

**Kingdom of Cambodia**

Nation Religion King



**Ministry of Health**

# Annual Report 2010



**National Center for HIV/AIDS, Dermatology and STD**

**March 2011**

## Acknowledgement

It gives us a great opportunity to review the last year achievements of NCHADS' program. The achievements are the outputs of our teams of dedicated staffs working in partnership with all partners and donors in the communities at provincial and national levels to implement and improve the quality of HIV/AIDS & STI Prevention and Care activities for the benefits of people of the Kingdom of Cambodia. I would like to thank all partners, donors and policy makers who have been dedicated their commitment towards the success of HIV/AIDS Prevention, Care and Treatment Programme in the country.

When we reviewed what has been achieved, we are motivated to continue striving, to set the overall goals, objectives, and target for the next coming year to meet with the various changing needs of people and to deal effectively with changing of the epidemic pattern of different target groups based on the latest research findings in their communities.

We hope that you will understand our last year achievements deeper as you read further of this report.

Date 01.04.2011



Dr. Mean Chhi Vun  
Director of NCHADS

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# NCHADS Annual Report 2010

## A. GENERAL REPORT:

### 1. BACKGROUND:

#### 1.1 Introduction:

This report describes the achievement of program implementation on HIV/AIDS and STI prevention, care, support and treatment during the year 2010. The report is intended to aggregate data and information collected from all OI/ART, VCCT, Family Health Clinics, HBC, and PMTCT sites from the whole country to be represented as the National Comprehensive Report for the health sector response to HIV/AIDS and STI in Cambodia. The following sections reported the main three program areas implemented for this year that are including: A) General Report related to Programme management and implementation; B) Results from health service deliveries; C) Financial Report for describe the financial disbursements against the yearly budget plan; D) Procurement of OI/ARV Drugs, E) Challenges etc.

#### 1.2 HIV/AIDS Epidemic:

Cambodia is one of the few countries that have seen declining HIV prevalence. HIV prevalence in the general population has declined from 1.2% in 2003 to 0.9% in 2006 (see Figure 1).

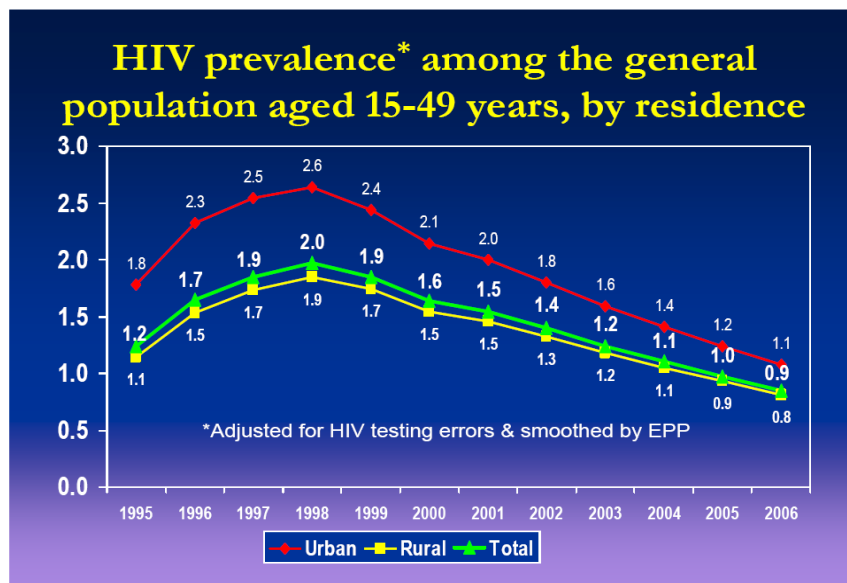


Figure 1: HIV prevalence among general population aged 15 – 49

Based on the HSS 2006 and based on the projection using the Asian Epidemic Model (AEM), showed that the HIV prevalence among the general population continues to decline from 0.9% 2006 to 0.8% in 2007 and 0.7% in 2010 and number of people living with HIV (PLHA) is 56,200 in 2010 (29,500 women and 26,700 men) and in 2012 will be 51,200 (26,800 women and 24,400 men) (see Figure 2 and 3).

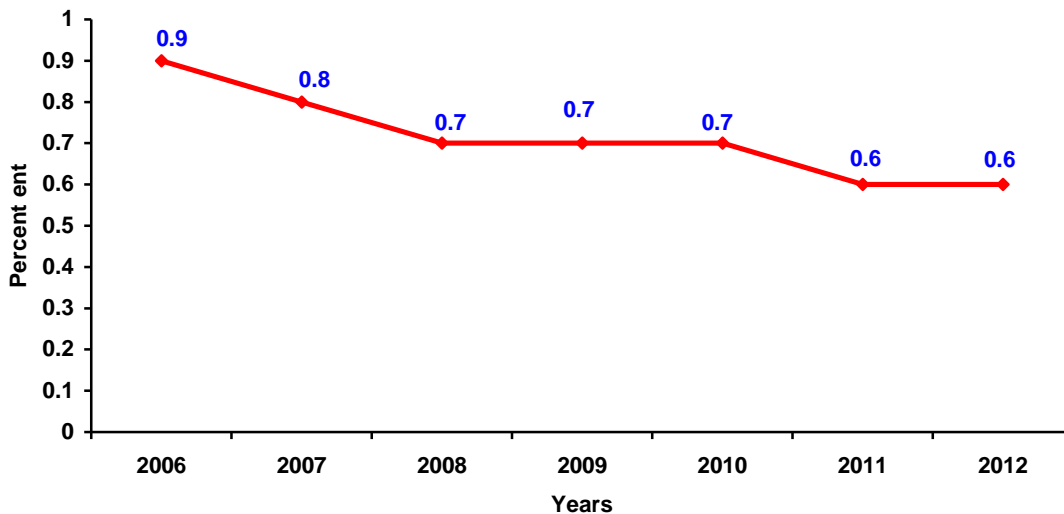


Figure 2: AEM-projected prevalence of HIV among the general population aged 15 – 49 years from 2006 – 2012 (with ART available)

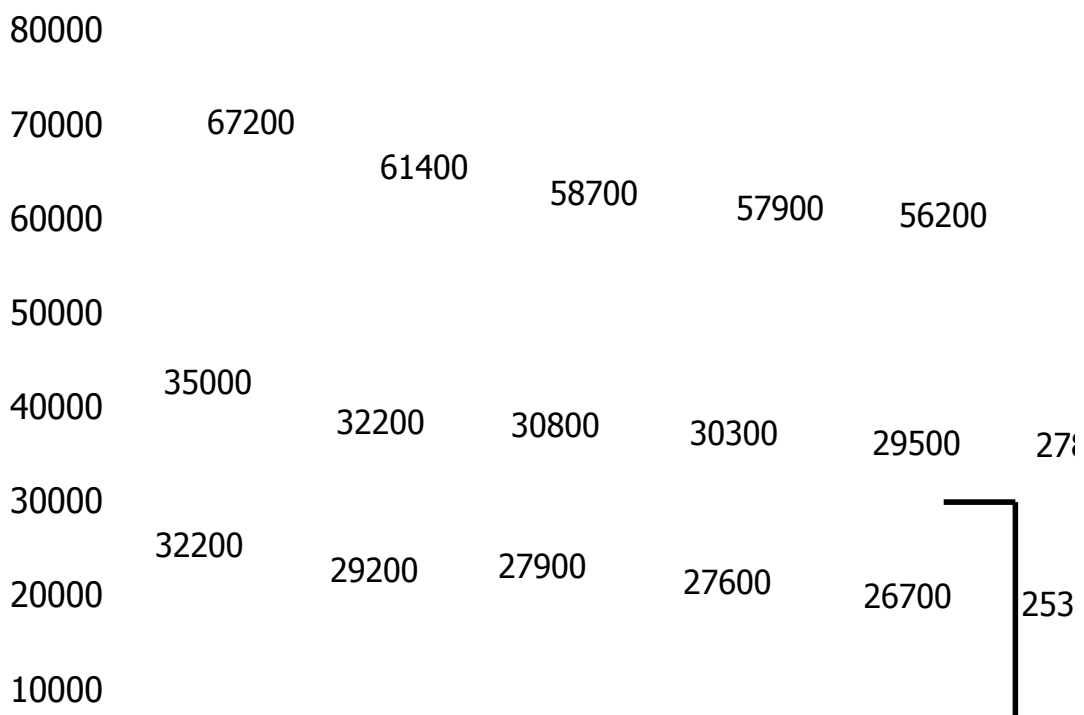


Figure 3: AEM-projected number of people aged 15+ living with HIV/AIDS in Cambodia, 2006-2012

## 2 NCHADS MANAGEMENT SYSTEM

### 2.1 Planning and Monitoring Cycle in NCHADS:

The Comprehensive Annual Operational Work Plan 2010: The Planning Workshop for 24 provinces was conducted as the part of the Annual Coordination Workshop held in October 2009 in order to review progress made during first 3 quarters, to provide the updates of technical concepts and strategies or Guidelines in the programme implementation, and to make the final review of the work plan for 2010. At this meeting, Annual national and provincial targets were set. The result was the final draft of Annual Operational

Comprehensive Plan for NCHADS Programme in 2010, which incorporated with many of the inputs and expected outputs of partners working in coordination with PAOs at provincial and national levels. This AOCPP was also firmly grounded on the Ministry of Health Annual Operational Plan 2010, prepared for the HSSP. Finally, the NCHADS Annual Comprehensive Work Plan and budget plan including incentives for staff for 2010 has been approved. It has the total budget of \$21,083,836 that is consisting of 15 different funding sources to implement HIV/AIDS and STI program at national and provincial levels. This budget is allocated 64% for the Continuum of Care (including reagents, consumable and OI/ARV drugs etc), 5% for surveillance, research and data management, and 31% for program planning, monitoring, admin cost, incentives and other prevention activities.

