   - Clinical and prevention benefits of testing
   - Description of the testing and counseling process
   - Risks associated with HIV testing and disclosure
   - Right to decline HIV testing and that testing will be performed unless they decline
   - Follow-up services that will be offered and schedule of services
   - In the event of a positive test result, the importance of anticipating the need to inform anyone at ongoing risk, such as sex or injection partners, who would otherwise not suspect that they were being exposed to HIV.

d. Individualized risk assessment is normally part of VCCT pretest counseling process. The Project RESPECT study have demonstrated that clients given a series of 3 counseling sessions with individualized risk assessment and reduction planning were less likely to become HIV infected compared to clients randomized to 2 sessions with information only.[5] For HPITC, risk assessment can still be offered to the patient; however, the health center and RH settings are often busy, and lengthy individualized pretest counseling may not be feasible. The focus on these target medical populations (TB, ANC, STI) is timely detection and referral for services; therefore, individualized risk assessment should not be a barrier.

e. While pretest education and information can be given to a group, post test counseling should always be given individually (one on one)

f. Informed consent can be given by the client verbally, written consent is not required.

2.2.3.4: Referral for HIV testing

a. Option 1Referral of patient: For those who decide to be tested, the health care provider should provide the patient with a REFERRAL CARD to the testing center (Annex 7). Health care providers

5 *Kamb ML, Fishbein M, Douglas JM, Jr., et al. Efficacy of risk-reduction counseling to prevent human immunodeficiency virus and sexually transmitted diseases: a randomized controlled trial. Project RESPECT Study Group. JAMA 1998;280(13):1161-7.*

should provide enough information to the patient so that s/he will understand the location and time of testing.

b. Option 2 sending blood specimen: If testing takes place at the same site, provider informs the patient that s/he will conduct an HIV test and will do so unless the patient refuses. The provider will then draw a blood sample and send the sample to the laboratory, with the referral card attached to the blood sample (Annex 8). In this way, the patient can be tested without needing to change locations, and the patient can receive his/her test results rapidly. This method can also be used to send blood to a testing center located off site. After performing the test, the testing center will send back the test results. The patient is given a follow-up visit to the site and the test results returned during the follow-up visit.

c. Those patients who decline testing should be offered assistance to overcome barriers to testing by identifying reasons for declining a test, helping to address these reasons, re-assessing their willingness for testing, and linking them with VCCT services should they later decide to be tested for HIV.

2.2.3.5: Testing

a. Rapid, on-site HIV tests should be used where available. This reduces delays and increases the number of people who receive test results.

b. Testing can occur outside of traditional laboratory settings, decentralizing access by giving wider flexibility to where and by whom testing and counseling can be conducted. These tests do not need specialized equipment and can be carried out by health-care providers or trained lay personnel. HIV testing can be performed by using a finger prick specimen that can be applied at the health center and other health services where laboratory is not available.

c. Where testing is not conducted on-site, counselors or relevant health personnel should send the sample to the nearest laboratory as soon as possible, with the referral card attached.

2.2.3.6: Test Results and Post-Test Counseling

a. Post-test counseling should be given clearly and effectively. The health care provider will provide test results directly to the client and will not provide the client's results through other people or in a group setting. If clients don't receive same day results, the provider will make a follow-up appointment for the patient to come back and receive the results. If the client does not return for results (especially if HIV positive), the counselor will contact the client at their home, or use home-based care (HBC) teams to contact the client and bring him/her into the hospital or health center receive his/her results.

b. Post-test counseling should provide more information and support for both HIV+ and HIV- patients. Test results should be given to the client in-person by health care providers or by trained lay personnel. Clients reserve the right to decline any part of the testing and counseling process, including learning results.

c. HIV+ Patients

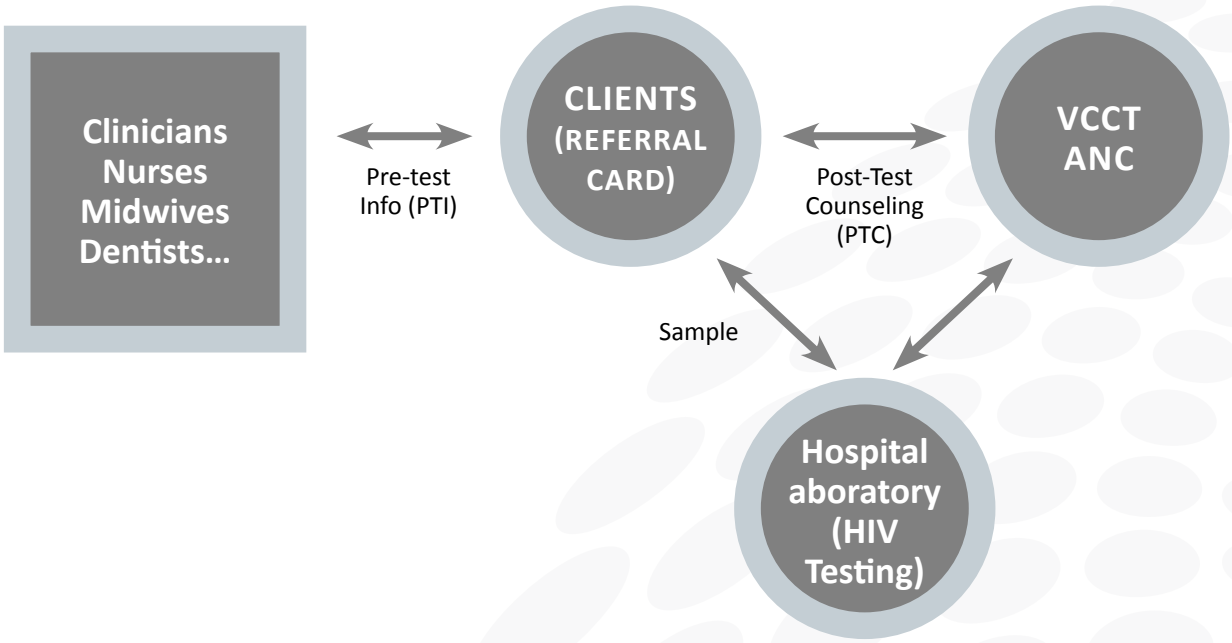
- Health care provider gives positive test result, interprets meaning and provides immediate emotional support

- Provider gives information about referrals for Continuum of Care (CoC) and treatment services; provides patient with clear understanding of services and their location and a referral card (Annex 8).
- Provider refers patient for treatment and care
- Provider advises on importance of partner disclosure and how to prevent HIV transmission
- Provider refers to another counselor for additional post-test counseling.

d. HIV- Patients

- Provider gives negative test result explains test result including the notion of window period and explores the last known risk exposure
- Provider explains how to prevent HIV to remain HIV-. This includes discussion about being faithful, using condoms, and providing a demonstration and provision of condoms if desired).
- Provider refers patients for more extensive post-test counseling if requested or for individuals in high-risk groups to address risk assessment and risk reduction

Diagram 2: How to Implement HPITC



2.2.4 HPITC IN SPECIFIC CLINICAL SETTINGS

Target groups: HPITC needs to be implemented in both public, NGO and registered private health facilities, especially at referral hospitals, former district hospitals and health centers with VCCT centers co-located or in proximity. If the HPITC is implemented at private health facilities, clinics or health workers of the non-governmental organizations shall follow the implementation guidelines applied at the public health facilities. Given the concentrated nature of Cambodia's current HIV epidemic, health providers should not routinely recommend HIV testing for all patients presenting to health facilities. However, patients with signs or symptoms of HIV infection or AIDS and those attending the following services should have education and offer of HIV test:

- Antenatal Care / Maternity – especially in high HIV burden settings
- STI/ Family Health – for patients diagnosed with an STI or at risk of HIV
- TB, for all patients diagnosed with TB and for TB suspects
- Infectious Disease inpatient ward and skin care ward if signs or symptoms of HIV infection or AIDS defining illness
- Prisons and other closed settings

Special considerations are needed for specific clinical services, such as those for pregnant women and for children. However, high-risk populations such as sex workers, IDUs and men who have sex with men are often among the most marginalized and discriminated against populations in society and particular efforts are needed to ensure that targeting health provider-initiated counseling and testing to these groups does not create further stigmatization or perpetuate discrimination.

2.2.4.1 Reproductive Health Centers at Referral Hospitals and Health Centers

To prevent HIV in infants and young children, a set of key interventions needs to be implemented as integral components of sexual and reproductive services. Preventing unintended pregnancy and supporting intended pregnancy and the sexual and reproductive health rights among HIV+ women is a key component in preventing mother-to-child transmission (PMTCT). Integrating HPITC within health services attended by pregnant women and women of childbearing potential especially in high HIV burden settings (family planning and reproductive health centers) is important for achieving this aim.

Pre-test counseling should be conducted and a referral card should be filled out for those patients who consent to the HIV test. Rapid HIV tests should be conducted on-site where available.

a. ANC/PMTCT

Effectiveness of PMTCT programs is critically limited by the proportion of pregnant women who know their HIV status. HPITC should be incorporated as the entry to PMTCT programs because they are essential to identifying women who can benefit from ART, care, and PMTCT services.

HPITC is recommended for all pregnant women (especially in high HIV burden areas), preferably as early in pregnancy as possible. For women not diagnosed during pregnancy, HIV testing and counseling in labor or shortly after childbirth can facilitate entry into PMTCT programs and other HIV services.

Pre-test counseling in ANC clinics should provide broader information than is provided in other cases. Women should be informed of the benefits of early diagnosis of HIV for themselves, their spouses, and their children, the risks of HIV transmission to infants, and the effectiveness of ARV drugs for their own health and in PMTCT.

b. Pretest information for pregnant women in the antenatal care setting:

- The risk of transmitting HIV to the infant in the absence of treatment is approximately 25% during pregnancy and childbirth. There is an additional transmission risk associated with breastfeeding in the absence of ARV treatment

- If mothers are found HIV positive, it is recommended that the receive a combination of three ARV drugs starting after 14 weeks and extending through the breastfeeding period in order to prevent mother to child transmission per Guidelines for the Prevention of Mother-to-Child Transmission of HIV, 3rd edition, 2010
- Women already on ART should continue to take their ARV medications but have their ART clinic physician review the medications
- HIV infected patients should deliver at a health facility with maternity services, not at home
- After delivery the infant should be tested for HIV per Early Infant Diagnosis (EID) Guidelines and if found positive can receive ART to reduce death and morbidity (see Chapter 6.)

Where possible, HIV testing should be provided on-site to enable same day results using rapid HIV test and a finger prick specimen. Where not possible, a referral card should be filled out for those patients who consent to the HIV test. Rapid HIV testing, which minimizes delays in obtaining test results, is especially critical for HIV testing during labor or shortly after childbirth.

c. Pediatric Wards

HPITC should be used for children presenting with:

- suboptimal growth,
- malnutrition, in particular for malnourished children not responding to appropriate nutritional therapy or
- other signs of advanced HIV disease

Pre-test counseling with children and/or their caregivers should be conducted and a referral card should be filled out for those patients who consent to the HIV test. Rapid HIV tests, however, should be conducted on-site where available. The 2010 National Guidelines for the use of Pediatric ART in Cambodia has guidance on the diagnosis of HIV in infants and children.

When a child or other member of a family tests positive for HIV, health care providers should initiate discussion and recommend HIV testing and counseling for all other members of the family.

d. TB Clinics

HPITC should be made available for those patients presenting opportunistic infections commonly associated with HIV, particularly tuberculosis (TB). Therefore, HPITC should be conducted at TB clinics and health centers where TB is diagnosed. HPITC at TB clinics has been shown to increase HIV knowledge among those who received their HIV test results[6].

Pre-test counseling should be conducted and a referral card should be filled out for those patients who consent to the HIV test. Rapid HIV tests should be conducted on-site where available.

6 *Wiktor S, Abouya L, Angora H, et al. Effect of an HIV counseling and testing program on AIDS-related knowledge and practices in tuberculosis clinics in Abidjan, Cote d'Ivoire. Int J TB and Lung Dis 8 (4):445-50.*

Pretest information for TB patients, TB suspects, medical inpatients:

- TB and other serious infections are associated with HIV
- The only way to know if the patient has HIV is to perform a test
- If the patient has HIV infection, the patient should be treated for both conditions. Treatment of TB or other infections alone is not enough.
- If a patient has TB and/ or HIV, close family members should also be tested
- Coughing patients should avoid coughing on other patients, wear a "kroma" or face mask when in enclosed areas (and infection control measures at household).

e. STI Clinics

Given the benefits of knowing one's HIV status, HPITC should be made available to patients attending all reproductive health services, particularly for all patients being assessed for sexually transmitted infections (STIs). Significant intervention effects have been found for men who tested negative for HIV at STI clinics—specifically, decreased visits to sex workers, decreased number of recent sex partners, and increases in condom use and monogamy (Bentley et al 1998).

Pre-test counseling should be conducted and a referral card should be filled out for those patients who consent to the HIV test. Rapid HIV tests should be conducted on-site where available.

f. Drug Treatment Facilities and other Closed Settings

HPITC should be conducted at drug treatment facilities in order to make HIV testing more available to injection drug users (IDU), given the high prevalence of HIV among IDUs in Cambodia.

Pre-test counseling should be conducted and a referral card should be filled out for those patients who consent to the HIV test. Rapid HIV tests should be conducted on-site where available. Refer to concept note for C/PITC.

g. Prison settings

HPITC should be conducted at prison health post according to the current SOP (*refer to NCHADS document). Prisoners should be free to decline HIV testing after receiving information about the HIV test.

Pre-test counseling should be conducted and blood sample from those prisoners who consent to the HIV test should be sent to the nearest VCCT site. HIV positive prisoners will have to be systematically referred to the nearest OI/ART site for evaluation and follow-up according to the revised SOP for HIV and TB-HIV activities in prisons.

2.2.5 HPITC MONITORING AND REPORTING

The monitoring of HPITC implementation is very important to promote the participation of all health workers and to ensure the effectiveness of the implementation. The monitoring and reporting are discussed in detail in Chapter 12.

- Include the activities of HPITC implementation monthly in the CoC meetings
- Hold quarterly HPITC implementation monitoring meetings with VCCT supervision activities included
- OD coordinators and PASP managers and VCCT coordinators shall check and monitor the reports from VCCT, focusing especially on referrals from health facilities and shall bring them up for discussion at monthly meetings of referral hospitals and PHDs with directors or deputy directors of health centers.
- VCCT/NCHADS shall check quarterly reports from each VCCT site, paying attention especially on the number of clients referred from health facilities.

2.3 PEDIATRIC HIV TESTING IN HIV-EXPOSED AND MALNOURISHED CHILDREN

2.3.1 IMPORTANCE AND RATIONALE

HIV infection follows a more aggressive course among infants and children than among adults, with 30% dying by age 1 year, and 50% by age 2 years without antiretroviral therapy and co-trimoxazole prophylaxis.[7] Early HIV diagnosis and treatment initiation is therefore very important for HIV-infected children.