**2.2 Signing of LoAs:** during the year 2010, NCHADS signed the Letter of Agreement with the following implementing partner:

1. Men's Health Social Service NGOs for the Prevention of HIV/AIDS and impact of Using Drugs among IDUs and DUs from August 2009 to July 2012. Men's Health Social Service has received funding from KHANA, PACT, FHI and PSI for HIV/AIDS, STI, IDU, DUs Prevention and condom social marketing among the Most at Risk Population ( MARPs) such as Men who have Sex with Men (MSM), Entertainment Workers (EWs), Drug Users and Injection Drug Users (IDUs) in 09 provinces and municipality which consist of Phnom Penh, Battambang, Banteay Meanchey, Kampong Thom, Pursat, Kampong Chhnang, Kampong Speu, Pailin , and Prey Veng province from August 2009 to July 2012.
2. Family Health International (FHI-Cambodia) from 1<sup>st</sup> January to 31<sup>st</sup> August year 2010 for the implementation of VCCT, STI/RTI Prevention and Care in 10 Family Health clinics of 6 provinces-cities including: Kampong Cham, Siem Reap, Banteay Meanchey, Battambang, Pailin, and Phnom Penh.
3. Second Amendment for extension of MoU between the Clinton Foundation HIV/AIDS (CHAI), from January to December 2010, for the provision of Adult Second-Line HIV/AIDS Project in 2010.
4. Agence d'Aide a la Coopération Technique-Pharmaciens Sans Frontiere (ATCTED-PSF) from October 2010 to September 2012 for the implementation of STI/HIV Prevention and Care for Most at Risk Population (MARP): the SMART girl and M-Style Projects in Phnom Penh.
5. AFESIP-CAMBODIA from January 2010 to December 2014 for the implementation of STI/HIV Prevention Programme for the Entertainment Workers in 8 districts in Phnom Penh and 7 other provinces (Koh Kong, Rattanakiri, Stung Treng, Siem Reap, Oddor Meanchey, Banteay Meanchey, and Pailin).

**2.3 Guidelines, Curriculum and Standard Operating Procedures (SOP) :**

During this year, NCHADS developed and revised several important Guidelines and Standard Operational Procedure such as:

1. Strategic Plan Strategic Plan for HIV/AIDS and STD Prevention and Care, 2011-2015, was revised and updated by each technical working group. The final of strategic Plan was discussed in the consensus meeting since November 2010 with local and international partners and will be finalized and submitted to MoH for approval in early 2011.
2. Guide for implementation of Positive Prevention among PLHIV in Cambodia, was developed by National Technical Working Group, and consulted with partners and

implementers through several round of discussion and meeting. This is the result of intensive efforts of improving the quality of care, treatment, and support services for PLHIV and will help them better understand issues affecting their health status. This SOP (both in Khmer and English version) were distributed and posted to NCHADS websites.

3. Functional Task Analysis of Provincial AIDS and STI Programme in Cambodia, was revised and updated to response to the new initiative approach including Continuum of Prevention to Care and Treatment, Three I's Strategy, Positive Prevention and Linked Response approach, and to fulfil the mission and targets in the Strategic Plan Strategic Plan for HIV/AIDS and STD Prevention and Care, 2011-2015. This guide (both in Khmer and English version) were distributed and posted to NCHADS websites.
4. Standard Operational Procedure for Implementing the Three I's in Continuum of Care setting, was developed by National Technical Working Group, and consulted with partners and implementers at the provincial level. This SOP (both in Khmer and English version) were finalized and posted to NCHADS websites. After this SOP was launched, NCHADS collaborate with CNAT, organized the orientation meeting to implement this SOP in CoC sites in 20 ODs since Q3.2010.
5. National Guidelines on Sexually Transmitted Infections (STI) and Reproductive Tract Infection (RTI) Case management, was developed by National Technical Working Group, and consulted with partners and implementers. This Guideline (both in Khmer and English version) were finalized and posted to NCHADS websites.

#### **2.4 Management of GFATM-R7:**

The Program Grant Agreement of Phase I of HIV/AIDS component GFATM Round 7 Grant was started to implement since 1<sup>st</sup> December 2008 and end by 31<sup>st</sup> December 2010, which 18 SRs implement on 6 goals, and 15 objectives. During Phase 1 implementation, the programme has shown significant achievements over the last year January-December 2010.

By consolidating the reports submitted by all SRs, there are 7 impact and outcome indicators and 16 consolidated programmatic indicators are shown as following:

- Among the 4 impact indicators, data is available to be reported in this period, except other two indicators that cannot be reported during this period due to:
  - a. "Percentage of Injection Drug users aged 15-24 years-old who are HIV infected". The survey is planned to conduct in 2011.
  - b. "Percentage of EWs aged < 20 years-old who HIV infected". Due to late in process of procured the test kits for HSS 2010, the HSS results will be available by Q3-2011.
- Among 3 outcome indicators, 2 indicators can be reported during this period, except one indicator on: "Percentage of Injection Drug Users reporting the use of sterile injecting equipment the last time they injected" due to the survey is planned to conduct in 2011.
- Among 16 programmatic indicators, 8 over-achieved, 2 achieved as planned, and 6 under achieved (2 severely). The two indicators that severely under achieved are:
  - a. "Number of IDU reached by NSP" is underachieved (39%) because only one SSR of 3 SRs is licensed by the National Authority Combating Drugs to implemented NSP.
  - b. "Number Opioid Dependent Drug Use enrolled on Methadone Maintenance Program (MMT)" is underachieved (24.4%), because MMT Clinic at Khmer-

Soviet Friendship Hospital was operated at the end of June 2010. (*Please see the detail in Annex 3*).

- During this year, PR/NCHADS team also coordinate with all SRs who will be continued to phase 2 of R7 and other SRs from R9 phase 1 which was combined to HIV SSF Grant. The HIV SSF Grant for First Commitment Period will be started from 1st Jan 2011 to 31<sup>st</sup> Dec 2013. Under HIV SSF Grant, there are 22 SRs by combining: 14 from R7 Phase 2 and 9 from R9 Phase 1. By the end of 2010, the HIV SSF Grant documents including Budget Plan, Performance Framework, and Procurement Issues were finalized. The cash balance of Phase 1 Round 7 has been submitted to the LFA and the GFATM for review. Soon after HIV SSF Grant officially signed by the GFATM, CCC, PR and Civil Society, PR will process the grant signing with all SRs.

## 2.5 Surveillance:

### i HSS Round 10:

The data collections for HSS round 10 were finished and all specimens and questionnaire were transported from all sites to NCHADS for data management.

### ii BSS Round 8:

The result of BSS round 8 was disseminated in a public forum to all partners and provinces with explored the key findings and recommendation for policy makers and implementers for their future action and planning. The slide presentations (both in Khmer and in English) were posted in NCHADS website.

### iii HIV Drug Resistance:

In 2006, Cambodia started implementing strategies to minimise the emergence of HIV drug resistance including:

- . The continuous supply of WHO pre-qualified ARV drug
- . ART provision using evidence-based standard highly active ART
- . Adherence support
- . Removal barriers to continuous access to ART
- . Prevention program to reduce HIV transmission from person on ART

HIV DR surveillance typically includes 3 components:

#### a. Surveillance of primary HIV Drug Resistance transmission through threshold survey of recently infected people:

This study aims to assess the proportion of people who have been infected with HIV strain resistant to any drug in the standard first line regimen and to assess whether standard first line regimen will continue to be effective. The prevalence of transmitted HIV DR to each drug in the standard first line regimen is classified as;

- **Low if <5%:** people infected with resistant strain to all relevant ARV drug or drug class.
- **Moderate if 5 – 15%:** Need to strengthen program functions and review ART program through monitoring of Early Warning Indicator.
- **High if >15%:** Need to change the standard first line regimen

Since this study started, the specimens have been collected from 5 VCCTs in Phnom Penh (National STD clinic, 7 Makara HC, clinic RHAC (Tek Tla & Tuol Sanke) and Chamkarmorn HC). As the end of this year, 62 HIV+ specimens out of 70 were collected and 55 HIV+ specimens were sent to Canada lab for sequencing.



**b. Monitoring of HIV Drug Resistance Early Warning Indicators :**

To monitor the HIV Drug Resistance, the Monitor of Early Warning Indicators study for started since 2006. 3 rounds of EWI were conducted which collected data from OI/ART sites including ARV patient registered book, ARV patient records, computer database (if available), ARV drug records, inspection of the ARV drug storage condition in the pharmacy, Interview with clinicians and Interview with patients who are on ARV etc.