2.3.2 TARGET POPULATION: INFANTS AND CHILDREN WHO SHOULD BE OFFERED HIV TESTING

All infants and children born to HIV-infected parents should be offered an HIV test through the parents/guardians. HPITC for children should also be performed when any signs or symptoms that could be due to HIV are noted. According to the *Guidelines for the Prevention and Treatment of Opportunistic Infections among HIV exposed and HIV infected children* (December 2010), in addition to those with known exposure or with suspected clinical HIV, the following high-risk children should also routinely receive HIV counseling and testing:

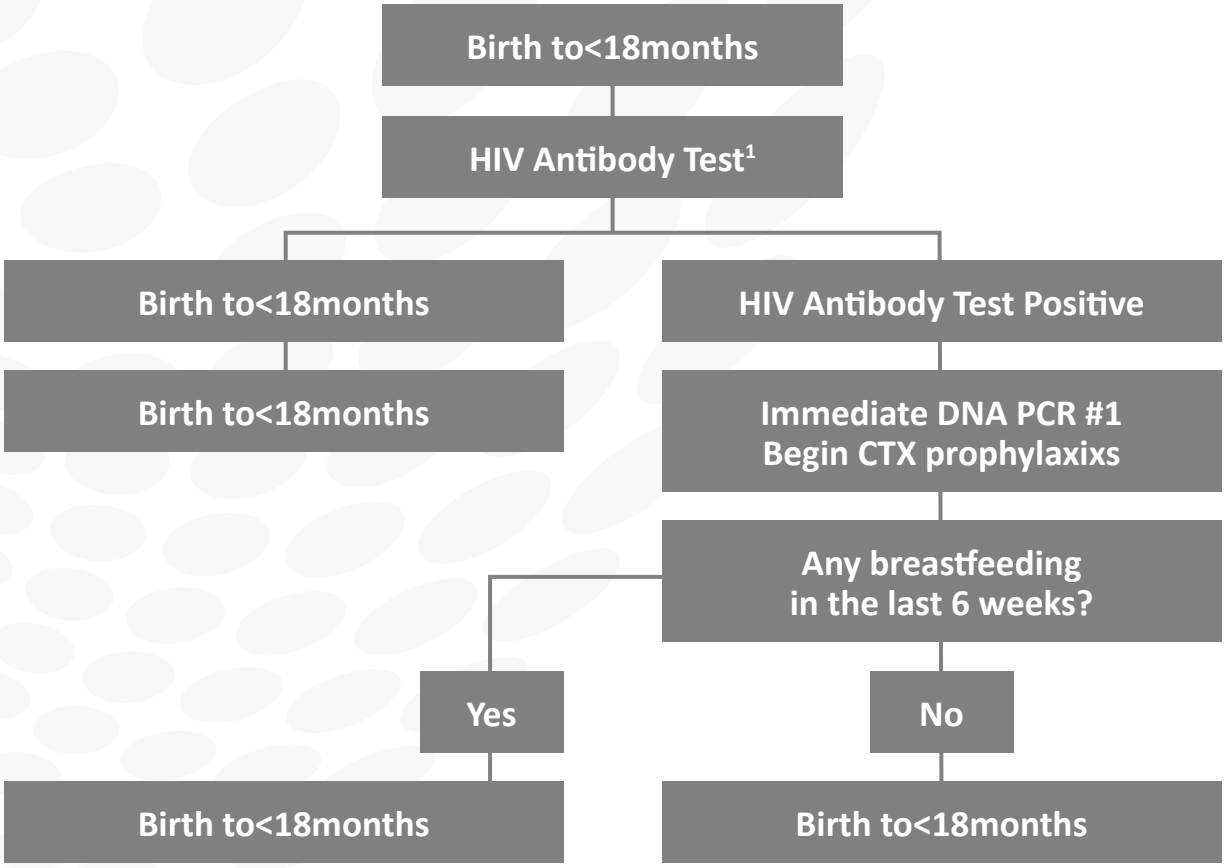
- Siblings of an HIV-infected child
- Orphans and abandoned children
- Children with tuberculosis
- Children with severe malnutrition
- Children with severe pneumonia not responding to the usual therapy

Informed consent is provided by the infant or child's parents or guardians. If parents refuse the HIV test, this right to refuse must be honored, though with proper counseling almost all parents will consent.

There are two types of tests to identify HIV infection in children: antibody tests and virologic tests. HIV antibody testing is used for children 18 months and older. A virologic test is used for children less than 18 months.

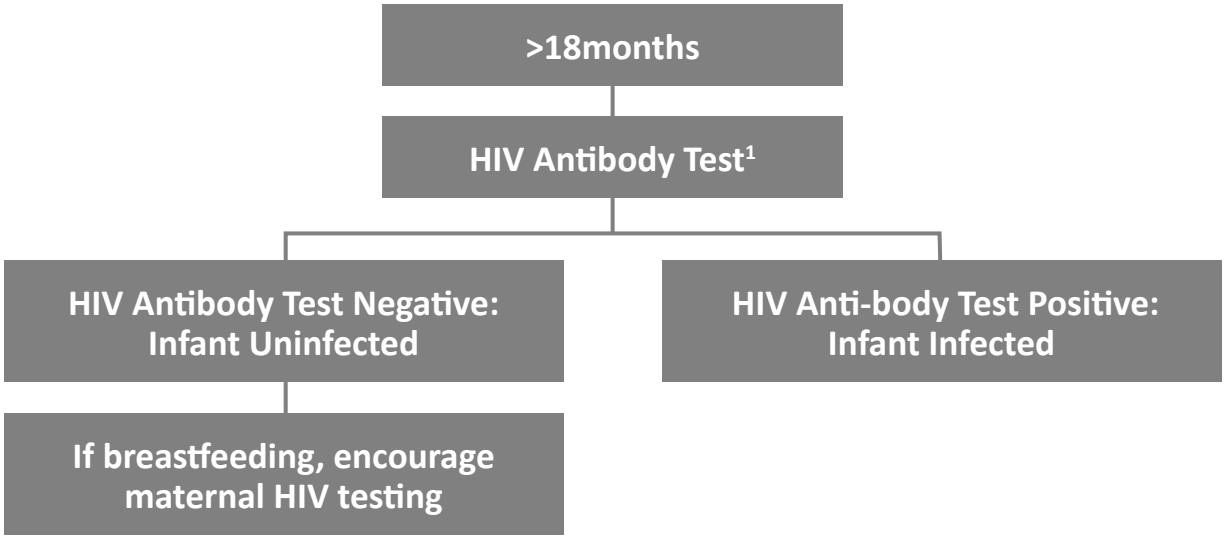
7 *Newell, Marie-Louise, et al., 'Mortality of Infected and Uninfected Infants Born to HIV-infected Mothers in Africa: A pooled analysis', The Lancet, vol. 364, no. 9441, 2–8 October 2004, pp. 1236–1243.*

Child Testing Algorithm: HIV Testing of Infants whose mother's HIV status is unknown



1 *Follow National Guidelines algorithm for HIV Antibody testing*

Child Testing Algorithm: HIV Testing for Children> 18Months



1 *Follow National Guidelines algorithm for HIV Antibody testing*

2.3.3 HIV ANTIBODY TESTING FOR CHILDREN AGED 18 MONTHS AND OLDER:

2.3.3.1 HIV antibody testing (which includes the use of rapid tests) is used for children aged 18 months and older to determine their HIV infection status.

A positive result (two reactive HIV tests per national algorithm) in a child 18 months or older indicates HIV infection.

A negative HIV antibody test result in a child 18 months or older, who has never been breastfed or has stopped breastfeeding for more than 6 weeks, indicates that the child is not HIV infected.

The rapid test algorithm used is the same as the standard algorithm employed for adults in Section 6.1.

Note: in resource limited settings, antibody testing can be done for children aged 12 months or older. This is because in 96% of HIV uninfected children will have lost their maternal antibodies and test antibody negative at 12 months.

2.3.3.2 Disclosure

It is generally recommended that children should know their diagnosis by 10 years of age (12 years of age at the latest). Disclosure to the adolescent of his/her HIV status, while difficult, often helps the adolescent to adhere better to ARV medications. For these reasons, it is especially important that young people:

1) are informed about their HIV status;
2) are well educated about their condition, its treatment and the importance of adhering to care and ART;
3) are confident in their ability to talk about HIV with those whom they want to know about their condition; and
4) have a strong support system so that they know where to obtain help and advice when necessary

2.3.3.3 Positive prevention counseling to adolescents

The age of legal sexual consent in Cambodia is 15. Therefore, positive prevention counseling provides adolescents with the knowledge and skills to protect themselves and their sexual partner(s) from STI and HIV infection or re- infection. Pediatric counselors or pediatricians must provide positive prevention counseling to HIV infected adolescents at every visit, or more frequently as needed. The content of counseling will vary according to individual needs. In general, counselors should talk with adolescents about:

- Route of HIV transmission
- Delay of sexual activity;
- Safety/risk of different sexual practices;
- Communication and negotiation skills for safer sex including condom use;
- Issue of partner disclosure; and
- HIV and unintended pregnancies.

2.3.4 HIV VIROLOGIC TESTING FOR CHILDREN AGED 18 MONTHS AND YOUNGER

Because infants born to HIV-infected mothers carry maternal HIV antibodies up to 18 months after birth, HIV virologic (DNA-PCR) testing is recommended, because this method detects the HIV virus or its components in the child's blood.

For all known HIV-exposed infants at 4-6 weeks of age, perform DNA PCR testing:

- A positive DNA-PCR test means that the child is HIV-infected, and ART should begin without delay.
- A second DNA-PCR test to confirm HIV infection should be performed as soon as possible, but ART should not be delayed while waiting the results.

Infants 6 weeks of age or older who have never breastfed and who have a negative DNA PCR test are presumed to be not HIV infected.

Infants 6 weeks of age or older who are breastfed, whose first DNA PCR test is negative, are recommended to have a second DNA PCR test 6 weeks after the complete cessation of breastfeeding to exclude HIV infection.

- ✓ DNA PCR-1 (4-6 weeks after birth)
- ✓ Confirmatory DNA PCR-1 (perform only if DNA-PCR-1 is positive)
- ✓ DNA PCR-2 (> = 6 weeks after weaning)
- ✓ Confirmatory DNA PCR-2 (perform only if DNA-PCR 2 is positive)

Please see Chapter 2 of the Guidelines for the Use of Antiretroviral Therapy in Cambodia (3rd Edition December 2010) for further information about the testing algorithms and treatment recommendations for children.

2.3.5 EARLY INFANT DIAGNOSIS IMPLEMENTATION GUIDELINES FOR STAFF

2.3.5.1 At 4-6 weeks of age:

- Initiate infant on cotrimoxazole
- Collect the dried blood spot (DBS) sample for DNA PCR-1 per NCHADS SOP for DBS collection for DNA PCR and complete the DNA PCR testing request form (Annex 9). DBS collection can be performed at all days and hours that the health facility is open.
- Provide counseling about:
  - Exclusive feeding methods
  - Importance of regular vaccinations
  - Availability of HBC services
- Record in the HIV Exposed Infant Register (Annex 10)
- Schedule next monthly appointment

2.3.5.2 At 8-10 weeks of age (if not before):

- Deliver DNA PCR-1 Result
  - If positive, initiate ART and adherence counseling (with the caregiver) and collect a new DBS specimen for Confirmatory DNA PCR-1
  - If negative:
    - counsel on the importance of exclusive infant feeding
    - maintenance of regular immunization schedule
    - If mother is breastfeeding, continue cotrimoxazole prophylaxis
- Schedule next monthly appointment

2.3.5.3 Six weeks after weaning (if breastfeeding):

- Check to see if infant weaned completely or ≥ 6 weeks prior to present consultation
  - If yes, collect DBS sample for DNA PCR-2
  - If no, offer counseling and encourage complete weaning
    - Continue cotrimoxazole prophylaxis
- Make appointment for follow-up visit after 4 weeks.

2.3.5.4 At the follow-up visit (four weeks after the collection of the PCR-2 sample):

- Deliver the PCR-2 Result:
- If positive, immediately initiate the child on ART and perform a confirmatory PCR.
- If negative, counsel the caregiver on the importance of no breastfeeding and maintenance of regular immunization schedule

2.3.6 TRAINING ON DBS COLLECTION:

2.3.6.1 A one-day training course on DBS collection has been developed by NCHADS. Extra care should be taken by managers at the national, provincial, district and site level to ensure that the PAC and VCCT lab staff who are responsible for specimen collection attend training. Health staff that have been trained to collect DBS samples should be able to:

- Understand the importance of and background to EID
- Understand the interdependency of Infant Diagnosis with other programs
- Identify infants for testing and provide the appropriate early care
- Collect and handle Dried Blood Spot (DBS) samples
- Understand how to store DBS samples
- Know how to transport samples for testing and maintain appropriate documents
- Keep records and manage data

2.3.6.2 Refresher Training:

Site level staff should participate in regular refresher trainings. NCHADS offer annual refresher trainings and extra care should be taken to ensure that staff who are directly responsible for collecting DBS samples are in attendance. NCHADS should maintain a record of staff members who have received training and refresher courses.

2.3.6.3 Transportation of DBS Samples

A reliable sample transport network is a key part of effective early infant diagnosis. All sites can collect a DBS sample on any day of the week because DBS samples are stable (not perishable) when stored sealed in the provided zip-lock plastic bags with desiccant at room temperature and out of direct sunlight. An EID focal point person has been established at every site, who is responsible for tracking samples and making sure that the caregivers of all infants tested promptly receive their results.

Once collected, the staff at the PAC facility or VCCT lab (EID focal point person) should use either of the following options:

Option 1: use a courier service[8] to transport the DBS to the National Institute for Public Health (NIPH) in Phnom Penh for testing. Those sites taking care of larger volumes of HIV exposed infants are encouraged to call the courier service when they have 2-3 DBS samples ready for collection (as long as the time taken to collect these samples does not exceed 2 weeks). However, sites with smaller volumes are encouraged to call the courier service straight away. Upon collection, the courier should record when and where each sample is picked up. The courier then delivers the sample to the NIPH, recording the date each sample arrived at the lab. To ensure swift results return, the NIPH should contact the courier service to pick up any completed results that need to be returned and record the date in which the results were returned to the site. NIPH is also encouraged to call the site (EID focal point) directly to inform them that the result has been sent. Positive results may be additionally provided over the phone to ensure rapid return of results to the caregiver.

Option 2: use another service

In those sites where the courier service is not being used, the site is responsible for organizing the sample transport – for example, with a local taxi service or bus company. The site should maintain important information regarding the transport of samples, including when the samples were collected, by whom, and how many samples. During sample drop off at NIPH, the site needs to assure that any available results will be picked up and returned back to the site. All information about sample transportation, including when the results were collected from NIPH and when the sample arrived to the site and was given to the caregiver, must be recorded by the site (e.g. the EID focal point).

2.4 COMMUNITY/PEER INITIATED HIV TESTING AND COUNSELING FOR MOST AT RISK POPULATIONS (C/PITC FOR MARPS)

2.4.1 INTRODUCTION AND RATIONALE

In 2009, the Standard Operating Procedures (SOP) for Continuum of Prevention to Care and Treatment (COPCT) for Women Entertainment Workers in Cambodia was approved by the MOH and sought to

8 *At the time of printing, Air Express Worldwide is the courier service contracted by NCHADS (with support from UNICEF) to provide this service between sites and NIPH. This service is available nationwide and most EID sites have chosen to use it. Contact staff are available in each province.*

ensure consistent preventive measures (condom use, HIV and STI testing, birth spacing) and strengthen the monitoring, coordination and collaboration between network support groups and health services for EWs. The SOPs were scaled nationally; however, there has not yet been a dramatic improvement in HIV testing and counseling among the EW and MSM groups.

The Community/ Peer Initiated Testing and Counseling approach addresses the low uptake of HIV testing services among EWs and MSM recognized through the public health VCCT centers. In Entertainment Establishments (EEs), EW networks have been established by NGO's such as FHI (Smart Girl), KHANA, RHAC, AFESIP, ACTED PSF-Cambodia and CWPD. M-Style is a network for MSM. Peer networks have been used in a number of settings to increase uptake of clinical services among low-literacy and difficult to reach populations. The peer networks will educate and mobilize their members to improve the demand for HIV testing and counseling and to attend meetings at the Drop in Centers. Drop in Centers will be used as a MARPS- friendly venue for outreach VCCT provision by health center staff. In addition, clients served through this C/PITC will be recognized as an EW or MSM.

Although Intravenous Drug Users (IDUs) represent an important MARP group at high risk of HIV infection and transmission, there are no existing IDU peer networks. At this time, the scope of the C/PITC will be for EWs and MSM.

2.4.2 OBJECTIVES

In order to reduce HIV transmissions among MARPS groups, C/PITC will seek to:

- Increase the HIV testing and counseling coverage among EW and MSM
- Increase the number of HIV infected EW or MSM accessing HIV care and treatment services
- Reduce risk-taking behaviors such as unprotected sex, especially with sweethearts through client education and counseling

C/PITC will be one approach in a combination prevention strategy which will include the existing self-referred VCCT, HPITC from STI/ RH clinics, mass media messages, substance use education and behavioral interventions for male sweethearts.