8 Early Warning Indicators for HIV Drug Resistance were defined to collect from all OI/ART sites:

1. Percentage of months in which there were no ARV drug stock out.
2. Percentage of months no expired ARV drug was found at ART site
3. Percentage of month no emergency request for ARV drug was found at ART site
4. Percentage of ARV drugs are in storage conditions
5. Percentage of patients started on standard recommended first line ART regimen
6. Percentage of patients still on first line ART regimen 12 months after ART initiation
7. Percentage of patients lost to follow up at 12 months after ART initiation
8. Proportion of patients who kept all appointments (ART database) used as a proxy for adherence to ART

The Key finding results of each round of EWI were disseminated and feed back to all OI/ART Team, PAOs, PHD and partners for their future action and planning to improve the quality services, and survival of PLHIV. The slide presentations (both in Khmer and in English) were posted in NCHADS website.

- 1<sup>st</sup> round in 2008: the data from 16 OI/ART sites for Adults and 10 Paediatric sites were collected.
- 2<sup>nd</sup> round in 2009: 42 OI/ART sites for Adults and 25 Paediatric sites were collected.
- and 3<sup>rd</sup> round in 2010: 35 OI/ART sites for Adults and 24 Paediatric sites were collected.

- c. **Monitoring of secondary HIV DR occurring among patients on ART sentinel sites:** This study aims to evaluate the suppression of Drug Resistance during the first year of ART in cohort of patients on first line regimen and evaluate the program factors potentially associated with Drug Resistance emergence. Since this study started, the specimens have been collected from 2 OI/ART sites (Social Health Clinic in Phnom Penh and Chey Chumneah RH in Kandal province). As the end of this year, 150 specimens from SHC and 105 from Chey Chumneah RH were collected and will be sent to Canada lab for sequencing in early 2011.

## **B. RESULTS FROM SEVICES DELIVERIES:**

### **1. HIV/AIDS prevention activities**

By the end of 2010, there were a total of 60 Family Health Clinics (33 specialized government STI clinics covering 21 of 24 province-cities (except Kandal, Mundulkiri province and Kep city and 27 NGO STI clinics; RHAC: 18 clinics, Marie Stopes: 6 clinics, MEC: 1 clinic and PSF: 1 clinic, Chhouk Sar: 1 clinic).

Of the 33 family health clinics, 33 (100%) are upgraded with laboratory support to perform RPR testing and basic microscopy. Of those, 30 labs are functioning (Annex: STI indicator 2). This laboratory support enables specialized clinics to use refined algorithms for the management of STIs in high-risk populations.

In addition to family health clinics, 210 health centers in 71 OD/21 provinces provide STI services using the syndromic approach. At these HCs, in 2010, 5,851 consultations for male patients and 43,934 for female patients were reported to the data management unit of NCHADS. Of 5,021 male patients who having STI/RTI syndromes reported, 4,797 of those (95.5%) suffered from urethral discharges; 210 (4.2%) from Genital ulcers and 14 (0.3%) from Genital warts respectively. Of 40,547 female patients who having STI/RTI Syndromes reported, 21,909 of those (54%) suffered from vaginitis, 16,744 (41.3%) from cervicitis and vaginitis; 1,696 (4.2%) from PID, 118 (0.3%) from Genital ulcers and from genital warts 80 (0.2%) respectively. A total of 4,207 male partners and 9,038 female partners of STI patients were notified and treated for STI.

226,003 consultations were provided at a total of 59 specialized STI clinics (32 government and 27 \*NGO STI clinics, Among those consultations, 19,295 consultations were provided to male patients, 9,276 to MSM, 151,237 to low-risk women, and 46,195 to brothel entertainment workers (BEW) and non-brothel entertainment workers (NBEW) (6,562 for BEW; 39,633 for NBEW) of which 23,558 were monthly follow-up visits] (Figure 4).

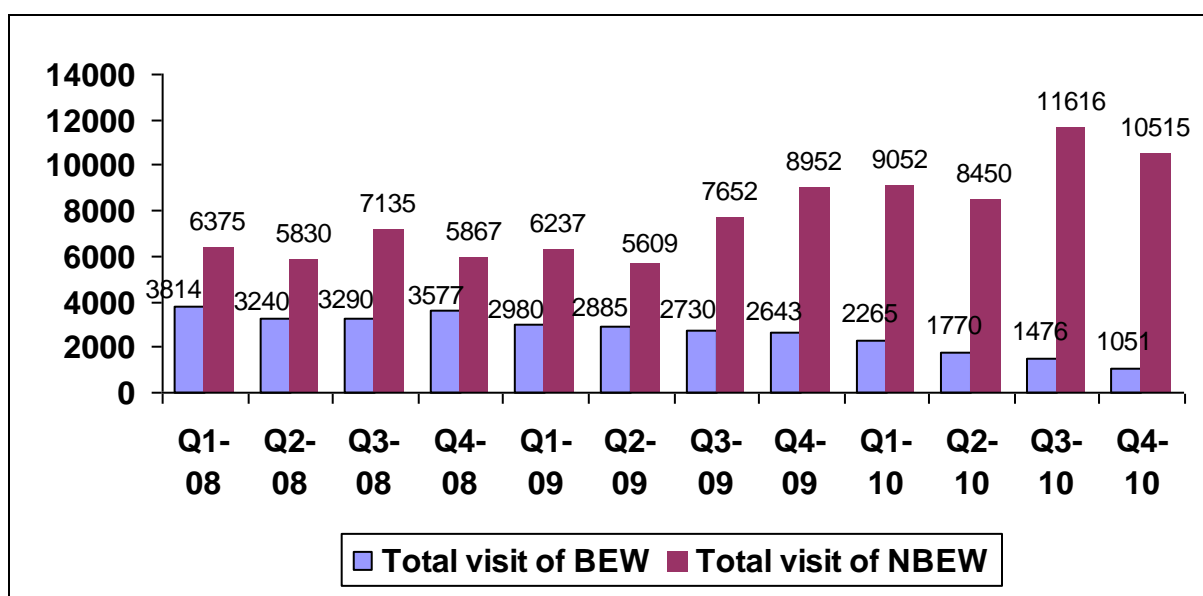


Figure 4: DSW and EW attendance to Family Health Clinics, from Q1 2008 to Q4- 2010

The RHAC clinics attract mostly low risk women whereas the 32 government STI clinics are used mostly by brothel entertainment workers and non-brothel entertainment workers. Most MSM population visited MEC clinic in Phnom Penh city.

At the 53 specialized STI clinics, among the 13,038 male patients who having STI syndromes reported in this year, 11,386 (87.3%) got urethral discharges, 59 (0.5%) got anal discharges, 871 (6.7%) got Ano-genital ulcers, 356 (2.7%) got Ano-genital warts, and 321 (2.5%) were inguinal bubo. Among the 1,603 MSM people having STI syndromes, 1,095 (68.3%) suffered from urethral discharges, 80 (5%) from anal discharges, and 244 (15.2%) from ano-genital ulcers respectively.

At the 53 specialized STI clinics, among the 156,247 low-risk women having STI syndromes reported that 126,184 (80.8%) were treated for vaginitis, 27,870 (17.8%) were treated for cervicitis and vaginitis, 663 (0.4%) were PID, 1,133 (0.7%) were ano-genital ulcers and 397 (0.3%) were ano-genital warts.

During the 2010, of the 2,530 BEW who attended specialized clinics for their first visit, 2,391 (94.5%) were diagnosed with a STI, including 964 (38.1%) with cervicitis. Among the 4,032 BEW who attended specialized clinics for monthly follow-up visits, 1,646 (40.8%) of those were diagnosed with a STI, including 832 (20.6%) with cervicitis (Annex: STI indicator 1). In 2010, of the 20,107 NBEW who attended specialized clinics for their first visit, 13,947 (69.4%) were diagnosed with a STI, including 6,530 (32.5%) with cervicitis. Of the 19,526 NBEW who attended specialized clinics for monthly follow-up visits, 8,638 (44.2%) were diagnosed with a STI, including 6,327 (32.4%) with cervicitis.

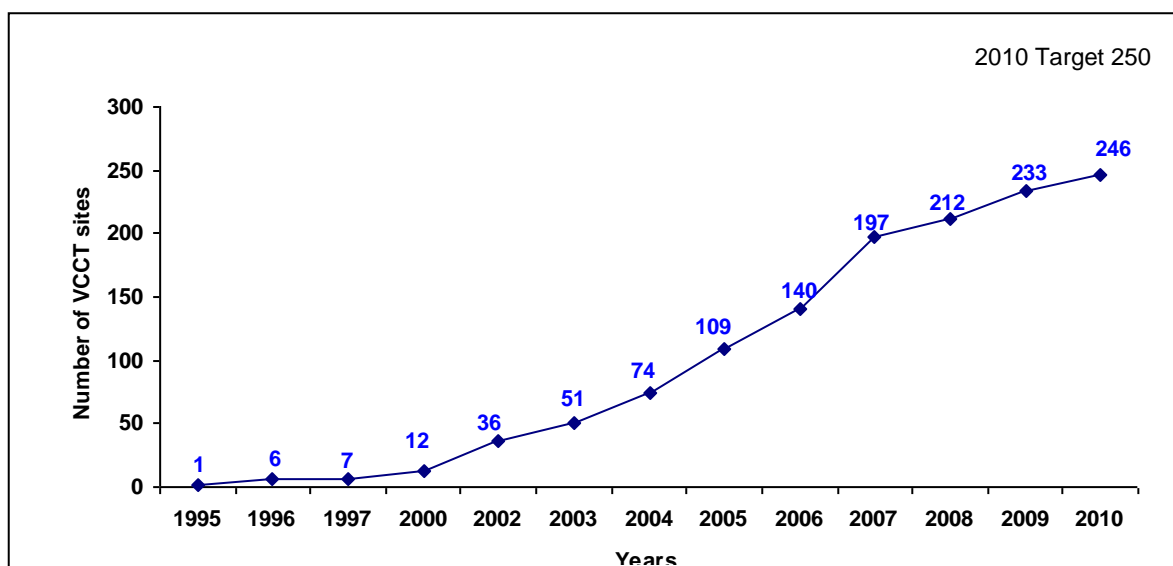
Of a total of 7,331 RPR tests were conducted in 2010 at the 32 government specialized STI clinics, and PSF and MEC clinics, 75 (1%) were positive.