2.4.3 IMPLEMENTATION

The activities and reporting described in the Standard Operating Procedures (SOP) for Continuum of Prevention to Care and Treatment for Women Entertainment Workers in Cambodia will continue as described in the SOP. In addition,

2.4.3.1 Preparation for the implementation of C/PITC

- Conduct situational analysis/mapping of PE/PF networks to assess suitability of the venues to C/PITC and the scope of MARP networks
- Identify VCCT Center near the drop in Centers/ meeting points that will be responsible for staffing, logistics and supplies management (LSM) including HIV tests and consumables. NGO VCCT staff recognized by MOH (for example RHAC clinic staff) can also be used
- Provide training to VCCT staff in EW and MSM groups to improve MARPS-friendly attitudes and reduce stigma or discrimination.
- Organize orientation/sensitization of PE/PF and VCCT staff on the 3C principles (consent, counseling and confidentiality) and the C/PITC approach to HIV testing and counseling.

2.4.3.2 Strengthen EW/MSM Networks (PF/PE) to support C/PITC

- EW and MSM Networks will develop the annual meeting plan and share it with NCHADS Team, PHD, OD, RH and HC where VCCT are available
- The schedule of network meetings will be communicated to and coordinated with the VCCT staff at the nearest health center.
- Organize training of PE/PF in peer counseling
- Conduct monthly EW/ MSM network meetings in the Meeting Points/ Drop in Centers
- PE/ PF will provide peer education and recruit new members into the peer networks

2.4.3.3 Pre-test counseling and education

- Trained counselors and testing staff) will attend the network meetings at the drop-in centers/ meeting points and will provide group pre-test counseling on risk reduction and HIV testing (process, benefits, risks alternatives). The trained counseling and testing staff could be health care workers from the VCCT centers or they may be lay counselors. Lay counselors could be Peer Facilitator, Peer Educator, or NGO staff. They will be officially trained on HIV counseling and testing.
- Information given during pretest should be tailored towards the MARP group since the concerns of EW and MSM may be different.
- Staff should use job aids for counseling and pretest information to ensure consistent and clear information
- For EW, the following information should be communicated:
  - Condoms and a modern contraceptive method should both be used for protection of Sexually Transmitted Infections (STI's) and pregnancy
  - STI's other than HIV can be acquired and transmitted. STI's can cause symptoms such as pain and vaginal discharge, can cause infertility or can be asymptomatic. If a woman thinks that she has an STI, she should seek diagnosis and treatment promptly
  - Importance of regular checkups at the Family Health Clinic where she can be screened for infections and receive condoms
  - Prevention of STI through limiting numbers of partners, use of condoms and limiting use of drugs like alcohol and methamphetamines
  - Safe abortion services
- For MSM, the following information should be communicated
  - STI's other than HIV can be acquired and transmitted. STI's can cause symptoms such as pain and penile discharge or can be asymptomatic. If a man thinks that he has an STI, she should seek diagnosis and treatment promptly
  - Importance of regular checkups at a Health Clinic (where available)
  - Prevention of STI through limiting numbers of partners, use of condoms and limiting use of drugs like alcohol and methamphetamines

2.4.3.4 HIV Testing

- At the Meeting Points/ Drop in Centers, health care workers or trained lay counselors will provide HIV testing for clients who voluntarily accept.
- HIV testing can be performed by using a finger prick specimen. In this case, a single HIV test (Determine) will be used plus the rapid syphilis test, if available. If the Determine HIV test is non-reactive, the client's result will be considered negative. If the Determine HIV test is reactive, the client must be referred to a VCCT center to receive the complete national three test algorithm (see Section 11.1).
- Lab technicians and lay testers can and should perform quality control of HIV testing.
- No name will be recorded but instead an ID code number will be issued. Each participant will be requested to provide personal phone number.

2.4.3.5 Post-test counseling

- Group post-test education/counseling will be provided to all participants, regardless of test results. All participants will be provided with the counselor's phone for further information regarding HIV testing. Participants should be informed that those testing negative should have another test in 6 months.
- Although the trained Lay Counselors can perform HIV counseling and testing, they are limited in that scope. They can provide pre-test counseling and provide post-test counseling for HIV Negative results.

2.4.3.6 Test results will be returned to each client in a sealed envelope at the end of the event. In case of a Determine HIV reactive test result (or HIV positive test result if the complete three test algorithm is performed), a relevant pre-paid mobile phone card/ telephone voucher (USD1 or 2) will be included in the seal envelope. The client will be requested to contact the counselor for detailed discussion, further post-test counseling, and referral to a VCCT center for HIV testing with the complete algorithm using three rapid tests. The client should be informed that a false positive result can occur when only a single rapid test is used.

- In the event that the positive client does not return the call, the counselor will be responsible for contacting the client for post-test counseling. The system for referral and retention of HIV reactive clients should ensure that HIV reactive clients successfully reach the VCCT center for follow-up.
- **Referral of clients to other services:** HIV positive clients will be referred by trained counselors to relevant services (OI/ ART site, self-help groups, STI/FP services). See Section 8 for linkage and referral.

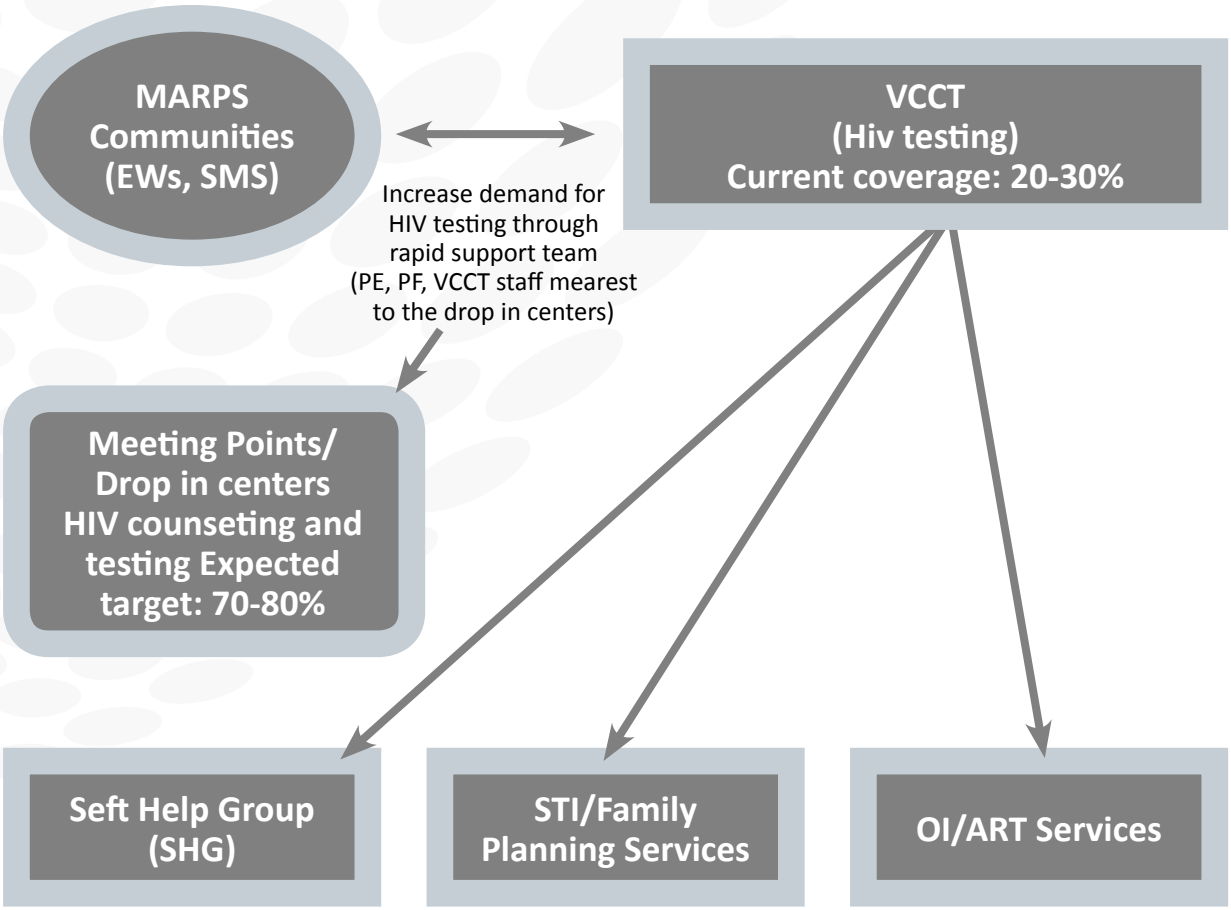
2.4.4 HIV TESTING FOR MINORS

It is important to note that Article 19 of the Law on the Prevention and Control of HIV AIDS states that "those who are minor, a written informed consent shall be obtained from his/ her guardian. In the case that such written consent could not be obtained from the legal guardian of the minor, and the test is considered to provide most interest to the individual, the test still can be performed only with an informed consent from the individual."

2.4.5 SUPPORT OF C/PITC

Partners involved in the implementation of the C/PITC initiative will provide support (transportation fees and other incentives through existing mechanisms including site promotion award-SPA scheme) to VCCT staff involved in the implementation of C/PITC.

Diagram of peer networks and service delivery centers



2.4.6 STANDARD DATA COLLECTION TOOLS

- Registration Log Book for outreach workers (OW)

3 ENSURING LINKAGES, REFERRAL, AND QUALITY SERVICES

3.1 LINKAGES AND REFERRAL

Within ODs, satellite VCCTs link to the designated OD VCCT hub, usually located at the referral hospital (RH). NGOs, clinics, health centers and private practitioners can link to the OD hub. Some of these may provide pre- and post- test counseling services only, and send the client, or his/her blood sample to the OD VCCT hub for actual testing. Others may provide the full service, and simply send their reports to the OD VCCT hub.

3.1.1 MECHANISM FOR LINKAGES

There are three main mechanisms for linking in the CoC network: within the Province, within the OD, and between the Regional Hubs

3.1.1.1 Within the Province Municipality

All Counseling and testing services must be licensed with the MOH; this will be registered at the PHD. The PHD will keep a list of all official testing and Counseling services in each OD within the province. The PHD should:

- Keep a list of all official testing and Counseling services in each OD
- Hold quarterly meetings of all official testing and Counseling services in each OD to monitor progress, review problems, establish training needs, coordinate issues, and link to the Regional Hub
- Coordinate with the Regional Hub for supervision, training, quality control, etc.

3.1.1.2 Within the OD:

All counseling and testing services will:

- Register and coordinate with the OD VCCT hub to ensure that the components of the counseling and testing are covered: eg. results of tests get sent to the right place; post-test counseling is available when results come back; supportive Counseling is available for positive results; pre-test Counseling is given before blood is taken for testing.
- Keep records and make reports accurately, according to the standard MOH formats and systems

3.1.1.3 Between the Regional Hubs:

All VCCT Regional Hubs should conduct regular meeting in order to share and learn their experiences and solve problems happening in their activities. Each VCCT center under regional hub, should be ready in identifying the problems and prepare lesson learnt to raise in the meeting. The meeting should be conducted in quarterly basic in the VCCT regional hub and every 6 months to 1 year in national meeting. The Regional Network meetings are described further in section 10.2.

3.1.2 PROCEDURES FOR LINKING REFERRED CLIENTS WITHIN THE COC

Whenever a client is referred for counseling and/or testing, or whenever a client requests counseling or testing, at any point in the VCCT referral network:

- He/she is given a VCCT referral card;
- The number of the card and the client's basic details (age, sex, etc) is recorded in the VCCT Referral Register
- The client is then referred to the most convenient place for counseling and testing
- Whenever a client attends counseling and testing, the number of the card is recorded in the VCCT Central Register. Any further referral is also noted in the register.
- Whenever a client attends the further referral with the referral card, the card number and the further services provided are recorded in that service's VCCT Register.
- Once a month, each member/part of the referral system sends a list of all cards issued or seen to the central VCT Registry
- The central VCCT Registry collates the data from these reports, analyses them, and sends this report back to all members of the system.
- Any member of the system can check any other member's register to identify card numbers they know, or want to follow up on.

NCHADS and partners are developing a method for identifying individuals uniquely in order to reduce duplicate counting of clients who receive HIV testing and counseling multiple times and to help ensure effective referrals within the CoC across multiple locations. Posttest counseling and referral are described further for each model of VCCT (HPITC, C/PITC, Pediatric testing).

3.1.3 REFERRAL OF BLOOD DONORS IDENTIFIED AS POSSIBLY HIV INFECTED

To ensure the safety of blood for medical transfusion, the National Blood Transfusion Service (NBTS) targets blood donation from low risk individuals (those who give blood voluntarily and do not receive money). If potential donors have risks for HIV, they should not donate blood. *If potential blood donors want to know their HIV status, they should go to VCCT.*

The NBTS perform a screening lab test for Transmission Transmitted Infections (TTIs) including HIV. Blood donors are informed that their blood will be screened for TTIs. The screening test for HIV is usually one ELISA test, which is not (and is not meant to be) the national algorithm for HIV diagnosis; therefore, a blood donor with a positive ELISA test should be contacted, counseled in person about the positive screening test, and referred to VCCT for confirmation of HIV status. NCHADS and NTBS will collaborate closely so that clients who wish to know their status or have risk factors for HIV are referred to VCCT and donors screening positive for HIV are referred to VCCT for diagnosis and possible entry into care and treatment.

4 LOGISTICS AND SUPPLY MANAGEMENT FOR VCCT

The chief of the VCCT center is responsible for maintaining a constant supply of materials in the VCCT. Stock outs cause interruptions in VCCT services and are avoidable through proper stock management, timely reporting, and timely requests. The VCCT site must maintain a constant stock of three types of supplies:

- Records: such as VCCT registers and referral forms
  - VCCT registers and referral forms are provided through NCHADS
  - VCCT site staff acting through the Health Center or hospital chief should request new registers and referral forms from Provincial AIDS and STI Program (PASP) manager who writes a letter official requesting the VCCT registers and forms from the VCCT unit of NCHADS
  - Timing of request: Request for new registers and referral forms should be made periodically when the current register or forms are 2 to 3 months from being either filled or used up. Plan for at least 1 week for delivery of new registers and forms.

4.2 Testing supplies (including test kits, needles, blood collection tubes, gloves, alcohol, cotton wool/ swabs, known positive and negative controls) and infection control supplies (bleach, tissues, sharps containers, plastic disposal bags). Supplies for DNA PCR are covered in the Pediatric testing section 6.

- Test kits and testing supplies are provided through Central Medical Stores; VCCT sites should only use MOH approved test kits according to the national algorithm (see Section 11).
- Quantification of need: the number of tests expected to be needed can be estimated by the number of clients served plus 10% extra for QC and wastage. The staff should plan for supplies for any upcoming events or new initiatives such as outreach testing through C/PITC in estimating the expected numbers of tests
- Sites must report on test kit usage through the OD and PASP to NCHADS to receive more test kits The NCHADS VCCT unit will review the service delivery numbers and authorize CMS to distribute the required quantity to the Operational Districts

- Per the usual CMS schedule for the OD, CMS will distribute new test kits and supplies
- On receipt of new test kits and supplies the VCCT site staff should check and record the lot numbers, condition of kits, expiry dates
- Storage of test kits: test kits should be kept in a locked room or cabinet. The temperature should be controlled (refrigerator, cool box or AC) and not be hotter than 40o Celsius.

4.3 Office supplies such as paper, pens, envelopes

- Office supplies are provided through the health center

4.4 Emergency supplies: With proper planning and stock management, the VCCT should be able to keep testing supplies and consumables in stock: however, emergency supplies can be requested in the rare event that stock will run out before CMS is able to re-supply. The VCCT staff through the PASP should provide a letter NCHADS Logistics unit to:

- report the number of clients served
- request the number of emergency test kits required and
- explain reasons for expected stock out

5 QUALITY ASSURANCE FOR HIV COUNSELING

Quality assurance for HIV counseling is a process to improve counseling services through program monitoring and supervision. VCCT program have developed different mechanisms to address quality of counseling services. However, common guiding procedures for promoting counseling services at the VCCT centers include regular supervision and counseling network.

5.1 REGULAR SUPERVISION:

5.1.1 CENTRAL SUPPORT:

- Supervision visits to VCCT centers are organized at regular intervals.
- Annual Supervision Plans are developed at NCHADS to ensure that every VCCT is visited appropriately.
- Staff from NCHADS making these visits use the Supervision Checklist for Counseling (see Annex).
  - New and low performance VCCTs may require more supervision example quarterly.
  - For well established and functioning with well performance VCCTs will require less supervision every 6 months or once a year.

5.1.2 PROVINCIAL LEVEL:

- Supervision visits to VCCT centers are also organized by staff from the Provincial AIDS and STI Program, who are trained on VCCT supervision.
- These staff will prepare an Annual Supervision Plan as well. The Supervision Checklist for Counseling is used (Annex 11).
  - For new and low performance will be visited in monthly basis for the first 6 months.
  - and for well functioning performance VCCTs will be visited quarterly;
- NGOs should supervise their registered VCCT clinics using the same of similar checklist

5.1.3 SUPERVISION ACTIVITIES:

The following activities should be included in the supervision:

- Counseling room: the counseling room should be:
  - clean, comfortable, with equal levels of chairs between client and counselor
  - should ensure privacy: people outside the room should not be able to hear the voices inside the room. During counseling sessions, the door should be closed; but windows can be opened to allow air.
- Counseling process: important elements in good quality counseling include:
  - Appropriate physical environment for privacy and confidentiality.
  - Good reception of the client; with a polite greeting and introduction.
  - Showing respect and trust that the client has the potential to make decisions.
  - Showing interest and understanding, and paying attention to the client's feelings.
  - A client-centered, and non-judgmental, approach.
  - Active listening (non-verbal and verbal); and listening rather than talking.
  - Emotional warmth and support; and exploring ways of reducing the problem together with the client.
  - Use of appropriate language for sensitive issues depending on the background, educational level and beliefs of client.
  - Provision of information and making the appropriate referral.
  - Encouragement towards behavior change that will lead to risk reduction and problem solving
  - Secure record keeping and confidentiality.
- Pre-test counseling session: during the pre-test counseling session, the supervisors should check whether the counselor:
  - Discusses confidentiality and how it is maintained.
  - Informs the client about the HIV counseling services.
  - Asks the client if he/she needs any help from the counseling services.
  - Checks the client's knowledge about HIV/AIDS and its transmission and complications.
  - Clarifies client's misconception on HIV/AIDS.
  - Assesses the client's personal risk profile: sexual (including oral sex) and drug related behaviors.
  - Discusses the test process; and the meanings of 'seropositive' and 'seronegative', 'window period', etc.
  - Discusses the implications, benefits and plans for the client, after learning if they have a positive or negative result.
  - Discusses ways to cope with seropositive results, the client's potential needs, and available support.
  - Establishes informed consent.
  - Makes an appointment for the test result.

- Post test counseling: during the post-test counseling session, the supervisors should check whether the counselor:
  - Checks whether the client is the right person.
  - Reviews major points covered during the pre-test counseling.
  - Asks the client his/her intention upon learning of positive or negative test result.
  - Shows the client the code number on the appointment card against code number on the envelope to ensure it is the correct result for the right patient.
  - Gives the test result to the client in a calm manner; or opens the envelop when requested by the client, and explains the marks made on the result slip.
  - Allows the client time to think and express his/her feelings.
  - Explores the client's concerns.
  - Discusses with the client about his/her situation, any potential problems, and possible plans.
  - Answers client's questions.
  - If the result is negative: discusses the negative result, widow period, etc.
  - Encourages the client to come for re-testing after 3 months.
  - Discuss about HIV risk reduction plan.
  - If the result is positive: identifies the HIV staging.
  - Provides referrals to other services: OI including TB, ANC, STI, ARV, home based care, etc depending on the HIV staging and client's intentions.
  - If the test result is indeterminate: or the test takes place less than 3 months (window period) after the episode of risk behavior, asks the client to come for another test.

Feedback from supervision: The supervision visited findings will be managed by supervisors when the problem can be solved on the site or reported to the national level when cannot be solved at the VCCT sites. When the supervisors find that the counselors are not or lack of compliance to the standard of counseling process, the supervisors will inform and correct them.

5.2 COUNSELING NETWORKING

5.2.1 PURPOSE OF NETWORKING

The purpose of the counseling network is to strengthen counseling and testing services. The Network links together staff members who work for VCCTs in the provinces and in regions to have regular meetings, to evaluate the VCCT services, and to provide training at local level. Issues and problems at each VCCT will be raised and will be solved on the site. Experienced counselors and lab technician from the Network can provide the support to network members.

Quality Improvement for counseling can be implemented through establishing counseling networks and through regular counseling network meetings with training and evaluation.

5.2.2 STRUCTURE OF THE NETWORK

Networking can occur within each OD, within each province, and in a group of provinces at regional level. At the center of this network is the Regional VCCT Hub - there are 6 regional VCCT Hubs:

- at Sihanoukville , for Koh Kong, Sihanoukville, Kep, and Kampot;Takeo
- at Kampong Cham, for Kampong Cham, Prey Veng , Svay Rieng,
- at Kratie - for Kratie, Stung Treng, Mondulkiri, Ratanakiri
- at Siem Reap ,for Siem Reap ,Kampong Thom,Praeh Vihear,Odor Meanchey
- at Battambang - for Battambang, Bantey Meanchey, Pailin, Pursat
- at Phnom Penh - for Phnom Penh, Kandal, Kampong Speu

At the Center of this network is the Regional Hub. Each Hub consists of 3-4 neighboring provinces. The reason for regional hub is to establish network of VCCT within regional hub. In addition, the Hub can organize regular meetings of the counseling network. Registered VCCT centers, including NGO VCCT, are invited to the counseling network meetings and should budget for these meetings.

5.2.3 COUNSELING NETWORK MEETINGS:

- At the provincial level: provinces that have more than 3 VCCT centers should have monthly meetings within the province; provinces that have fewer than 3 VCCT centers should arrange meetings with other provinces.
- At regional level: as for the VCCT regional hub, meetings should be held every quarterly. Provinces within the regional hub can take turns in organizing meetings. The Provincial AIDS and STI Program officers, in the region, are responsible for the meeting. The meeting will be put in the provincial annual workplan.
- At the national level: The counseling Network workshop will be organized byNational Level. The workshop will be held once or twice a year or can be integrated into the National AIDS Conference. The workshop will be put in the annual workplan of NCHADS.
- Objectives of the counseling network meetings:
  - To strengthen VCCT services
  - To find out any problems and issues that occur during counseling activities
  - To solve any problems and issues that occur in the workplace
  - To share experiences among counselors of each VCCT center
  - To provide new knowledge from National level.
- Meeting preparation: each VCCT center should prepare their data before the meeting, to present at every meeting. The preparation should include:
  - numbers of clients tested,
  - number and percentage of pre and post test counseling,
  - number and percentage of positive test results,
  - number and percentage of clients referred to health institutions;
  - Case experiences or lesson learnt and should identify any problems, including commodity and test supplies.

6 QUALITY ASSURANCE (QA)/ QUALITY CONTROL FOR HIV TESTING

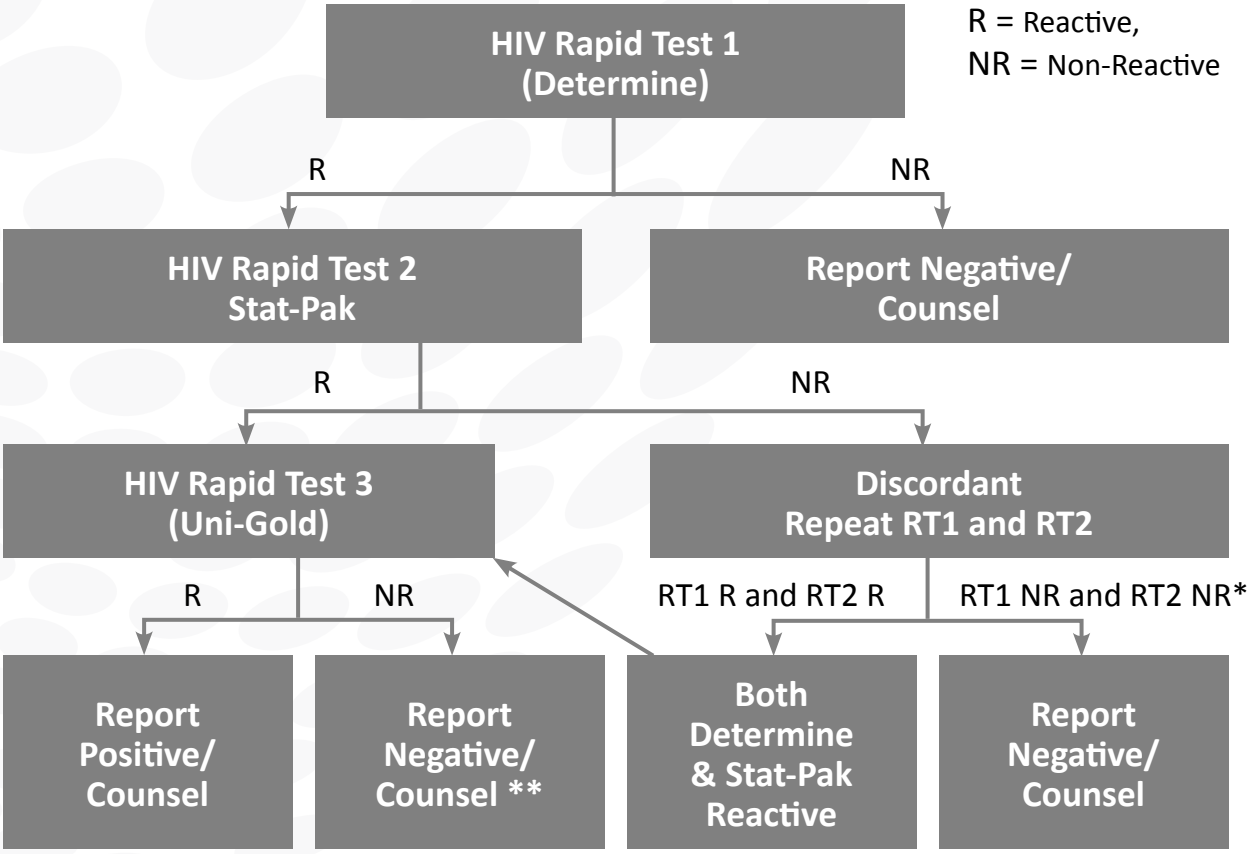
In spite of the availability of excellent rapid tests, the reliability of the test results depends on their correct use, and stock condition of sera and reagents. Mis-diagnosis may have severe consequences for individuals and for the community's confidence in health care received. Use of the National HIV rapid testing algorithm, regular supervision and quality assurance of testing are thus extremely important.

6.1 NATIONAL HIV RAPID TESTING ALGORITHM

The Cambodian MOH has a national HIV testing algorithm based on findings of an in-country evaluation of rapid test kits in Cambodia in 2004 by NIPH, the National Reference Lab for HIV.. Previously, the national algorithm used a serial combination of two rapid test kits for HIV diagnosis in clinical settings. However, the HIV prevalence in Cambodia has been declining. In low prevalence settings such as Cambodia's current situation, WHO and CDC recommend a third rapid test kit be used in order to reduce the risk of false positive results.[9] Assuming 99% sensitivity and specificity of rapid test kits, the positive predictive value of two reactive rapid test kits is 99.9% if the HIV prevalence is 10%, but the positive predictive value of two rapid test kits falls to 90.8% if the HIV prevalence is 0.1%. Sites should only use HIV test kits and algorithms currently validated and approved by the MOH.

9 *World Health Organization. Rapid HIV tests: guidelines for use in HIV testing and counseling services in resource-constrained settings. WHO Geneva. 2004. ISBN 92 4 159181 1*

The national HIV testing algorithm is:



* *or if RT 1 (Determine) is Reactive and RT 2 (Stat-Pak) is negative on repeat testing, the patient should be considered HIV negative*

** *In the case of RT 1 Reactive, RT 2 Reactive and RT 3 NR, HIV testing should be repeated on the second sample after 14 days. If the results are the same, and there is no evidence of sero-conversion, the patient should be considered HIV Negative*

HIV rapid tests can be performed on serum or whole blood. On whole blood specimens, it is important to use chase buffer as recommended by the manufacturer.

If Stat-Pak is not available at the testing site, Uni-Gold can be substituted. If a second or third rapid test kit is not available at the testing site, a blood sample or client should be sent to another testing site for performance of the remaining rapid test algorithm if the initial rapid test is reactive.

Clients who test Reactive on all three rapid tests (Determine, Stat-Pak and Uni-Gold) should be considered HIV positive and referred for care and treatment at an OI/ ART site.

6.2 VALIDATION OF NEW HIV TESTS AND ALGORITHM

Ministry of Health has the responsibility to validate and approve test kits for use in Cambodia; and validation of HIV rapid test kits is normally a function of the National Reference Lab for HIV. Rapid test evaluations were last performed in 2004 for Determine, Stat-Pak and Uni-Gold , OraQuick and First Response and in 2007 for Serodia as a tie breaker. Since then, other rapid test kits have been developed and evaluated by CDC and WHO, and are commercially available. The Strategic Plan for HIV/AIDS and

STI Prevention and Care in Health Sector contains a validation of additional HIV rapid test kits and an algorithm for diagnosis in 2012/13. Favorable characteristics of test kits will be: WHO prequalification, accuracy, reproducibility, ease of use, short time to reading the result, stability in warm storage conditions, and low price. As with the prior evaluation, a well characterized panel of blood/ serum will be collected and used for the evaluation.

Steps in Phase 1 evaluation process:

1. Formation of a protocol for evaluation and approval by relevant Centers & IRBs
2. Collection of a well-characterized panel of HIV positive and HIV negative In the past evaluation, the blood was collected from the blood bank (discarded units) and outpatient department (for HIV positive samples) and tested by EIA. Positive samples were confirmed by Western Blot.
3. Performance of rapid test with the panel samples.
    - Unlinked specimens—no name identifiers available to those processing specimens or conducting the evaluations
    - Specimens randomized and renumbered before testing
    - Previous test results unknown by those performing the evaluation
    - All tests performed as indicated by manufacturer's package insert
    - Specimens for which rapid test results were discordant with gold standard results were retested using the same rapid test
    - Specimens for which rapid test results were discordant with other rapid test results were run a second time using all tests
4. Analysis and sharing of results
    - Sensitivity, specificity, and predictive values calculated for each test
    - Sensitivity, specificity, and predictive values calculated for hypothetical serial algorithm options

6.3 NEW LOT VERIFICATION OF HIV KITS ON ENTRY INTO CAMBODIA

RT kit evaluation described above occurs only every few years; however, the approved test kits coming into the country need to be tested on an ongoing basis to ensure the manufacturing quality remains consistently high and that conditions during transport to Cambodia have not damaged the test kit performance. Currently, the vast majority of RT kits in Cambodia are procured using Global Funds. As HIV test kits come into the country, batch testing should be performed under the authority of the Department of Drugs and Food (DDF) to ensure that test kits received have consistently high performance before distribution to sites[10].

Steps in new lot verification:

- On receipt of new RT kits and before distribution to sites, test kits will be randomly selected from each lot
- RT kits for lot verification will be sent to the WHO accredited lab
- If problems or inconsistency among lots are found, the DDF will take further action

10 *in accordance with the MoH procedures for ensuring quality of drugs and health commodities*

6.4 REGULAR SUPERVISION

All VCCTs (Government, NGOs, and private labs performing HIV RT) need to be supervised. Lab technician staff from NCHADS will make these visits use the Supervision Checklist for VCCT (see annex). Well established and functioning VCCTs will require less central supervision and instead will be supervised by the provincial level.

- **Central Support:** Supervision visits to VCCT centers are organized at regular intervals from NCHADS. Annual Supervision Plans are developed at NCHADS, with NIPH, to ensure that new and persistently non-performing VCCTs are visited appropriately:
  - New VCCTs may require supervision twice during the first year of operation
  - Sites with unsatisfactory performance on PT panel testing (described below) ;
- **Provincial Level:** Supervision visits to VCCT centers are also organized by trained staff from laboratory of the referral hospital quarterly; these staff will prepare an Annual Supervision Plan also. The Supervision Checklist for VCCT is the same one used by the national level. Private labs performing HIV rapid testing should also be visited.