During this quarter, specialized STI clinics have referred 11,613 patients to VCCT, 76 of HIV/AIDS patients (PLHA) to OI/ART services, 229 pregnant women to ANC, and 568 women to Family Planning Services. In the other hand, specialized STI clinics also received patients that were referred from the other services including 853 patients from VCCT, 408 of patients from OI/ART services, 190 pregnant women from ANC and 110 women from Family Planning services

## 2. Comprehensive Care for people living with HIV/ AIDS (PLHA)

### 2. 1. VCCT

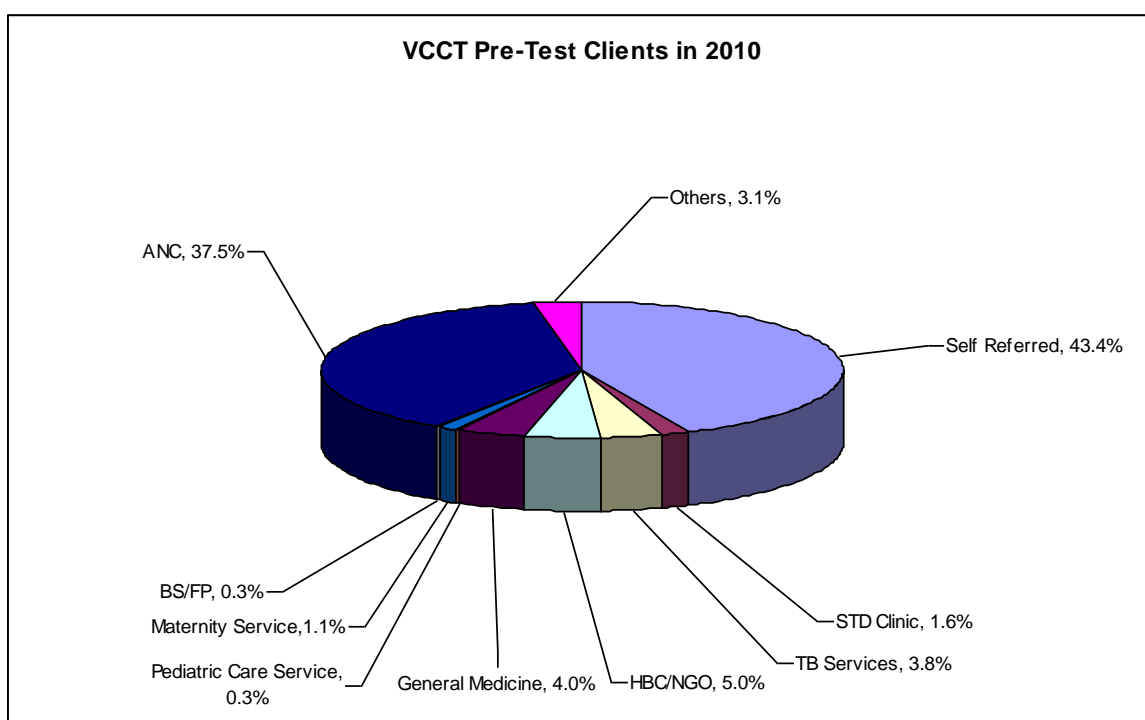
The number of VCCT services has increased drastically over the last10 years, from 12 sites in 2000 to 246 sites by the end of 2010 (Annex: VCCT indicator 1) (Figure 5).



*Figure 5: Trend in number of VCCT sites from 1995 to 2010*

Of the current 246 VCCT sites, 220 are supported directly by the Government and 26 by NGOs (RHAC, Marie Stopes, MEC and Center of Hope).

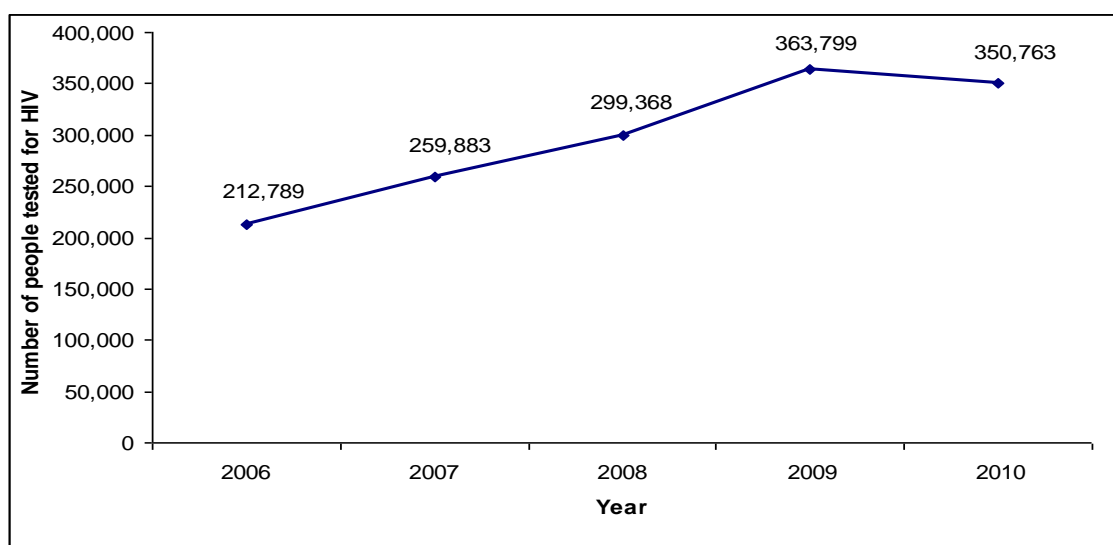
In 2010, of the 541,080 (including 187,912 ANC attendees from NMCH) VCCT clients, 234,905 (43.4%) were self referred, 202,892 (37.5%) were referred by ANC services, 8,547 (1.6%) were referred by STD clinics, 20,538 (3.8%) were referred by TB program, 26,804 (5.0%) were referred by HBC/NGO, 21,819 (4.0%) were referred by general medicine, 1,651 (0.3%) were referred by Pediatric care services, 5,688 (1.1%) were referred by Maternity services, 1,670 (0.3%) were referred by BS/FP services and 14,475 (3.1%) were referred by other services (Figure 6).



**Figure 6:** Trend in number of VCCT clients referred from other services in 2010

A total of 534,298 clients have been tested for HIV in 2010, including 350,763 VCCT clients, 19,605 TB patients, 161,880 pregnant women (150,070 at government facilities and 11,810 at RHAC clinics) and 34,268 male partners of pregnant women (33,465 at government facilities and 803 at RHAC clinics).

The figure 4 and Table 1 below show the trends and characteristics of the subset of VCCT clients and TB patients tested for HIV at VCCT services, these figures do not include pregnant women. A total of 350,763 VCCT clients and TB patients have been tested for HIV at VCCT sites in 2010 (Figure 7).



**Figure 7:** Trend in numbers of people tested for HIV at VCCT services from 2006 to 2010

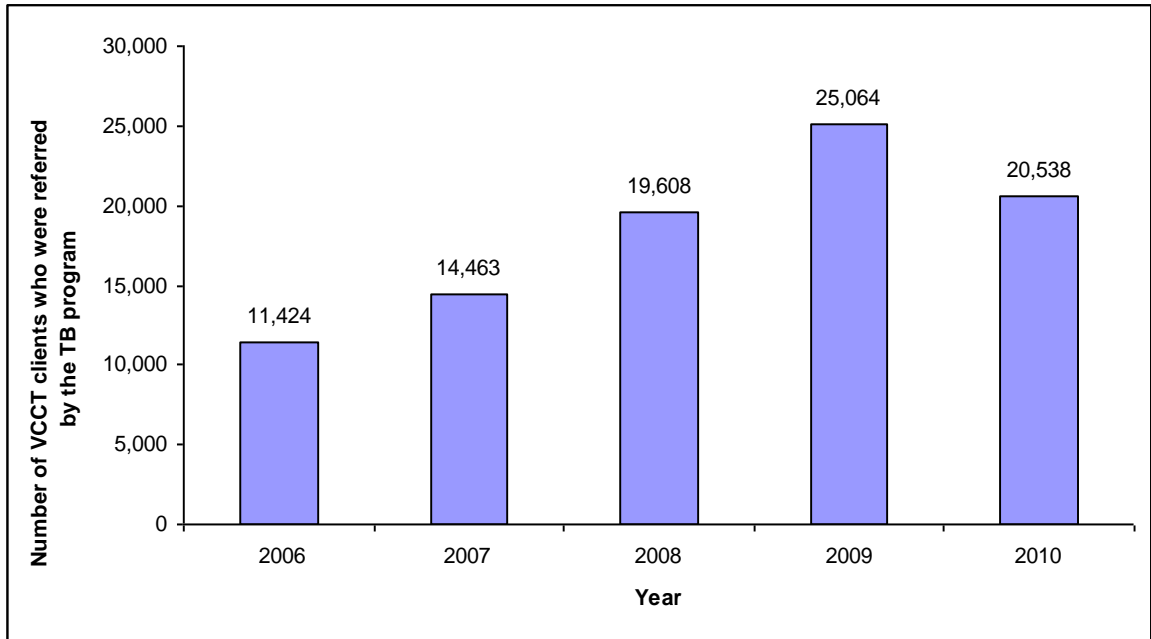
Of the total number of VCCT clients and TB patients tested in 2010, 196,174 (55.9%) were female and 319,767 (91.2%) were aged 15-49 years (VCCT indicator 2) (Table 1).