6.4.1 SUPERVISION ACTIVITIES:

All operational techniques and tasks should be regularly reviewed and discussed with the lab technician and the responsible persons as well as with the reference level partners. The checklist (see Annex 8) should be used to monitor the following.

a. Testing conditions and supplies:

- Lab room: should be clean and the temperature maintained at 22-28 Degrees Celsius
- Maintain a source of clean water
- Inventory:
  - Test kits: shelf-life check up (use of older stock first, orders made at regular dates, etc.); test kits lot numbering, and status of packaging.
  - Supplies: the amount on hand of alcohol, gauze, needle, vacutainer, syringe, pipette tip.
  - Check inventory report.
- Storage conditions (temperature in refrigerator), use monitoring sheet to note the daily temperature (by lab technician) and room temperature (if possible use Max/Min thermometer).
- Testing area, space, conditions of security, appropriate availability of supplies.
- Adherence to Universal Precautions as per National UP Guidelines (UP guidelines should be available and accessible to all staff): present of waste container, needle proof box, decontamination container.
- Awareness of PEP procedures (it is important that the staff know the name and contact information of the PEP focal point and know where the PEP is kept). PEP guidelines should be available and accessible to all staff.

b. Testing process:

- Observe testing procedure with the test methodology (PA or rapid test) normally used at site
- Internal quality control – check whether weekly testing of known positive and negative samples is being performed
- Availability of National Manuals: (National Testing Guidelines and testing algorithm, National Universal Precaution Guidelines).
- Interpretation of results: the results should be noted down in the laboratory record book. Any question on test technique, or test interpretation or record difficulties should be corrected by the supervisors. The laboratory technician should know where to call for help if in doubt: must have the contact number and address of reference laboratories or lab technicians.
- On reviewing the HIV testing registers, a high number of discordant test results could signal a testing problem
- Laboratory technicians at the VCCT should report on any difficulties they may have to reference lab technician or to NCHADS.

c. After testing:

- Cleaning and disposal of waste, biohazard prevention measures (National Universal Precautions Guidelines);
- Communication systems to ensure reporting by the laboratory technicians on technical difficulties they may have encountered, and problem solving, through contact with the supervision system or immediate communication with NCHADS or Reference laboratories.
- Regular update and discussion on the testing methods with the lab technicians.
- Appropriate analysis and feed back to NCHADS of the testing QC.
- Discuss UP (Universal Precautions) and PEP (Post Exposure Prophylaxis) with technicians: if someone is injured with a needle stick, National PEP should be applied.
- Keep the lab informed of their performance.

6.5 QUALITY CONTROL (QC) AND EQA FOR HIV TESTING

6.5.1 INTERNAL QC TESTING ON KNOWN POSITIVE AND NEGATIVE SAMPLES:

For new sites, staff performing HIV tests should perform HIV tests on a known positive and known negative test on a weekly basis. Established sites can reduce the frequency of QC testing but at minimum should perform on receipt of new test kit lots or at least every 2 months. The lot number and results of the QC testing should be written into the standard log book (Annex 9) and reviewed during the supervisory visits. False positives or false negatives require notification of the provincial lab technician as false results could be due to poor testing technique or problems with the test kit reagents.

6.5.2 Objective of QC for HIV testing: To maintain high quality of HIV testing.

Selection of QC Procedure: There are several procedures for QC such as random sampling and serum panel through internal and external validation. For reasons of cost effectiveness and reliability,

NCHADS has selected serum panel and regular sampling as its preferred methods. The National Institutes of Public Health and NCHADS have SOPs, approved in 2009, for External Quality Assurance (EQAS) of HIV testing.

6.5.3 THE FOLLOWING IS A SUMMARY OF THE STEPS IN THE EQAS SOP.

a. Sites included: All NCHADS or MOH-registered HIV testing laboratories/facilities that have been functional for at least 6 months in Cambodia will participate in the HIV serology EQAS. The proficiency panel testing procedures apply to all staff in testing facilities providing HIV serology diagnostics including NIPH laboratory, referral hospital laboratories, district hospital laboratories, VCCT laboratories, and health centers/PMTCT screening sites.

b. Serum Panel Process:

- **Step 1:** A panel of serum or blood sample pools is prepared at the NIPH national reference laboratory, tested for HIV and the test results recorded. There should be 8 samples prepared for each VCCT site including two samples are challenging, low-titer samples. The serum samples are then transported to all VCCT centers; carefully stored in an icebox temperature between 2ºC - 28ºC. Formerly, staff from each VCCT site came to Phnom Penh for a workshop, received the serum samples and then brought the samples back to their sites. See Distribution section below.
- **Step 2:** At the VCCT centers, the staff responsible for HIV testing perform tests on the serum samples sent or brought from the reference laboratories at the national level and complete the result sheet (attached). Within 2 weeks of panel distribution, the sites will send the results back to the national reference laboratory through NCHADS.
- **Step 3:** At the Reference Laboratory, the test results sent from the VCCT centers are checked and compared to the reference laboratory's results from Step 1. The Reference Lab will issue a preliminary report with the results to NCHADS within 1 month of receiving the results from sites.
- **Step 4:** The results will be analyzed and translated as below:
    1. If the result of 8 tubes is correct, the score is 100% correct.
    2. If the result of 7 among 8 tubes is correct, the score is 88% correct
    3. If the result of 6 among 8 tubes is correct, the score is 75% correct,
    4. If the result of 5 among 8 tubes is correct, the score is 63% or less correct, and the performance is judged unsatisfactory.
- **Step 5:** If the results vary from the reference Laboratory results, NCHADS staff with a reference lab technician will visit the VCCT and check and observe the testing performance, test storage, date of reagents etc. and provide technical support accordingly.

c. Materials required:

- Serum panel tubes (8 tubes)
- Iceboxes (cold chain)
- Result sheets

d. Person involved:

- NCHADS and NIPH focal points
- Provincial lab coordinators
- VCCT laboratory staffs or site supervisors.

e. Frequency of panel distribution: Every 6 months; the serum should be thawed, aliquoted and transferred to all VCCT centers within one week after its preparation.

Distribution: The former way for managing transportation of the serum panel was to call a one-day workshop at the national level, organized by the VCCT sub-Unit of NCHADS in cooperation with reference laboratory staffs. One lab technician from each VCCT center was invited to the workshop and brought the prepared serum back to his or her VCCT center for testing. In order to reduce cost and staff absence from the VCCT sites, the new approach for panel distribution is through the provincial structures. The PASP will be invited to Phnom Penh and will pick up the panels for the VCCT and distribute the panels to the Provincial VCCT sites. The workshop and travel should be put in the national level VCCT sub-Unit Annual Work Plan.

g. Persisting Unsatisfactory Performance

A laboratory is considered to be persistently performing unsatisfactorily in an EQAS if that laboratory has demonstrated unsatisfactory performance more than once over three successive EQAS panels.

Any laboratory/ testing site performing serology testing that has demonstrated persisting unsatisfactory performance in an EQAS will be followed up according to the Quality Assessment for Laboratory in NIPHL, and by NCHADS.

Laboratories/ testing sites demonstrating persisting unsatisfactory performance must be brought to the attention of the VCCT Operations Manager or the Director.

Wherever possible, a comment about the cause of an aberrant result and the corrective actions taken by the laboratory/ testing site concerned should be made in the final report.

Assay problems identified in an EQAS should be communicated confidentially to the assay manufacturer/ sponsor. Managers may refer problems to the Senior Scientist or Director.

EQAS problems or queries will be brought to the EQAS Advisory meetings and documented. The minutes of these meetings must be maintained and the meeting should be convened at least once a year, but more frequently if necessary.

7 CQI OF HIV COUNSELING AND TESTING SERVICES AS PART OF COC CQI PROCESS

There are multiple ways of ensuring quality of care described earlier including:

- Standardized trainings for counseling and testing
- Filling of the standardized registers
- Evaluation of quarterly reports
- Supervision of VCCT sites and staff
- Counselor network meetings
- Internal QC and proficiency panel testing

NCHADS launched the Cambodia Quality Improvement program within the CoC in 2008 and has draft SOPs for the CQI process, which contains a more detailed description of the process for cleaning and analyzing the data, launching a site, analyzing the barriers to improved performance and the PDCA cycle. CQI has been rolling out to CoC sites and currently contains 12 indicators related to mortality (3), service delivery (5), and case finding/ prevention.

7.1 THE OBJECTIVES OF HIV TESTING AND COUNSELING AND CORRESPONDING INDICATORS TO ASSESS PROGRESS ARE:

7.1.1 TO IDENTIFY HIV INFECTED INDIVIDUALS THROUGH PROVIDING HIV TESTING AND COUNSELING SERVICES:

7.1.1.1 There are 2 current CQI indictors already assessing testing coverage of 2 target groups (pregnant women and TB patients)

- Percentage of ANC1 patients who receive HIV testing and counseling
- Percentage of new TB patients who receive HIV testing and counseling

7.1.1.2 Additional target groups and indictors for case finding include:

- MARPS (EWs and MSM), but currently it is difficult to define good indicators for these groups . NCHADS plans a census of FEW and unique identifier code, which will make this a more practicable CQI indicator
- STI patients - Percentage of patients attending Family Health Clinic and newly diagnosed with an STI who are tested for HIV within 60 days
- HIV exposed infants – Percent of HIV exposed infants who receive a DNA PCR test at 6 weeks postnatal

7.1.2 TO PROVIDE RAPID ENTRY OF PLHIV INTO THE CONTINUUM OF CARE AND TREATMENT

7.1.2.1 Currently 2 CQI indicator assesses early entry of PLHIV into the CoC

- Percentage of new OI patients with an initial CD4 count of >350 cells/ mm^3
- Percentage of known HIV+ pregnant women who receive prophylaxis and follow-up

7.1.2.2 Successful referral into the CoC could also be tracked by:

- Percentage of clients testing HIV positive at VCCT enrolling in OI within 60 days

7.1.2.3 To prevent new infections through behavior change

Current there are no CQI indicators to assess prevention of new infections. It is easy to monitor outputs of what is provided (condoms, education); slightly harder to assess self-reported behaviors; and given our low HIV prevalence, next to impossible to measure new infections through surveillance studies.

Tracking individual clients instead of visit interactions is an important issue of monitoring true reach of and access to services. Two important initiatives will be the piloting and use of a unique identifier and integration of data systems (registers or electronic databases). A more integrated approach for CQI of HIV counseling and testing services linked to the CoC will be piloted in sites by linking the individuals' records in the VCCT database, the OI/ ART database and STI database through a unique ID code.

8 IMPROVING PUBLIC-PRIVATE PARTNERSHIP ON HIV COUNSELING AND TESTING

Public Private Partnerships address 2 challenges faced by the public health system:

- Lack of staff in public sector CoC sites
- Patient choice to enter private care

Although there is a long term strategy for increasing the number of qualified staff in the public sector facilities, the current staffing is not sufficient in numbers to cope with the increasing volume of work in the CoC sites. The current low number of providers will be exacerbated by expected retirement of government health care staff.

8.1 TYPES OF PRIVATE CARE PROVIDERS

All private care providers are not the same. There are at least 3 distinct types of private care providers:

- Not-for-profit private providers such as NGO's, CBO's and Foundations
- For profit providers that are completely private such as private pharmacies, private hospitals
- Public/ private mix: Government staff (doctors, nurses, lab techs) who have private clinics

NCHADS has a long history of working with the first type of private care providers, the not-for-profit NGOs and CBO such as RHAC, RACHA, KHANA, PSI and FHI.

Around 2005, there was an attempt to work with private, for profit providers such as garment factories to provide VCCT to their workers. This attempt was abandoned for several reasons including the low numbers of HIV-infected people found since they were low-risk general population and the commitment of the private providers to providing quality services. In addition, other NGO's are not in a strong position to push the private providers to comply with MOH guidelines; whereas, the MOH may be in a better position.

8.2 RATIONALE AND FOCUS OF PPPS

Although NCHADS has tried several times to work with the private sector, the results have been mixed. There can be clear rationale for working within a public private partnership agreement when:

- The partnership serves an objective in the national strategy for HIV AIDS and STIs that is not being filled through the public sector
- There is a binding agreement with the private provider and willingness to follow the guidelines, SOPs and reporting requirements of the national program
- The private providers receive some benefit for participating in the agreement. The benefit could be in the form of commodities (test kits), staff training, recognition as a MOH certified sites, or increase flow of clients willing to pay for services

The PPP focus will be in two objectives of the National Strategic Plan for HIV AIDS and STIs:

- Prevention and entry into the Continuum of Care for Most At Risk Populations (MARPS), in particular through HIV Counseling and Testing
- Elimination of Pediatric HIV through boosted Linked Response

Since the greatest number of MARPs and highest prevalence of HIV are in the major urban cities in Cambodia, the initial focus will be on the major cities within Cambodia in assessing unmet need for HIV Testing and Counseling among MARPs groups. In addition, the large private hospitals located in major cities should be prioritized for the boosted Linked Response activities.

8.3 SPECIFIC PACKAGE/ STRATEGY

The approach to working with the 3 different types of private providers may differ. NCHADS has a long history of working with the not-for-profit private providers, for example within the Continuum of Prevention Care and Treatment (COPCT), and these collaborations fit the principles described above. In addition, the not-for-profit private providers generally have external funding (for example through USAID) and an organizational vision to provide HIV services.

A possible strategy for engaging the for-profit private providers would be to:

- Identify the locations where a gap in MAPRs testing services exist
- Identify possible for-profit private providers who work in that location
- Call a meeting with the for-profit private providers to explain the rationale and conditions of the partnership
- Agree on and create a binding agreement with the willing for-profit private providers
- An example of the agreed package could be:
    - The for-profit private provider agrees to provide HIV Testing and Counseling services to Entertainment Workers and MSMs. The provider will comply with the Guidelines and SOPs of NCHADS/ MOH including: registering the site with NCHADS, ensuring that staff are trained per national guidelines, reporting service delivery statistics to NCHADS on a quarterly basis, agreeing to supervisory visits by the PASP, and to enroll in an EQA system for HIV testing and participation in periodic network meetings
    - NCHADS will provide HIV test kits free of charge, initial training of providers, initial evaluation and certification of the site

8.4 MONITORING AND REPORTING FOR PPP

The requirements and frequency of monitoring and reporting for the private providers should be same as for public government institutions. If the private providers are performing HIV testing and counseling, they should complete the VCCT reporting form and submit it through the PHD to NCHADS.

To monitor whether this PPP program is achieving the expected objectives it will be important to monitor the service delivery reports including:

- Number of EW/ MSM counseled
- Number of EW/ MSM tested
- Number and percent of EW/ MSM tested HIV positive
- Number of EW/ MSM HIV positives referred to OI/ART services.

The same difficulties in knowing unique individuals tested, not testing interactions, will apply to this PPP just as with the MARPS testing through NGOs and the COPCT. There are a lot of monitoring and reporting issues here – how to measure quality (PT panel performance, performance on supervision visits) and impact (through periodic IBBS), but these issues are not unique to the PPP.

9 MONITORING, REPORTING, AND EVALUATION OF HIV COUNSELING AND TESTING

9.1 MONITORING AND SUPERVISION

Monitoring, evaluation and supervision of VCCT services within an OD is the responsibility of the VCCT Officer in the Provincial AIDS and STI Program (PASP). The VCCT officer in the PASP should review the quarterly service delivery results and proficiency panel results and conduct site supervision as indicated. The officer should look at each site's service delivery numbers over time to ensure not only that the number of tests are increasing but also that there is high coverage of the target population (TB patients, ANC attendees). Service delivery figures that are unrealistically high or surprisingly low should be contacted and ideally visited for supervision. Central level review of the quarterly service delivery figures is also performed to pick out low-performing sites for further action.

9.2 REPORTING

9.2.1 Standardized VCCT registers and case report forms are the basis of service delivery information from which aggregated reports are collected (Annex 11). NCHADS require all VCCT services to prepare the following reports for counseling and laboratory.

1. Quarterly report
2. Annual report
3. Data report

All reports must be submitted to NCHADS Data Management Unit 2 weeks after the end of the month, the quarter and the year. The officer responsible for VCCT reporting at the site, district and provincial level must not only collect the reports but also think about the trends in testing coverage for each site to catch under or over reporting.

9.2.2 Additional information about target groups and the follow-up after HIV testing are contained in:

- The Linked Response report is required on a quarterly basis for HIV testing for pregnant women and contains the indicators for referral and follow-up on pregnant women and their HIV exposed infants.
- NTP report on HIV testing among TB patients
- There are additional reporting tools used by the MARPS networks and described in the CoCPT SOP (see CoCPT SOP).
  - quarterly report from the OW and
  - quarterly District reporting tool

At the national level; the following outputs and targets will be monitored from program reports:

Indicator	Baseline	2011	2012	2013	2014	2015	Source
Number of licensed VCCT sites operating in the public and non-profit sectors	246 (2010)	260	280	300	330	350	NCHADS report
Number and percentage of adults (aged 15-49) who received HIV counseling and testing	532,293 (2010)	750,000	800,000	850,000	900,000	1 million	NCHADS report
Percentage of individual EWs who received HIV test result in the last 12 months	N/A	30%	50%	60%	70%	80%	NCHADS report
Percentage of MSM who received HIV test result in the last 12 months	N/A	20%	30%	50%	70%	80%	NCHADS report

Other impact indicators (for example HIV prevalence among EWs / MSM/ IDU and GC/ CT prevalence among FEW) will be pulled from special studies like the IBBS/ SSS. Consistent condom use in the past 3 months will be measured among MARPS groups from BSS/ IBBS. To assess integrated counseling, the percent of FEW using STI and Birth spacing services will be tracked (see Strategic Plan for HIV/AIDS and STI Prevention and Care in Health Sector, 2011- 2015).

Review of Case report forms at the national level can provide a passive surveillance system. Because the Linked Response approach results in high levels of HIV testing among ANC attendees, this information could be used for sentinel surveillance instead of fielding a separate HSS study.

Annexes

ANNEX 1

LICENSING APPLICATION FORM

KINGDOM OF CAMBODIA
NATION RELIGION KING

Phnom Penh,_____2012

Licensing Application Form

1. Information about Person submitting application

Name_____Sex_____Age_____

Nationality_____Occupation_____

Position in VCCT_____

Phone Number_____e-mail address_____

2. Location of VCCT

Address of site or RH_____

Village_____Commune_____

District_____Province/ Town_____

3. Avowal Letter (attached)

4. List of VCCT staff

	Name	Age	Sex	Position (counselor/lab tech)	Qualification
1					
2					
3					
4					
5					

ANNEX 2

AVOWAL LETTER

KINGDOM OF CAMBODIA
NATION RELIGION KING

Avowal Letter

Name _____ Sex_____ Age_____

I Swear to Ministry of Health that my service:

- Conforms to the National Policy, Strategy, and Protocol for Voluntary Confidential Counseling and Testing
- Provides appropriate pre and post test counseling
- Ensures confidentiality
- Provides HIV testing according to the National testing protocol and quality assurance protocol
- Will use the registers, Counseling Registration Sheet and Referral Card required by NCHADS/ MoH
- Will provide quarterly reports to the District, PASP, and NCHADS
- Will cooperate with Government health institutions

Signature of Applicant _____ Date: _____

Seen and approved

Director,
NCHADS

Phnom Penh,
Date: _____

ANNEX 3

CHECKLIST FOR INITIAL REGISTRATION

KINGDOM OF CAMBODIA
NATION RELIGION KING

Checklist for Initial Registration

Name of Investigator: _____

	Yes	No
1. Documents:		
• Licensing Application Form		
• Avowal Letter		
2. Site:		
• Waiting Room		
• Counseling Room		
• Laboratory Room		
3. Lab Equipment:		
• Refrigerator		
• Centrifuge (optional)		
• Pipette 20 – 200 ul		
4. Staff certification:		

	Name	Age	Sex	Position (counselor/ lab tech	Has Certificate?	
					Yes	No
1.						
2.						
3.						
4.						
5.						

Seen and approved

Director,
NCHADS

Phnom Penh,
Date: _____

ANNEX 4

JOB DESCRIPTION: VCCT STAFF / OFFICER

Title of the post: VCCT Officer (PASP6) (PASP9)

Accountable to: Provincial AIDS and STI Program Officer (PASP)

Accountable for: N/A

Job Summary: To manage and coordinate the VCCT element of the HIV/AIDS and STD program in the province, ensuring it fulfills all the program targets to which it is committed and that cohesive strategic and operational plans are prepared to guide future activity.

Specific Responsibilities

1. Train health workers for and supervise VCCT services in ODs and RHs
2. Coordinate all VCCT services within the province
3. Ensure the VCCT referral Network is established and functioning
4. Identify requirements for drugs and consumable supplies for VCCTs in the ODs and ensure availability and distribution
5. Maintain VCCT records and data
6. Prepare VCCT Report for the province

General Responsibilities

1. To work with due diligence in carrying out the tasks of the position
2. To cooperate helpfully within and between units of the PHD and ODs to strengthen the performance of the PASP
3. To ensure regular, punctual and full-time attendance to duties during official working hours.
4. To strive all times to assist the PASP attain the highest levels of accuracy and honesty in all its activities.
5. To draw the attention of the PASP Manager immediately to any irregularity or other matter of significance affecting the efficient and honest functioning of the unit.
6. To undertake any other duties assigned by the PASP Manager or the PHD Director.

ANNEX

5

CHECKLIST FOR INITIAL REGISTRATION

Health Provider-Initiated HIV Testing and Counseling (HPITC):

A model in which health care providers initiate HIV testing and counseling to patients who are seen in inpatient and outpatient medical services, including STI clinics, antenatal care clinics, TB clinics, pediatric wards and maternal-and-child health clinics. This model includes Routinely-Offered PITC and Diagnostically-Indicated PITC. Patients must be informed of their right to decline the HIV test.

Health Care Provider:

In PITC, health care providers are NOT narrowly defined as clinicians. Rather, "provider" refers to all health care professionals, including midwives, nurses, counselors, community health workers and clinicians.

Diagnostically-Indicated PITC:

Diagnostically-Indicated PITC is part of the clinical process of diagnosis and management of an ill person and is indicated whenever a person has a medical condition or symptom which suggests possible underlying HIV. The test is recommended as a regular part of diagnosis, and like any medical consultation, involves confidentiality and the provision of information based on which the patient consents to testing and treatment.

Routinely-Offered PITC:

Routinely-Offered PITC represents HIV testing and counseling for patients attending health facilities who do not have obvious HIV-related signs or symptoms, yet who could benefit from knowledge of their HIV status. This includes patients assessed for a sexually-transmitted infection (STI), those seen in antenatal care (ANC) clinics, tuberculosis (TB) clinics, drug treatment facilities (targeting injection drug users (IDUs)), infectious disease wards, pediatric wards, skin care wards and all patients seen in inpatient and outpatient clinical settings. The patient is informed of the HIV test and has the right to decline it.

Guiding Principles of PITC—Confidentiality, Counseling and Informed Consent (the 3 C's)

Confidentiality

All medical records, including HIV test results and whether or not they involve HIV-related information, should be managed in accordance with appropriate standards of confidentiality. Health care providers should receive specific training on maintaining patient confidentiality, including the appropriate sharing of patient information among health care personnel in a confidential manner on a "need to know" basis.

Counseling

Counseling for HIV is a confidential dialogue between a patient and a health care provider and aims to enable the person to cope with stress and make personal decisions related to HIV/AIDS. In the PITC model, the pre-test counseling session used in VCCT should be simplified with the aim of providing enough information to obtain informed consent. Counseling in the context of PITC follows the communication of HIV test results (post-test).

Informed consent

Patients should be provided with sufficient information to be able to provide informed consent. Declining an HIV test should not, in any way, affect a person's access to health services, and the health provider should acknowledge this while offering the test. PITC uses a "right to decline" approach for obtaining informed consent.

ANNEX 6

PATIENT REFERRAL CARD

លេខរៀង .....

លិខិតបញ្ជូន (REFERRAL CARD)

១. លេខកូដ ឈ្មោះអតិថិជន : ..... ភេទ ..... អាយុ .....

២. បញ្ជូនមកពី (Refer from): ឈ្មោះសេវា :.....

មណ្ឌលផ្តល់ប្រឹក្សា និងធ្វើតេស្តឈាមរកមេរោគអេដស៍ (VCCT) ☐ សេវា OI/ART ☐ ក្រុមថែទាំតាមផ្ទះ ☐

កម្មវិធីបង្ការការចំលងមេរោគអេដស៍ពីម្តាយទៅកូន (PMTCT) ☐ សេវាព្យាបាលជំងឺរបេង (TB) ☐ គ្លីនិកព្យាបាលជំងឺកាមរោគ ☐

សេវាព្យាបាលជំងឺកុមារ ☐ សេវាព្យាបាលជំងឺឆ្លង (ជំងឺទូទៅ) ☐ សេវាព្យាបាលជំងឺស៊ើស្បែក ☐ ផ្ទៃកសម្ភព ☐

សេវាពន្យាកំណើត ☐ ផ្ទៃកវះកាត់ ☐ សេវាព្យាបាលជំងឺមាត់ធ្មេញ ☐

សេវាព្យាបាលផ្សេងទៀត (សូមបញ្ជាក់) .....

៣. បញ្ជូនទៅកាន់ (Refer to): ឈ្មោះសេវា :.....

មណ្ឌលផ្តល់ប្រឹក្សា និងធ្វើតេស្តឈាមរកមេរោគអេដស៍ (VCCT) ☐ សេវា OI/ART ☐ ក្រុមថែទាំតាមផ្ទះ ☐

កម្មវិធីបង្ការការចំលងមេរោគអេដស៍ពីម្តាយទៅកូន (PMTCT) ☐ សេវាព្យាបាលជំងឺរបេង (TB) ☐ គ្លីនិកព្យាបាលជំងឺកាមរោគ ☐

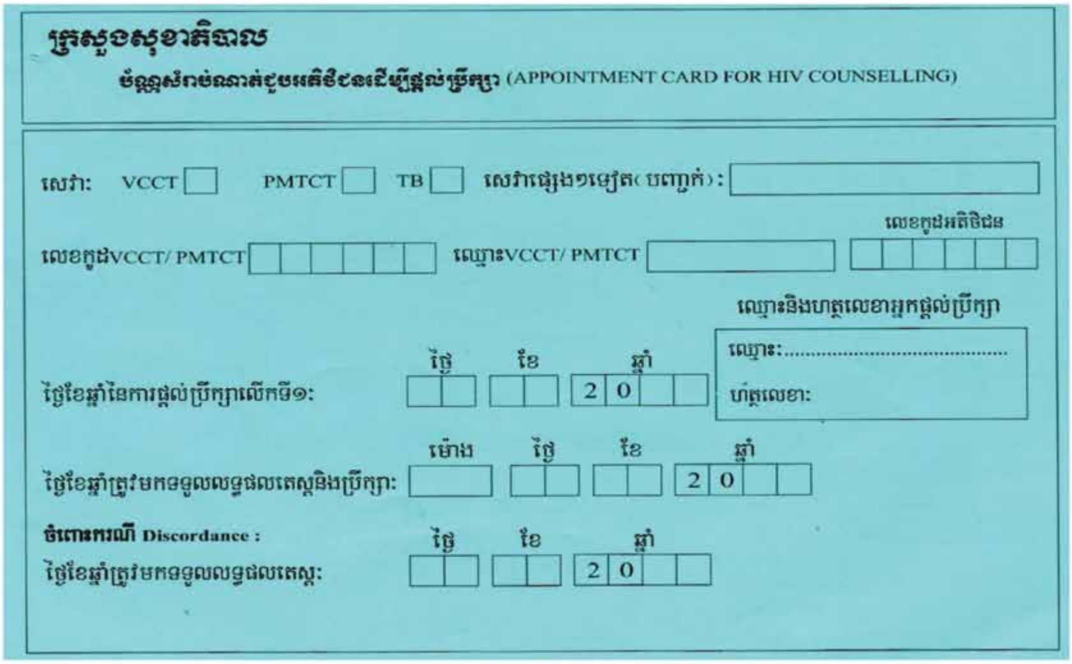
សេវាព្យាបាលជំងឺកុមារ ☐ សេវាព្យាបាលផ្សេងទៀត (សូមបញ្ជាក់) .....

ហត្ថលេខានិង ឈ្មោះអ្នកបញ្ជូន :

ថ្ងៃ ..... ខែ..... ឆ្នាំ.២០.....

សំរាប់សេវា PMTCT តែប៉ុណ្ណោះ	សំរាប់សេវាព្យាបាលជំងឺរបេង
១. រដូវចុងក្រោយ: ថ្ងៃ.....ខែ.....ឆ្នាំ ២0..... ២. ថ្ងៃប្រហាក់ប្រហែលសំរាល: ថ្ងៃ.....ខែ.....ឆ្នាំ ២0..... ៣. ការព្យាបាលដោយ ARV (ART) : ថ្ងៃ ខែ ឆ្នាំ ចាប់ផ្តើមប្រើ :.....	ការពិនិត្យសុខភាពរកមេរោគសញ្ញាជំងឺរបេង (-) ☐ ក្នុងរយៈពេល ៤ សប្តាហ៍ចុងក្រោយ : ☐ មានក្តៅខ្លួន (fever, anytime of any duration) ☐ មានក្អក (cough, anytime of any duration) ☐ មានបែកញើសជោគខុសធម្មតានៅពេលយប់ រយៈពេល២សប្តាហ៍ ឬលើស រោគវិនិច្ឆ័យជំងឺរបេង ☐ របេងសួត ☐ របេងក្រៅសួត ☐ កំហាកវិជ្ជមាន ☐ កំហាកអវិជ្ជមាន កាលបរិច្ឆេទរោគវិនិច្ឆ័យជំងឺរបេង: ថ្ងៃ.....ខែ.....ឆ្នាំ ២0..... កាលបរិច្ឆេទចាប់ផ្តើមព្យាបាលជំងឺរបេង: ថ្ងៃ.....ខែ.....ឆ្នាំ ២0..... រូបមន្តព្យាបាលជំងឺរបេង : .....

ANNEX 7 APPOINTMENT CARD FOR COUNSELING, TEST REFERRAL AND RESULT CARD



ក្រសួងសុខាភិបាល

ប័ណ្ណសំរាប់ណាត់ជួបអតិថិជនដើម្បីផ្តល់ប្រឹក្សា (APPOINTMENT CARD FOR HIV COUNSELLING)

សេវា: VCCT ☐ PMTCT ☐ TB ☐ សេវាផ្សេងៗទៀត (បញ្ជាក់): ____

លេខកូដVCCT/ PMTCT ☐☐☐☐☐☐ ឈ្មោះVCCT/ PMTCT ____ លេខកូដអតិថិជន ☐☐☐☐☐☐

ឈ្មោះនិងហត្ថលេខាអ្នកផ្តល់ប្រឹក្សា

ឈ្មោះ:..

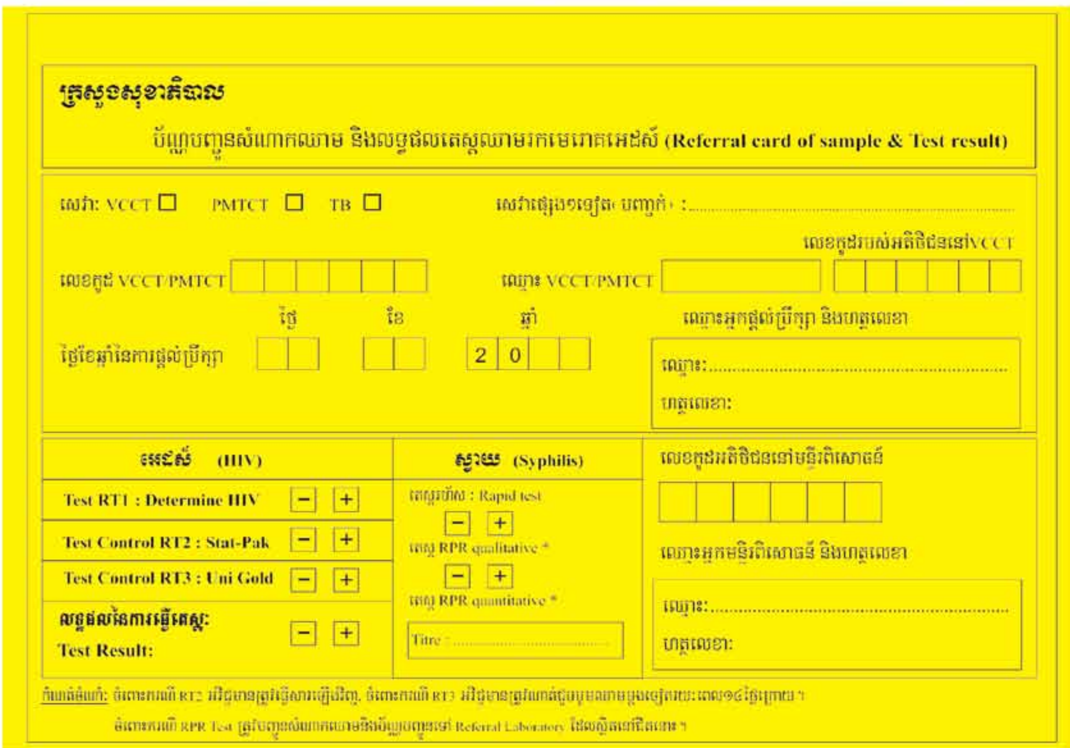
ហត្ថលេខា:

ថ្ងៃខែឆ្នាំនៃការផ្តល់ប្រឹក្សាលើកទី១: ថ្ងៃ ☐☐ ខែ ☐☐ ឆ្នាំ 2 0 ☐☐

ថ្ងៃខែឆ្នាំត្រូវមកទទួលលទ្ធផលតេស្តនិងប្រឹក្សា: ម៉ោង ____ ថ្ងៃ ☐☐ ខែ ☐☐ ឆ្នាំ 2 0 ☐☐

ចំពោះករណី Discordance :

ថ្ងៃខែឆ្នាំត្រូវមកទទួលលទ្ធផលតេស្ត: ថ្ងៃ ☐☐ ខែ ☐☐ ឆ្នាំ 2 0 ☐☐



ក្រសួងសុខាភិបាល

ប័ណ្ណបញ្ជូនសំណាកឈាម និងលទ្ធផលតេស្តឈាមរកមេរោគអេដស៍ (Referral card of sample & Test result)

សេវា: VCCT ☐ PMTCT ☐ TB ☐ សេវាផ្សេងៗទៀត (បញ្ជាក់) :..