	People tested for HIV N= 350,763 No. (%)	People tested HIV positive N=8,639 No. (%)
Age		
≤14 years	11,422 (3.3%)	755 (8.7%)
15-49 years	319,767 (91.2%)	7,304 (84.5%)
> 49 years	9,535 (2.7%)	580 (6.7%)
Sex		
Male	154,589 (44.1%)	4,041 (46.8%)
Female	196,174 (55.9%)	4,598 (53.2%)

**Table 1:** Characteristics of clients tested at VCCT sites, in 2010

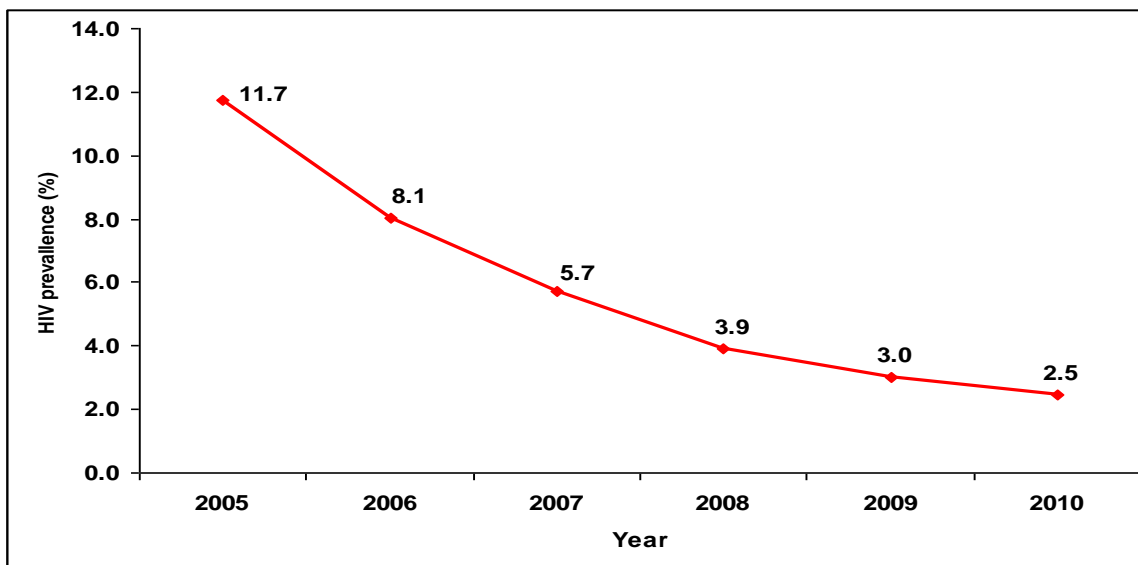
In 2010, 99.6% (range: 85.8% - 100% across sites) of VCCT clients and TB patients tested received their result through post-test counselling (Annex: VCCT indicator 3).

In 2010, of the 541,080 VCCT clients, 20,538 (3.8%) were referred from the TB program (Figure 8). The number of patients referred by the TB program for HIV testing has increased steadily over time since 2006.



*Figure 8: Trend in number of VCCT clients referred from TB program from 2006 to 2010*

In 2010, of the 350,763 VCCT clients and TB patients tested at VCCT sites nationwide, 8,639 (2.5%) were detected HIV positive at VCCT sites (Figure 9).



*Figure 9: Trend in HIV-infection rate among VCCT clients from 2005 to 2010*

## 2.2. OI and ART services

Today, 51 health facilities offer OI and ART services in 44 Operational Districts in 21 provinces and cities (Annex: CoC indicator 1). These 51 OI and ART services are supported by the government 48 sites and 3 sites by NGOs and partner (Annex: CoC indicator 2). Of the total 51 OI/ART sites, there are 32 sites provide pediatric care in 29 Operational Districts.

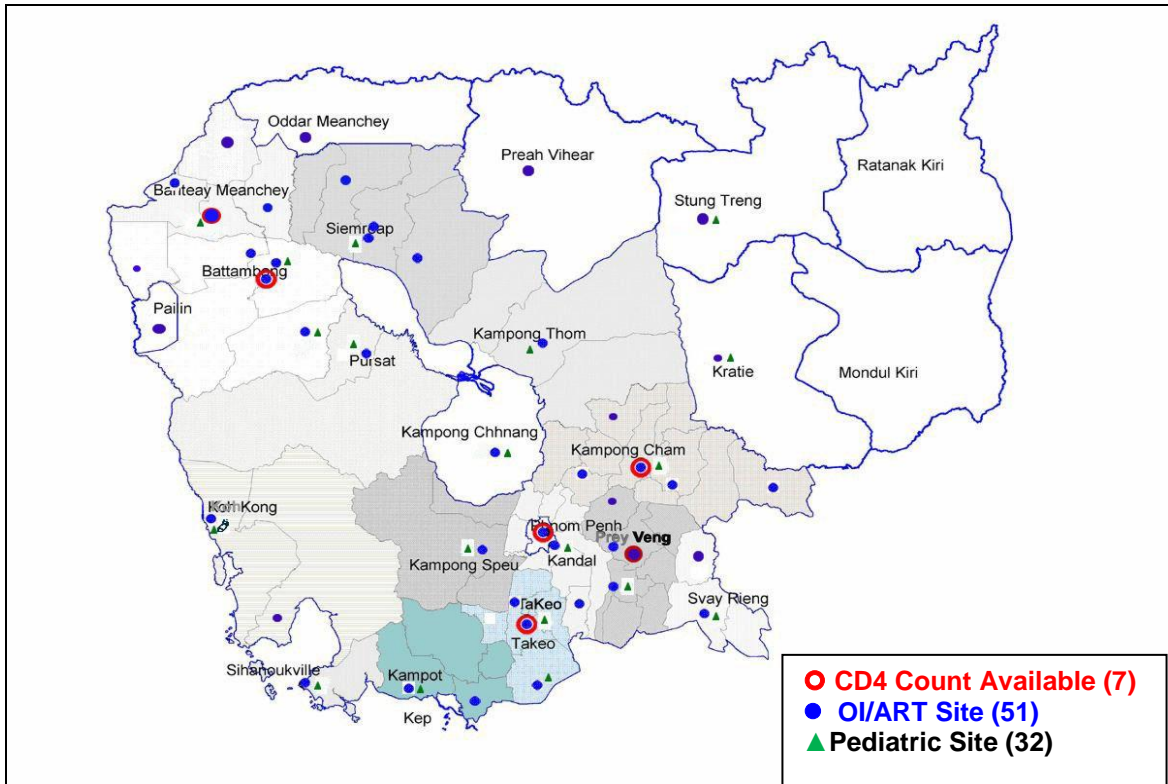


Figure 10: Location of facility-based OI/ART sites as of December 2010

### 2.2.1 Laboratory Support

In 2010, 65,634 CD4 tests have been conducted in the seven regional laboratories with the leased FACS counts (Takeo, Kompong Cham, Battambang, Neakleoung OD, NCHADS, NIPH in Phnom Penh and Banteay Meanchey Province) (Figure 11). CD4 test is also available at Pasteur Institute in Phnom Penh, which has 2,251 tests examined in 2010. CD4 % tests in percentage for children is performed at Pasteur Institute of Cambodia (IPC) in Phnom Penh and at NIPH.

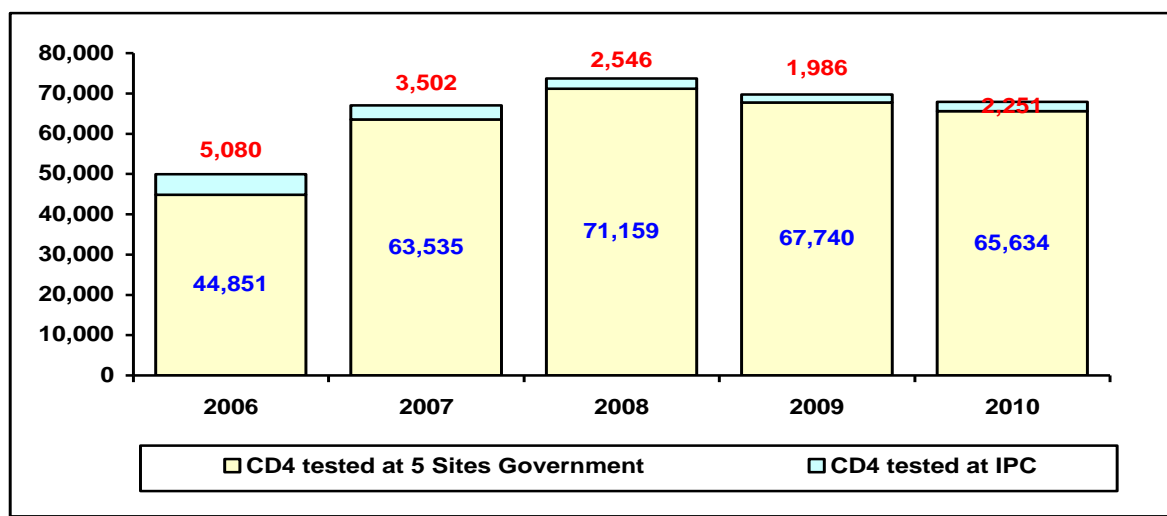
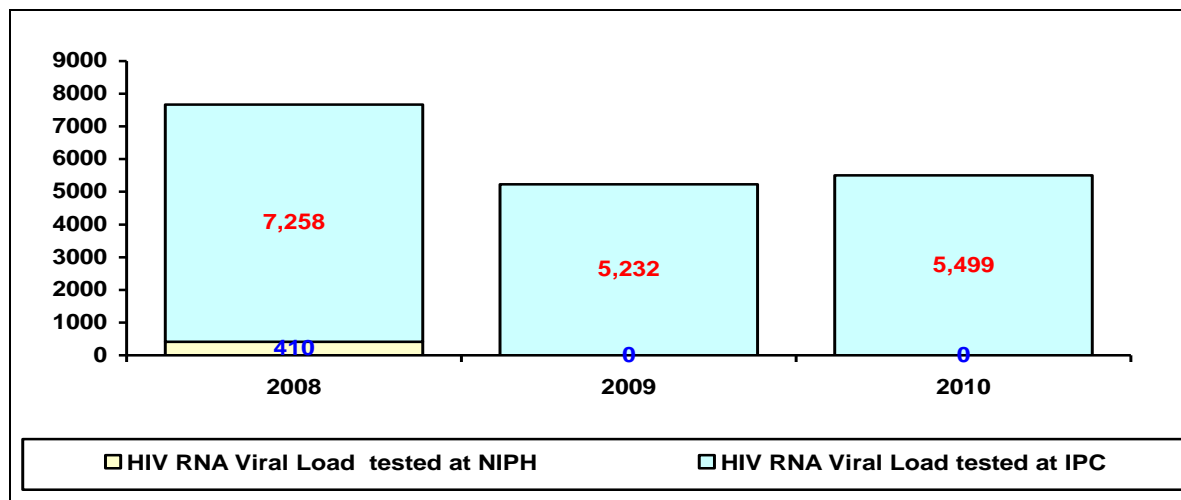


Figure 11: Trend in the total number of CD4 tests conducted in Cambodia at 6 government sites and IPC in 2006 and 2010

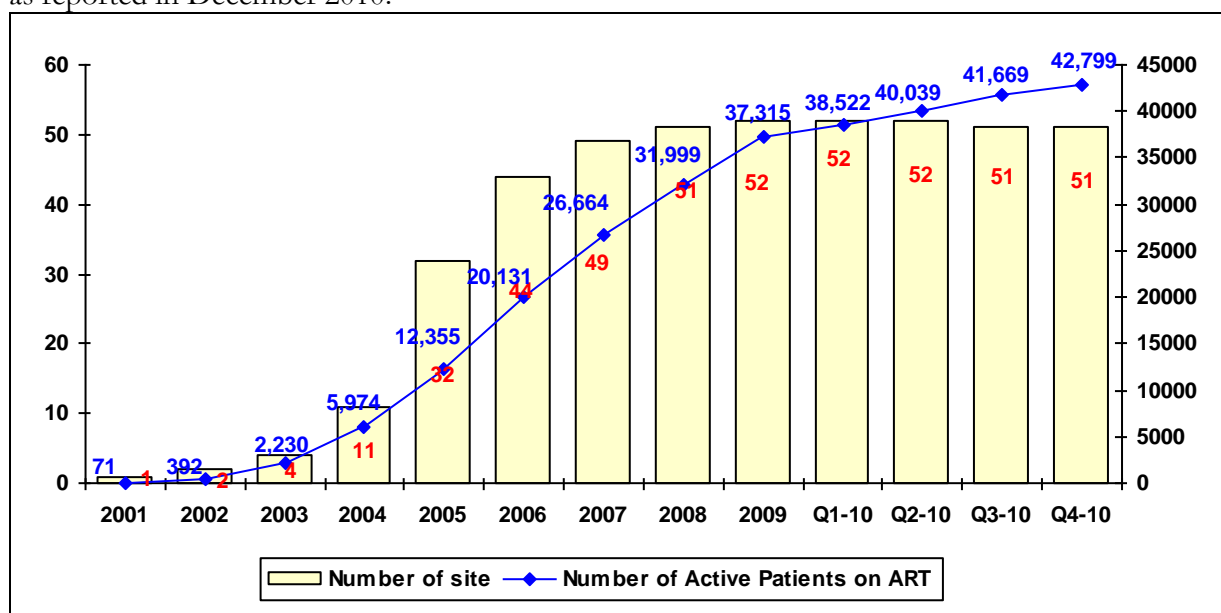
In 2010, there are 5,499 HIV RNA viral load tests were conducted at Institute Pasteur of Cambodia (IPC) (Figure 12).



**Figure 12:** Trend in the total number of RNA Viral Load tests conducted in Cambodia at NIPH and IPC from 2008 to 2010

In 2010, 793 DNA PCR tests for early infant diagnostic (EID) found 54 positive were conducted at NIPH. Another place at Institute Pasteur of Cambodia (IPC) in 2010 the total number of DBS screened are 1,227 found 59 positive and Number of infant screened for the 1<sup>st</sup> time (excluding DBS for confirmation) are 462 which the number of infant diagnosed positive at time of 1<sup>st</sup> screening are 33, and the total number of HIV DR tested are 283. (Sources: report from NIPH and IPC)

This Q4-2010, a total of 42,799 active patients including 38,697 adults and 4,102 children are receiving ART (Figures 13 and 14) (Annex: HFBC indicator 3). According to the increasing of CD4 threshold 350/mm<sup>3</sup> for starting of ART, the estimated need of HIV/AIDS patients (Adults and Children) on ART are projected about 44,280 in 2010, it is 96.7% if compared with the actual number of AIDS patients (Adults and Children) on ART as reported in December 2010.



**Figure 13:** Trend in number of OI/ART sites and active patients on ART from 2001 to Q4-2010



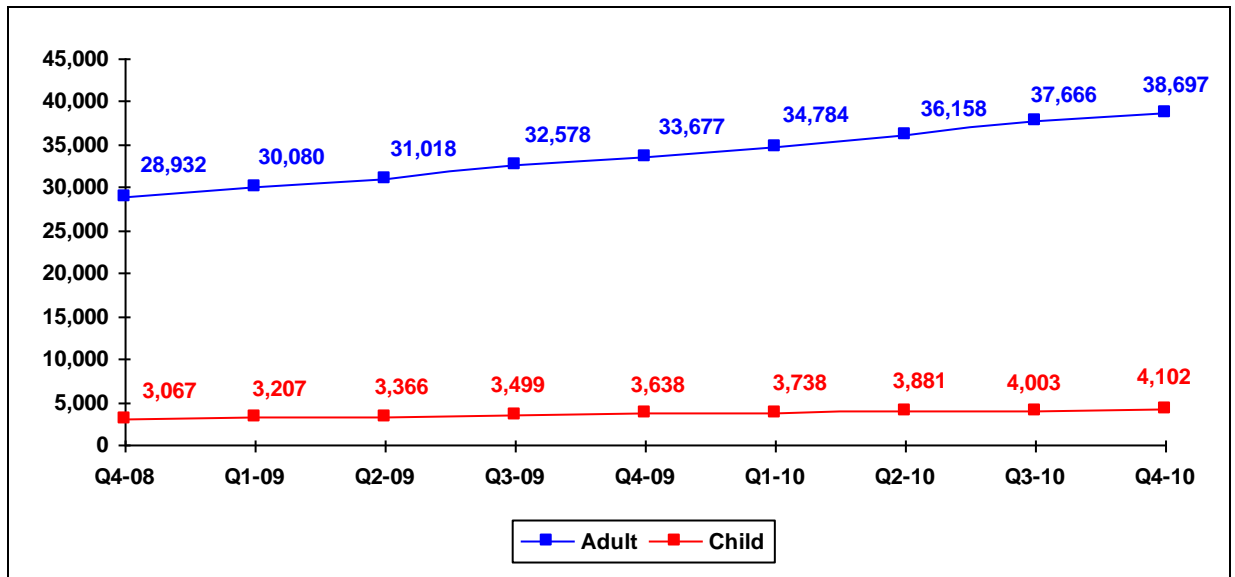


Figure 14: Trend in number of active adult and child patients from Q1 2008 to Q4-2010

In Q4-2010, female adult patients accounted for 53.2% (20,603) of all active patients on ART. At OI/ART sites, a total of 1,530 new patients (including 157 children) started OI prophylaxis and management and 1,438 new patients (including 138 children) started on ART in Q4-2010 (Figure 15). The number of new patients on OI care has been decreased than Q3 2010. On the other hand, the numbers of new patients on ART were significantly decreased as from Q3 2010.