លេខកូដ VCCT/PMTCT ☐☐☐☐☐☐ ឈ្មោះ VCCT/PMTCT ____ លេខកូដរបស់អតិថិជននៅVCCT ☐☐☐☐☐☐

ថ្ងៃខែឆ្នាំនៃការផ្តល់ប្រឹក្សា ថ្ងៃ ☐☐ ខែ ☐☐ ឆ្នាំ 2 0 ☐☐

ឈ្មោះអ្នកផ្តល់ប្រឹក្សា និងហត្ថលេខា

ឈ្មោះ:..

ហត្ថលេខា:

អេដស៍ (HIV)		ស្វាយ (Syphilis)	លេខកូដអតិថិជននៅមន្ទីរពិសោធន៍
Test RT1 : Determine HIV	− +	តេស្តរហ័ស : Rapid test − +	☐☐☐☐☐☐
Test Control RT2 : Stat-Pak	− +	តេស្ត RPR qualitative * − +	ឈ្មោះអ្នកមន្ទីរពិសោធន៍ និងហត្ថលេខា
Test Control RT3 : Uni Gold	− +	តេស្ត RPR quantitative *	ឈ្មោះ:..
លទ្ធផលនៃការធ្វើតេស្ត: Test Result:	− +	Titre :....................	ហត្ថលេខា:

កំណត់សំគាល់: ចំពោះករណី RT2 ... ចំពោះករណី RT3 ...

ចំពោះករណី RPR Test ... Referral Laboratory ...

ANNEX 8

DNA PCR REQUEST FORM

បំណុំស្នើសុំធ្វើតេស្ត HIV-1 DNA PCR

ឈ្មោះមន្ទីរពេទ្យបង្អែក ឬមណ្ឌលសុខភាព ..... លេខកូដមន្ទីរពេទ្យបង្អែក ឬមណ្ឌលសុខភាព

I- ពត៌មានអំពីអតិថិជន :

១- លេខកូដអតិថិជន : ☐☐☐☐☐☐ ២- ឈ្មោះអតិថិជន : ☐

៣- ថ្ងៃខែឆ្នាំកំណើត : ☐☐☐☐☐☐☐☐ ៤- ភេទ : ប្រុស ☐ ស្រី ☐

៥- ស្ថានភាពនៃការឆ្លងមេរោគអេដស៍របស់ម្តាយ : ៦- លេខកូដរបស់ម្តាយ (Clinic ID) ☐☐☐☐☐☐

(+) ☐ (-) ☐ មិនដឹង ☐ ឬ លេខកូដ ART : ☐☐☐☐☐☐☐☐

II- ពត៌មានអំពីសំណាកឈាម :

៧- ធ្វើតេស្ត PCR :

លើកទី១: ☐ លើកទី១ បញ្ជាក់: ☐

តេស្តពេលឃើញមានរោគសញ្ញាជំងឺឱកាសនិយម(OI Symptom): ☐ តេស្ត បញ្ជាក់: ☐

លើកទី២: ☐ លើកទី២ បញ្ជាក់: ☐

៨- ថ្ងៃខែឆ្នាំដោះឈាម : ☐☐☐☐☐☐☐☐

៩- ឈ្មោះ និងហត្ថលេខាអ្នកដោះឈាម : ☐

១០- ឈ្មោះ និងហត្ថលេខាគ្រូពេទ្យ ឬអ្នកព្យាបាល : ☐

III- ពត៌មានអំពីលទ្ធផលតេស្ត :

១១- លេខកូដមន្ទីរពិសោធន៍ ☐☐☐☐☐☐

១២- ថ្ងៃខែឆ្នាំទទួលសំណាកឈាម : ☐☐☐☐☐☐☐☐

១៣- ថ្ងៃខែឆ្នាំធ្វើការវិភាគ : ☐☐☐☐☐☐☐☐

១៤- លទ្ធផលតេស្ត :

(+) ☐

(-) ☐

* សូមធ្វើសំណាកឈាមម្តងទៀតដោយសារ:

- សំណាកឈាម DBS មិនត្រឹមត្រូវ ☐
- បច្ចេកទេសនៅមន្ទីរពិសោធន៍មិនត្រឹមត្រូវ : ☐
- លទ្ធផលមិនអាចកំណត់បាន : ☐
- ផ្សេងៗទៀត (បញ្ជាក់ : .....

១៥- ថ្ងៃខែឆ្នាំផ្តល់លទ្ធផល : ☐☐☐☐☐☐☐☐

១៦- ឈ្មោះនិងហត្ថលេខាមន្ត្រីមន្ទីរពិសោធន៍ : ☐

ANNEX

9

DNA PCR REGISTER

[illegible] Register for HIV-Exposed Infants

[illegible] (Site) :																												
														[illegible] DBS [illegible] DNA-PCR											[illegible] DBS			
						[illegible] ARV				[illegible]				[illegible] DNA-PCR [illegible]					[illegible] DNA-PCR [illegible]					[illegible] DNA-PCR [illegible]				
[illegible]	[illegible]	[illegible] OI/ART [illegible]	[illegible]	[illegible]	[illegible]	[illegible] NVP [illegible]	[illegible]	[illegible]	[illegible] CBPCS ? [illegible]	[illegible]	[illegible]	[illegible]	[illegible] Cotrimoxazole	[illegible] DBS	[illegible] DBS [illegible]	[illegible] DBS [illegible]	[illegible] DBS: (+ / - / [illegible])	[illegible]	[illegible] DBS	[illegible] DBS [illegible]	[illegible] DBS [illegible]	[illegible] DBS: (+ / - / [illegible])	[illegible]	[illegible] DBS	[illegible] DBS [illegible]	[illegible] DBS [illegible]	[illegible] DBS: (+ / - / [illegible])	[illegible]
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
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[illegible]

[illegible] សំរាប់ DNA-PCR						តេស្ត DBS សំរាប់ DNA-PCR										ការបរិច្ឆេទ មកពិនិត្យ											ការធ្វើតេស្ត HIV (Antibody test)		[illegible]				
	ការធ្វើតេស្តបញ្ជាក់ សំរាប់លទ្ធផល DNA-PCR លើកទី ២ វិជ្ជមាន					ការធ្វើតេស្ត DNA-PCR ([illegible])					ការធ្វើតេស្តបញ្ជាក់សំរាប់លទ្ធផល DNA-PCR វិជ្ជមាន ([illegible])					[illegible]																	
[illegible]	[illegible] DBS	DBS [illegible]	[illegible] DBS [illegible]	DBS: (+ / - / [illegible])	[illegible]	[illegible] DBS	DBS [illegible]	[illegible] DBS [illegible]	DBS: (+ / - / [illegible])	[illegible]	[illegible] DBS	DBS [illegible]	[illegible] DBS [illegible]	DBS: (+ / - / [illegible])	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] HIV	[illegible] HIV	(+) [illegible] OI/ART [illegible]	(-) [illegible]	[illegible]	[illegible]	[illegible]
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
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ANNEX 10

SUPERVISION CHECKLIST

SUPERVISION CHECKLIST FOR VCCT NCHADS AND PASP TO VCCT

I. General information:

- Date of supervision (d/m/y)_____/_____/_____
- Name of supervisor:_____
- Name of VCCT centre _____OD_____ PHD _____
- Name of counselors:

  1_____Tel:_____ Basic training date (M/ Y)? _____

  2_____Tel:_____ Basic training date (M/ Y)? _____
- Working hours:

  1. Morning: start _____ Leave _____
  2. Afternoon: start_____ Leave _____

Structure and Management

Scoring system: 2 = Well done, 1 = partially performed, 0 = Not done

Write NA under remark if not applicable

	Subject	2	1	0	Remark
1.	All staff and volunteers received basic training appropriate to their work and received refresher training(s) as planned by the National program				
2.	Regular (Weekly/bi-weekly/monthly?) meetings with staff are held with minutes being filed properly				
3.	Staff regularly attend CoC meetings for experience sharing, networking, skills-building and collaboration				
4.	The site is opened at appropriate hours and clean				
5.	The counseling rooms ensure visual and auditory privacy, and comfortable ventilation				
6.	Client records are kept in secured, locked cabinets and only reviewed by appointed staff				
7.	VCCT service is linked to PLHA support group(s), HBC and MMM, and makes active referrals as appropriate				

Observation of VCCT Counselors in counseling session

Scoring system: 2 = Well done, 1 = partially performed, 0 = Not done

Write NA under remark if not applicable

	Subject	2	1	0	Remark
I. Pre-test counseling					
1.	Greeted client friendly and introduced self and role including confidentiality of clients' medical information				
2.	Asked reason why client come to VCCT				
3.	Assessed client about the basic knowledge of HIV/AIDS				
4.	Corrected misunderstanding on HIV/AIDS				
5.	Assessed the risk behaviors				
6.	Counseled about the risk reduction				
7.	Counseled risk reduction planning process				
8.	Introduced condom and how to use it in appropriate way				
9.	Introduced HIV/AIDS transmission from mother to child and how to prevent it				
10.	Asked client about symptoms of TB/HIV co-infection and its treatment				
11.	Asked client about symptoms of STI/STI and its treatment				
12.	Asked client about the consent for taking blood				
13.	Filled code number to the blood tube is similar the code of appointment slip				
14.	Provided the appointment slip and informed verbally about the date for post-test counseling				
15.	Staff obtained voluntary verbal consent from the client for HIV testing				
II.1. Pre-test counseling with proper inter-personal communication performance					
16.	Appointment slip was given simply and directly				
17.	Asked simple question one at a time				
18.	Answered question, using simple or clear language				
19.	Gave client time to consider after asking him or her question				
20.	Demonstrated active listening skills				
21.	Facial expression followed client's story or emotion				
22.	Asked about feeling or emotion				
23.	If client showed feelings, allowed to express				
24.	Checked understanding of client by asking them to say how they understood the information				
25.	Asked client did he/she understand that				
26.	Encouraged client to ask question				
27.	Counsellor checked to see if client had further questions or issues for discussion				
28.	Responded patiently and clearly to client's questions				

	Subject	2	1	0	Remark
II.2. Pre-test counseling with improper inter-personal communication performance					
29.	Interrupted client				
30.	Spoke too loud or fast				
31.	Used too many technical words				
32.	Paid too much attention for forms or paper, not looking at the client				
III. Post-test counseling					
33.	Checked whether the client is the right person by comparing the client number on the appointment slip and envelope				
34.	Reviewed major points covered during the pre-test counseling				
35.	Asked client to intention upon learning of positive and negative test				
36.	Discussed with client about his or her situation, any potential problems and possible plan				
37.	Asked client for permission to open an envelope (if client agreed counsellor to open the envelope, counsellor provide counseling only one way either HIV positive or negative, or if client did not agree counsellor to open an envelope, the counsellor should provide counseling for both ways)				
III.1. Post-test counseling for HIV +					
38.	Discussed the meaning of the HIV testing result and made sure that the client understood the meaning of a positive result				
39.	Provided emotional support, checked the client immediately plans to ensure their safety				
40.	Discussed the personal, family and social circumstances including disclosure with spouse or partner if applicable				
41.	Discussed progression of HIV/AIDS.				
42.	Discussed other medical care and support such as OI treatment and prophylaxis, prevention of mother to child transmission (for pregnant women), TB preventive therapy and information about use of ART.				
43.	Developed a personalized risk reduction plan, including prevention of HIV transmission to partners who may be uninfected or untested, and use of safer sex practice.				
44.	Provided information about other services are available and made referral within the hospital or the nearest health facilities (when agreed by client), including services in the community such as community or home based care and support to families and children affected by HIV/AIDS.				
III.2. Post-test counseling for HIV -					
45.	Discussed the meaning of the HIV testing result and made sure that the client understood the meaning of a negative result				
46.	Clarified the meaning of test result and "window period" if applicable. Recommends re-test if client is in "window period"				
47.	Reviewed the basic knowledge of HIV/AIDS which was provided during pre-test counseling				
48.	Discussed a risk reduction plan to safer sex behavior				
49.	Distributed IEC to the clients				
50.	Informed services are available for care support and treatment				

	Subject	2	1	0	Remark
III.3. Post-test counseling with proper inter-personal communication performance Combine with II.1					
51.	Gave test result to client in calm manner				
52.	Gave client time to consider after asking him or her question				
53.	Encouraged client to ask question				
54.	Responded patiently and clearly to client's questions				
55.	Answered the client's question by responding correctly				
56.	Asked and answered questions, using simple or clear language				
57.	Asked and answered questions pleasantly				
58.	Asked question one a time				
59.	Checked understand of client by asking them to say how he or she understood the information				
60.	Checked to see if client had further questions or issues for discussion				
61.	Closed counseling session with kind words of farewell, thank for coming				
III.4. Post-test counseling with improper inter-personal communication performance Combine this section with II.2					
62.	Gave client advice				
63.	Told client they must change, do this or that				
64.	Talk down to client				
65.	Interrupted client				
66.	Used too many technical words				
IV. Role of counselor					
67.	moved to pretest section				
68.	Moved to pretest section Q 18				
69.	Client intake record/report completed with client				
70.	Models were available and demonstrated them to the client (especially condom performance)				
71.	Blood drawn per guidelines				
V. Data management					
72.	Ensured data entry of all medical and counseling forms (the latest month)				
73.	Random sample of medical records reviewed and checked				
74.	All active and inactive file in order				
75.	Keep all record for HIV testing Quality Control				
VI. IEC/document management					
76.	HIV testing protocol				
77.	Appointment slip for VCCT				
78.	Laboratory slip for VCCT				
79.	Referral slip				
80.	Counseling registration sheet				
81.	Monthly report form				
82.	Request form				
83.	Condom was available				
84.	Leaflet of VCCT was available				
85.	Referral information was available (list of HBC or health services)				

SUPERVISION CHECKLIST FOR VCCT

VCCT LAB TECHNICIAN

I. General information

- Date of supervision (d/m/y)_____/_____/_____
- Name of VCCT _____OD _____ PHD _____
- Name of Lab technician and counselors who perform HIV testing

  1_____

  2_____
- Working hours

  1. Morning: start _____ Leave _____
  2. Afternoon: start_____ Leave _____

	Subject	Y	N	Remark
I. Cleaning and hygiene				
1.	Room			
2.	Refrigerator			
3.	Reagents were in place and appropriate			
4.	Equipments were in place and appropriate			
II. Documented management				
5.	Consumable request form			
6.	Monthly report form			
7.	Quarterly report form			
8.	Register of Lab			
III. Observation the HIV test procedure				
9.	Centrifuged blood			
10.	Put reagents			
11.	Aspired serum			
12.	Stirred serum			
13.	Spend enough time to show result			
14.	Interpreted result			
15.	Wrote the date and test result			
IV. Role of lab technician				
16.	Addressed to all safety guidelines, used standard work practice and followed universal precautions			
17.	Worn long-sleeved lab coat, buttons closed with narrow tags			
18.	Gloves were changed between clients			
19.	Ensured laboratory equipment were arranged in order			
20.	Ensured blood sample have client's number sticker secured			
21.	Ensure blood samples packaged, transported and stored per guidelines			
22.	Ensured test result were recorded in the register			