In this 2010 there are 2,249 patients lost and 70 died in OI care.

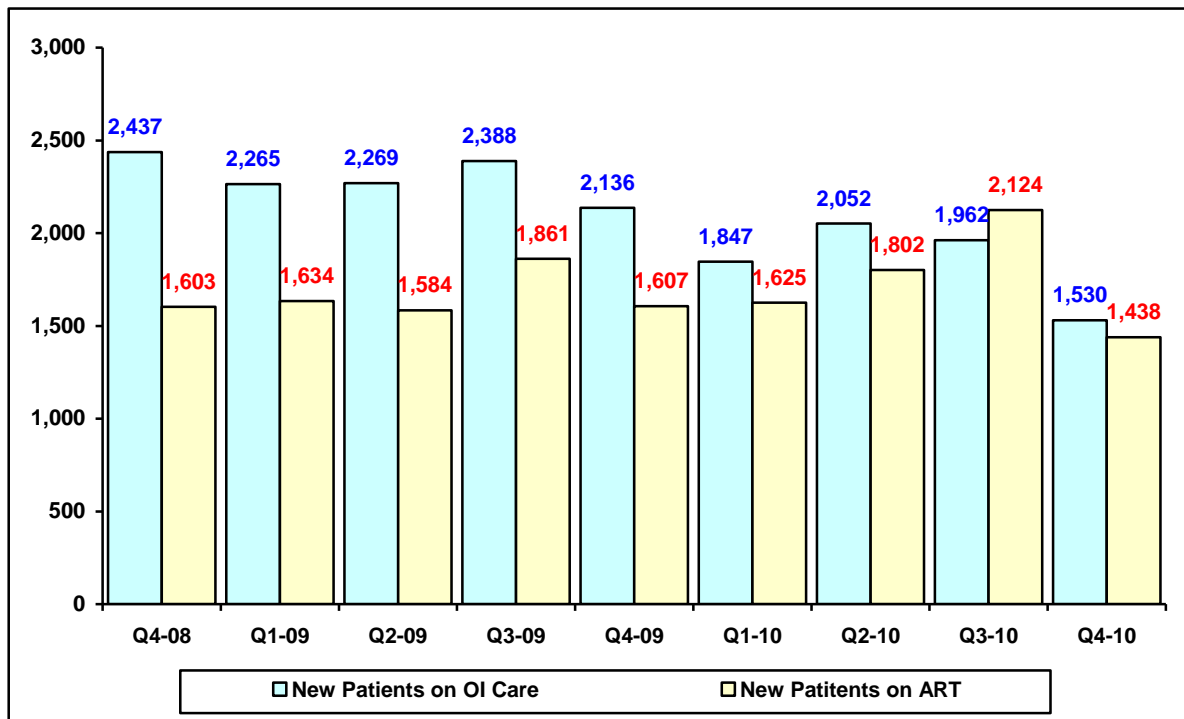


Figure 15: Trend in numbers of new patients on OI and ART from Q4-2007 to Q4-2010

There were a total of 6,236 active adult patients and 1,529 child patients with opportunistic infections who are not eligible for ART yet at the end of Q4-2010. Of those, 3,956 (63.4%) were

female patients represented mostly the spouses of male patients who are started on OI/ART care since years ago.

A total of 1,091 adult patients and 205 child patients on OI care were eligible to prepare on ART at the end of December 2010.

### 2.2.2 Patient mobility across services, lost and died

In 2010, a total of 987 ART patients were transferred out to new ART sites located closer to their home residence, moreover there are 969 ART patients lost treatment and 626 patients died. At the end of Q4-2010, 10 ART sites have large cohorts of more than 1,000 active patients on ART, including Khmer Soviet Friendship Hospital/Phnom Penh that has 3,669 active patients on ART.

### 2.2.3 Drug and logistic support

In Q4-2010, the number of patients on different ART regimens has been reported from all ART sites. Most AIDS patients were prescribed for 1st line of regimen, including d4t+3TC+NVP, d4t+3TC+EFV and AZT+3TC+NVP; whereas 3.8 % of adults and 7.2 % of children were on PI-based regimens (Table 2).

ARV drug regimen Q4 - 2010	Adults N= 40,011* No. (%)		Children N= 4,134* No. (%)	
d4t+3TC+NVP	16,700	41.7 %	3,065	75.4 %
d4t+3TC+EFV	5,262	13.2 %	423	10.2 %
AZT+3TC+NVP	10,353	25.9 %	222	5.4 %
AZT+3TC+EFV	3,759	9.4 %	65	1.6 %
PI-based regimens	1,512	3.8 %	299	7.2 %
Other regimens	2,425	6.1 %	60	1.5 %

\* Regimen data do not match exactly the actual the number of people on ART.

**Table 2:** Distribution of antiretroviral drug regimens prescribed for HIV infected patients in Cambodia, Q4-2010

### 2.2.4 TB Screening of new OI Patients

In 2010, there were 7,399 new OI patients registered at OI-ART Sites. Of these 7,399 new OI patients, 4,778 (64.5%) were screened for TB Symptom during the quarter. Of the 4,778 patients screened for TB, 689 were detected as TB Pulmonary, 426 were detected as Extra-pulmonary TB detected, 3,278 delivered a negative result and 445 pending resulted. The number of TB screened among new OI patients were low (64.5%) due to four OI-ART sites didn't report for TB-Screening to NCHADS.

### 2.2.5 Implementation of Three "I" Strategy during the fourth quarter 2010.

- **Isoniazid Prevention Therapy (IPT)**

During the quarter 3 and 4 2010, there were a total of 1,340 new OI patients registered at 20

sites implementing the Three "I" Strategy. Among 1,340 patients there are 491 started IPT (TST sites=43 patients and non-TST=448 patients).

- **Pre-ART (OI)**

During the fourth quarter of 2010, 1,373 of new adult OI patients registered at OI/ART sites. Of these 843 received TB symptom screening that identified that 415 patients had at least one of three TB symptoms in the last 4 weeks (fever, cough and drenching night sweats for two weeks or more). Among the 415 patients with screened positive for TB symptoms, 193 were diagnosed to have TB (BK+/-, EP) 159 started TB treatment, and 162 started IPT as they did not present TB symptom and put on IPT. There were 237 active patients on OI diagnosed with TB (BK+/EP), of which 187 patients started TB treatment, and 118 TB-HIV patients started cotrimoxazole prophylaxis during this quarter.

- **ART**

During the last quarter of 2010, 1,300 new ART patients registered at OI-ART sites. Of these, 71 were diagnosed with TB (BK+/- EP), 68 patients started TB treatment. Of the 155 of active patients on ART who were diagnosed as having TB (BK+/-, EP), 128 started TB treatment and 75 of TB-HIV patients started cotrimoxazole prophylaxis during this quarter.

### 2.2.6 Pregnancy and abortion

During the quarter 4 2010, there're 763 new OI female patients registered at OI/ART sites, among these new female 45 became pregnant. Of all 4,583 active female patients on OI until this last quarter, 47 got pregnant and 42 of them started ARV prophylaxis. Four women were reported to have spontaneous abortion, and one was reported to have induced abortion during this quarter.

In this quarter 4 2010 there're 711 new ART female patients registered at OI/ART sites, among these new female 46 became pregnant. Of all 20,603 active female patients on ART in this last quarter 58 of them got pregnant. Five women were reported to have spontaneous abortion, and two women were reported to have induced abortion during this quarter.

### 2.2.7 Survival of patient on ART

Survival data were analyzed at 30 ART sites for adult cohorts started ART in 2009 and 2008, 24 sites for adult cohorts started on ART in 2005. The survival data were not be able to analyze for this year.