	Subject	Y	N	Remark
V. Stocked check (available or not available, check expiry dates)				
23.	Serodia HIV ½			
24.	Genscreen HIV ½			
25.	Uni-Gold			
26.	Determine HIV ½			
27.	Vacutainer tube			
28.	Vacutainer needle			
29.	Yellow tube			
30.	Gloves			
31.	Microplate			
32.	Micropipette			
33.	Centrifuge			
34.	Plate shaker			
VI. Infection Control				
35.	PEP guideline/IEC (poster), contact and medications/ART are available and visible, and medical staff have been trained and know what to do in case of injury (test)			
36.	Contaminated material disposal is organized and efficient			

ANNEX 11

STANDARD LOG BOOK FOR INTERNAL QC TESTING

FORM FOR QUALITY CONTROL TESTING

- Province_____
- VCCT _____

Test kit Name: _____ Lot No: _____ Exp:_____

Technician: _____ Date of Testing: _____

No	ID Code	Results			Other
		T	C	Results	

Date:_____/_____/_____

Checked by: _____

ANNEX 12

HIV TESTING REGISTER

លេខកូដ												លេខកូដមន្ទីរពិសោធន៍						ថ្ងៃ ខែ ឆ្នាំ បូមឈាម	ថ្ងៃ ខែ ឆ្នាំ បានទទួលឈាម	តេស្តរហ័សទី ១				តេស្តរហ័សទី ២			
លេខកូដកន្លែងបូមឈាម						លេខកូដអតិថិជន														ឈ្មោះតេស្ត	កាលបរិច្ឆេទ	លទ្ធផល		ឈ្មោះតេស្ត	កាលបរិច្ឆេទ	លទ្ធផល	
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ANNEX 13

COUNSELING REGISTRATION SHEET

ចំណុចទុះឈ្មោះអតិថិជនមកទទួលសេវាផ្តល់ប្រឹក្សា (Counseling Registration Sheet)

1. កាលបរិច្ឆេទ : ថ្ងៃ.....ខែ.....ឆ្នាំ 200..... 2. ឈ្មោះមណ្ឌលផ្តល់ប្រឹក្សា និងធ្វើតេស្ត :.....

3. **លេខរៀងពេលផ្តល់ប្រឹក្សា** (VCCT :..... **លេខកូដអតិថិជន** (PMTCT :.....

4.ភេទ : 1: ប្រុស ☐ 2: ស្រី ☐ 5. អាយុ :.....

6.ស្ថានភាពអាពាហ៍ពិពាហ៍ : 1: នៅលីវ ☐ 2: រៀបការហើយ ☐ 3: ពោះម៉ាយ/មេម៉ាយ ☐

7. មុខរបរ :.....

8. កំរិតសិក្សា 1: មិនដែលរៀន ☐ 2: បឋមសិក្សា ☐ 3: អនុវិទ្យាល័យ ☐ 4: វិទ្យាល័យ ☐ 5: ក្រោយវិទ្យាល័យ ☐

9. អាស័យដ្ឋាន : ភូមិ.....ឃុំ/សង្កាត់.....ស្រុក/ខណ្ឌ..... ខេត្ត/ក្រុង.....

10. ប្រទេសកំណើត 1: កម្ពុជា ☐ 2: វៀតណាម ☐ 3: ថៃ ☐ 4: ប្រទេសផ្សេងៗ.....

11 : មូលហេតុរកសេវា:

1: ស្ម័គ្រចិត្តដោយមានរោគសញ្ញា ☐ 2: ស្ម័គ្រចិត្តដោយគិតថាមានការប្រឈមមុខ ☐ 3: គោលបំណងរៀបការ ☐

4: ស្ត្រីមកពិនិត្យផ្ទៃពោះ/មានគភ៌ ☐ 5: ដៃគូផ្តុំកមេរោគអេដស៍ ☐ 6: ឪពុកម្តាយផ្តុំកមេរោគអេដស៍ ☐

7: មកទទួលការផ្តល់ប្រឹក្សាបន្ត ☐ 8: បារម្ភពីជំងឺអេដស៍ ☐ 9: ដៃគូមានផ្ទៃពោះ ☐

12 : បញ្ជូនដោយ:

ក : 1: មកដោយខ្លួនឯង ☐ 2: ក្រុមផែទាំតាមផ្ទះ ☐ 3: គ្លីនិកកាមរោគ ☐ 4: កម្មវិធីរបេង ☐ 5: មណ្ឌលសុខភាព ☐

ខ : មន្ទីរពេទ្យ 1: ផ្នែកព្យាបាលជំងឺទូទៅ ☐ 2: ផ្នែកព្យាបាលជំងឺកុមារ ☐ 3: ផ្នែកសម្ភព ☐ 4: សេវាពន្យាកំណើត ☐ 5: ផ្នែកជំងឺឆ្លង ☐

6: ផ្នែកព្យាបាលជំងឺស្បែក ☐ 7: ផ្នែកវះកាត់ ☐ 8: ផ្នែកព្យាបាលមាត់ធ្មេញ ☐ 9: សេវាពិនិត្យផ្ទៃពោះមុនពេលសំរាល ☐

គ : ក្រុមការងារ CoPCT សំរាប់ក្រុមប្រឈមមុខខ្ពស់ (CoPCT-for-MARP)

1:ស្ត្រីធ្វើការនៅសេវាកំសាន្ត ☐ 2:បុរសស្រឡាញ់បុរស ☐ 3:ប្រើប្រាស់គ្រឿងញៀន: ☐ អ្នកប្រើថ្នាំញៀន ☐ អ្នកចាក់ថ្នាំញៀន ☐

13. ការវាយតំលៃការប្រឈមមុខ :

1. រួមភេទជាមួយដៃគូច្រើនមិនប្រើស្រោមអនាម័យក្នុងកំឡុង ៣ខែកន្លងទៅ ☐ បើមានថ្ងៃខែចុងក្រោយ...../...../.....

2.រួមភេទជាមួយស្ត្រីរកស៊ីផ្លូវភេទដោយមិនប្រើប្រាស់ស្រោមអនាម័យ ☐ បើមានថ្ងៃខែចុងក្រោយ...../...../.....

3.ដៃគូមានដៃគូរួមភេទច្រើន ☐ 4.ដៃគូធ្វើការឆ្ងាយពីផ្ទះ ☐ 5.ដៃគូមានផ្តុំកមេរោគអេដស៍ ☐ 6.ដៃគូមុនស្លាប់ដោយជំងឺអេដស៍ ☐

7. ធ្លាប់បញ្ចូលឈាម ☐ បើមានថ្ងៃខែចុងក្រោយ...../...../..... 8. ធ្លាប់មានកាមរោគ ☐ 9. ក្រោយរំលោភផ្លូវភេទ ☐

10. ធ្លាប់ប្រើមួលរួមគ្នា ៦ ខែកន្លងទៅ ☐ 11.ចាក់ថ្នាំញៀន ☐ 12. បុរសស្រលាញ់បុរស ☐ 13. មិនមានការប្រឈមមុខ ☐

14: ឪពុកម្តាយផ្តុំកមេរោគអេដស៍ ☐ 15: ស្ត្រីធ្វើការនៅសេវាកំសាន្ត (EW) ☐

ស្ត្រីមានផ្ទៃពោះ (PMTCT) ចំនួនកូនកើតគ្រប់ខែ ☐ ចំនួនកូនកើតមិនគ្រប់ខែ ☐ ចំនួនកូនរលូតរំលូត ☐ ចំនួនកូននៅរស់សព្វថ្ងៃ ☐

ផ្ទៃពោះថ្ងៃ (Gestation) ..... រដូវចុងក្រោយ (Last Menstrual Peroid) .....

ថ្ងៃខែសំរាល ..... ចំនួនកូនស្លាប់ (# of children) .....

14. ប្រវត្តិធ្វើតេស្ត: មិនធ្លាប់ធ្វើតេស្ត ☐ ធ្លាប់ធ្វើតេស្ត ☐ 1.ថ្ងៃមាន ☐ 2.អវិជ្ជមាន ☐ 3.មិនអាចកំណត់បាន ☐ 4.ធ្លាប់ធ្វើតេស្តតែមិនបានមកទទួលលទ្ធផល ☐

15.ផ្តល់ការធ្វើតេស្ត: មិនយល់ព្រមធ្វើតេស្ត ☐ យល់ព្រមធ្វើតេស្ត ☐ 1.ថ្ងៃមាន ☐ 2.អវិជ្ជមាន ☐ 3.មិនអាចកំណត់បាន ☐

16.ការផ្តល់ប្រឹក្សាក្រោយពេលធ្វើតេស្ត: មិនបានផ្តល់ប្រឹក្សា ☐ បានផ្តល់ប្រឹក្សា ☐ ថ្ងៃ.....ខែ.....ឆ្នាំ.....

17 : បញ្ជូនទៅកាន់:

1. សេវា OI/ART ☐ 2. គ្លីនិកកាមរោគ ☐ 3. ក្រុមផែទាំតាមផ្ទះ ☐ 4. កម្មវិធីរបេង ☐ 5. ផ្នែកជំងឺឆ្លង ☐

6. មណ្ឌលសុខភាព/មន្ទីរពេទ្យ ☐ 7. សេវាពិនិត្យផ្ទៃពោះមុនពេលសំរាល ☐

ឈ្មោះអ្នកផ្តល់ប្រឹក្សា ..... ហត្ថលេខា .....

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ANNEX 14

COUNSELING REGISTRATION SHEET

របាយការណ៍ស្តីពីការផ្តល់ប្រឹក្សា និងធ្វើតេស្តឈាមរកមេរោគអេដស៍

ដោយស្ម័គ្រចិត្ត និង រក្សាការសម្ងាត់ (VCCT)

ឈ្មោះមន្ទីរពេទ្យបង្អែក/គ្លីនិក (Facility)	លេខកូដ (Facility Code)				
ឈ្មោះស្រុកប្រតិបត្តិ (Operational District)	ខេត្ត/ក្រុង(Province)				
ឆ្នាំ (year)	ត្រីមាសទី (Quarter)				

មុនពេលធ្វើតេស្ត — **ចំនួនអតិថិជនដែលបានទទួលការផ្តល់ប្រឹក្សា មុនពេលធ្វើតេស្ត (Number of Client referred from)**

មក ដោយខ្លួនឯង (Self referred)		មកពី មន្ទីរសម្ភព (Maternity)		មកពី សេវាវះកាត់ (Surgical Service)	
មកពី សេវាព្យាបាលជំងឺកាមរោគ (STD Clinic)		មកពី សេវាពន្យាកំណើត (BS/FP)		មកពី មណ្ឌលសុខភាព (Health Center)	
មកពី កម្មវិធីរបេង (TB Program)		មកពី សេវាពិនិត្យផ្ទៃពោះមុនសំរាល (ANC)		មកពី ក្រុមស្ត្រីធ្វើការនៅសេវាកំសាន្ត(EW)	
មកពី ក្រុមថែទាំតាមផ្ទះ (HBC)		មកពី សេវាព្យាបាលជំងឺស្បែក (Skin Care)		មកពី ក្រុមបុរសស្រលាញ់បុរស (MSM)	
មកពី សេវាព្យាបាលជំងឺទូទៅ(General Medicine)		មកពី សេវាព្យាបាលជំងឺមាត់-ធ្មេញ (Dental Service)		មកពី ក្រុមអ្នកប្រើគ្រឿងញៀន(DU/IDU)	
មកពី សេវាព្យាបាលជំងឺកុមារ (Pediatric Care)		មកពី សេវាព្យាបាលជំងឺឆ្លង (Infection Disease)			

សរុបចំនួនអតិថិជនមុនពេលធ្វើតេស្ត =

បានធ្វើតេស្ត

ចំនួនអតិថិជនដែលបានទទួលធ្វើតេស្ត (# of Clients tested)	អាយុ (Age)	VCCT		TB		MARP				PMTCT		
		ស្រី (Female)	សរុប (Total)	ស្រី (Female)	សរុប (Total)	EW	MSM	DU/IDU		ស្ត្រីមានផ្ទៃពោះ	ដៃគូ	សរុប
								DU	IDU			
តេស្ត HIV +	≤ 14											
	15 - 49											
	> 49											
	សរុប											
តេស្ត HIV -	≤ 14											
	15 - 49											
	> 49											
	សរុប											
តេស្ត HIV Indeterminate (±)	≤ 14											
	15 - 49											
	> 49											
	សរុប											
សរុបចំនួនអតិថិជនដែលបានធ្វើតេស្ត =												

ក្រោយពេលធ្វើតេស្ត

ចំនួនអតិថិជនដែលបានទទួលការផ្តល់ប្រឹក្សា ក្រោយពេលធ្វើតេស្ត (# of Clients received Post-Test Counseling)												
	≤ 14											
	15 - 49											
	> 49											
	សរុប											

ចំនួនអតិថិជនបានទទួលលទ្ធផល HIV + ដែល បានបញ្ជូនទៅកាន់ (# of HIV + Clients referred to Other services)		
	កន្លែងផ្តល់សេវា OI/ART	
	កន្លែងផ្តល់សេវាជំងឺរបេង (TB Programme)	
	ក្រុមថែទាំតាមផ្ទះ (Home Base Care)	
	ផ្សេងទៀត (Others)	
	សរុប (TOTAL)	

ថ្ងៃ.ខែ.ឆ្នាំធ្វើរបាយការណ៍ (Date reported)	/ /	
ឈ្មោះ និង ហត្ថលេខាអ្នកធ្វើរបាយការណ៍ (Report Completed by)		
Approved by)		

របាយការណ៍នេះ ត្រូវផ្ញើមក Data Management Unit (NCHADS) ***ក្នុងរយៈពេល ១០ថ្ងៃ នៃដើមត្រីមាសបន្ទាប់*** ហើយត្រូវចំលងជូន OD, PAST *update:18/01/2012

ANNEX 15

MONITORING INDICATORS AND TARGETS

Number and Percentage of infants born to HIV-infected women started on cotrimoxazole prophylaxis (CPT) within two months of birth

Numerator= Number of infants born to HIV-infected women started on CPT within two months of birth

Denominator= estimated number of HIV-infected pregnant women giving birth

Source of data:

LR follow up sheet (or patient tracking tool) but possible problem of completeness

Data collection method:

Cohort analysis of LR at OD level compiled by NCHADS

Number and Percentage of infants born to HIV-infected women who received an HIV DNA PCR test within the first three months of life

Numerator = Number of infants born to HIV-infected women who received an HIV test within the first three months of life

The numerator can be disaggregated as follow:

- nb infants who received a first DNA PCR
  Nb positive
  Nb negative

Number and Percentage of infants born to HIV-infected women who received an HIV DNA PCR test within the first year of age

Numerator= Number of infants born to HIV-infected women who received an HIV test in their first 12 months

The numerator can be disaggregated as follow:

- nb infants who received a first DNA PCR
  Nb positive
  Nb negative
- nbof infants who received a second DNA PCR
  Nb positive
  Nb negative

Denominator = estimated number of HIV-infected pregnant women giving birth

Source of data:

The data is transcribed in the NIPH laboratory register and disaggregated by number of first and second specimens for DNA PCR.

The data is reported to NCHADS on a quarterly basis

Interpretation of data:

This indicator provides information on the process of early infant diagnosis and also on the outcome of the PMTCT program (nb of HIV-infected infants).

The number of infants who have been HIV-infected from their mother is (the number of positive at the first test) + (the number of negative at first test and positive at the second test).

However, the nb and % of HIV-infected infants is representative only if the uptake of EID is high.

Number and percentage of HIV-infected infants < 1 year started on ART

Numerator = number of infants < 1 year started on ART

Denominator = number of infants < 1 year detected HIV-infected through EID.

Data source = Facility ART quarterly report

ឧបត្ថម្ភបច្ចេកទេស/ថវិកាដោយ :

World Health Organization

CDC

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