	Indicators	Adult age >15 years old
<b>12 month survival</b>	<b>Percentage of adults with HIV known to be on treatment 12 months after initiating antiretroviral therapy</b>	<b>86.4%</b>
	Number of adults who are still alive and on ART at 12 months after initiating treatment	3,076
	Total number of adults who initiated ART in 2009 including those who have died and those lost to follow-up	3,559
<b>24 month survival</b>	<b>Percentage of adults with HIV known to be on treatment 24 months after initiating antiretroviral therapy</b>	<b>83.6%</b>
	Number of adults who are still alive and on ART at 24 months after initiating treatment	2,922
	Total number of adults who initiated ART in 2007	3,494

<b>60 month survival</b>	<b>Percentage of adults with HIV known to be on treatment 60 months after initiating antiretroviral therapy</b>	<b>77.9%</b>
	Number of adults who are still alive and on ART at 60 months after initiating treatment	2,765
	Total number of adults and children who initiated ART in 2005	3,545

**Table 3:** Survival at 12, 24 and 60 months after ART initiation for the cohorts of adult patients started on ART in 2009, 2008 and 2005

### 2.3. Linked Response 60 Reporting LR ODs, January to December 2010

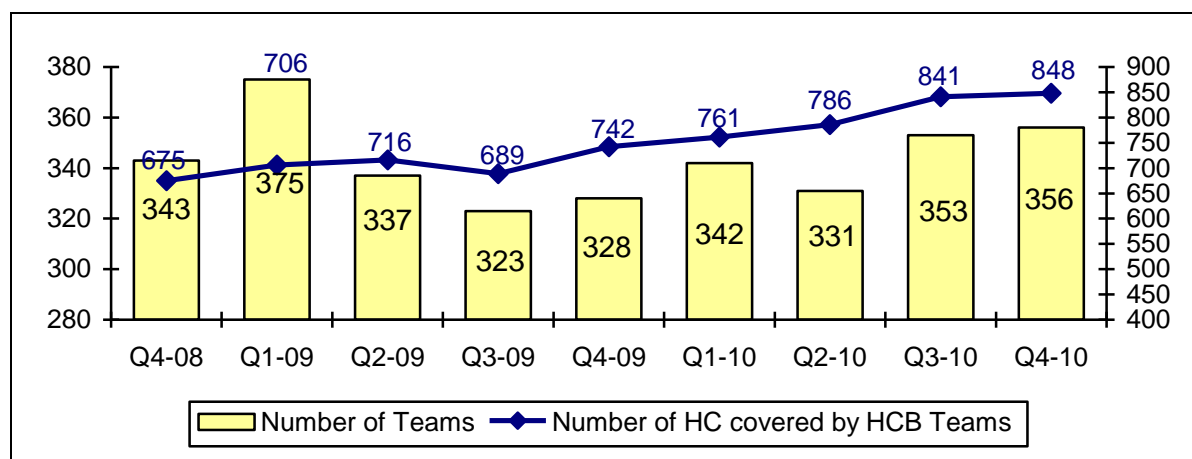
In October 2010, of the 60 ODs implementing the Linked Response Approach, 60 ODs had reported data. From January to December 2010, of a total of 168,826 first ANC attendees at Linked Response sites and outreach services, 134,377 (79.59%) were tested for HIV. Amongst couples where the woman attended an ANC consultation at a Linked Response site, 27,340 husbands/partners accepted testing (16.19% of pregnant women was tested with their husbands/partners). Among the 168,826 ANC attendees at Linked Response sites and outreach services who received an HIV test, 263 (0.15 %) were HIV positive and a further 85 known HIV-positive pregnant women were referred to Linked Response services.

A total of 256 HIV-infected pregnant women delivered their babies at PMTCT maternity sites between January and December 2010. Of these mothers, 232 (90.62%) accessed ARV drugs: 173 (74.56%) received HAART and 59 (25.43%) received ARV prophylaxis in labor alone. Of 250 infants born to HIV-infected mothers at PMTCT maternity sites from January to December 2010, 224 (89.6%) received NVP.

### 2.4. Community-based services

#### Home-based care (HBC)

As reported in 4<sup>th</sup> quarter 2010, there are 356 HBC teams covered over 848 Health Centers in 71 operational districts (OD) in 19 provinces. In this quarter Preah Vihear provinces still have no report, because NGO that operated CoC finished their project in coverage and supporting PLHAs and still waiting for new NGOs (Annex: HBC indicator 1) (Figure 16) within the CoC established in place (Annex: HBC indicator 4).



**Figure 16:** Trend in number of HBC teams form Q4-2008 to Q4-2010

These HBC teams are currently supporting for a total of 31,127 PLHA (Annex: HBC indicator 2), which 8,513 were registered in Pre-ART (OI) and other 22,614 were registered in ART.

### C. FINANCIAL REPORT:

This Report presents both expenditures against the proportion of planned budget disbursed and achievements of planned activities, as the major indicators of achievement. It included the main sources of NCHADS programme funding for implemented by NCHADS itself and 24 provinces: GFATM (R7, R4 and R5), US-CDC, ITM-DGDC, CHAI, UNSW/CTAP, CIPRA and AHF.

The figures in column of annual expenditures were recorded in the NCHADS accounting system as allowable reconciled expenditure against advances is shown. These include both actual expenditures incurred and recorded during the year.

**Table 4: Summary of Annual Expenditure by Sources in 2010**

Sources	Annual Plan	Annual Expenditures	A %
GFATM-R7	\$ 9,643,775	\$ 7,377,787	77%
GFATM-R4	\$ 7,330,814	\$ 1,092,705	15%
GFATM-R5	\$ 581,488	\$ 238,302	41%
US-CDC	\$ 800,587	\$ 732,101	91%
UNSW/CTAP	\$ 100,000	\$ 92,763	98%
CHAI	\$ 303,458	\$ 154,693	51%
AHF	\$ 146,283	\$ 143,731	98%
CIPRA	\$ 80,000	\$ 67,289	84%
ITM- DGDC	\$ 58,654	\$ 75,898	129%
<b>Grand Total</b>	<b>\$ 19,045,269</b>	<b>\$ 9,980,269</b>	<b>52%</b>

### D. CHALLENGES AND CONSTRAINTS

- Late HIV testing at 3rd/4th stage progression to AIDS remains a persistent issue, especially in respect of Most-at-Risk Populations where treatment outcomes are often compromised.
- Delay in disbursement, and approved for reprogramming leads to delay in implementing some necessary activities and need to reschedules and also leads to save budgets.
- The procurement process continued to be delayed lead to delay of some activities including HSS data collection, and also will be affect to some performing indicators particularly related to STI treatments (for MSC) and VCCT interruption of reagents in some sites related to the logistics management.

- Basic needs for living of the beneficiaries in the community could not be fulfilled because of the limited budgets and high demands.
- Delay in approval of POC scheme from July 2010 until now, this may affect the staff performance at service delivery.

#### **E. LESSON LEARNED**

- Good coordination and collaboration with all partners, local authorities, Health Facilities at all levels and Communities are the key success of the program.
- Partnership between NCHADS, NMCHC and CENAT is particularly important in the fight against HIV/AIDS and joint collaborative activities have to be strengthened at OD level to reach the ambitious targets set for MDG 2015.
- Education and awareness rising of the community and the target group allows them to undertake the health education, information and health services and reduce stigma and discrimination towards MARP.
- Improved utilisation of HIV/STI services by MARPs is necessary to ensure universal access for this population group.

#### **F. CONCLUSION AND RECOMMENDATION**

Overall, NCHADS and its partners were made great achievements against the target sets in 2010, we can therefore, conclude that working in partnership, the HIV/AIDS Prevention, Care and Treatment programs in Cambodia is moved towards. However, we should ensure long-term funding and political commitments to run the HIV/AIDS programs. If development partners withdraw assistance for HIV/AIDS too quickly, Cambodia could face significant difficulty in sustaining HIV/AIDS efforts.

#### **G. ACTION POINTS**

- NCHADS and partners will review the current new approach for improving condom use between EW and sweethearts. Currently NCHADS together with Partners to develop a concept note on making available of birth spacing at OI/ART, and STI services to improved access for PLHAs and EWs to birth spacing.
- Cambodia is started to implement the 5 Is strategies (Intensify Case Finding, Isoniazide Prophylaxis Treatment, Infection Control, Integration into health service delivery and Initiate early of ART) to improve the TB/HIV program; develop an integrated data (VCCT, STI and OI/ART) into the health strategic information system, develop a unique Identified of patient on ART with the supports from PEPFARE and partners, and implement the boosting the linked response approach.

## ANNEX 1: Monitoring and Evaluation indicators

	<b>STI Indicators</b>	<b>Type</b>	<b>2010 target</b> No. (%)	<b>2010 score</b> No. (%)
1	Proportion of visiting brothel-based SWs diagnosed with cervicitis during monthly follow-up consultations at special STI clinic	Outcome	< 14%	19.9 %
2	Number of Special STI Clinics with laboratory support to perform RPR and basic microscopy	Output	31	33
3	Percentage of entertainment services workers who use STI services monthly	Output	EWS: 18,350	EWS: 7,984

	<b>CoC Indicators</b>	<b>Type</b>	<b>2010 target</b> No. (%)	<b>2010 score</b> No. (%)
1	Total number of Operational Districts with a full Continuum of Care	Output	45	44
2	Number of CoC sites with ARV services	Output	55	51

	<b>VCCT Indicators</b>	<b>Type</b>	<b>2010 target</b> No. (%)	<b>2010 score</b> No. (%)
1	Number of licensed VCCT sites operating in the public and non-profit sectors (UA 1).	Output	250	246
2	Number and percentage of adults (aged 15-49) who received HIV counseling and testing (UA 3, 4, 5, 9).	Outcome	400,000 (5.2%)	From Jan to December 2010 343,314
3	Percentage of people HIV tested who received their result through post-test counseling (UA 9).	Output	98%	99.5 %
4	Number and percentage of HIV (+) Clients who were referred to OI/ART sites	Output	95%	76.8 %

	<b>HFBC Indicators</b>	<b>Type</b>	<b>2010 target</b> No. (%)	<b>2010 score</b> No. (%)
1	Percentage of people on ART alive 12 months after initiation	Impact	>85%	
2	Number of targeted OD with at least one centre that provides public ART services (UA 23).	Output	40 A: 40 C:30	44 A: 44 C:29
3	Number and percentage of people with advanced HIV infection on HAART (UA 24).	Outcome	38,477 adults 4,800 children <hr/> 43,277 total	38,697 adults 4,102 children <hr/> 42,799 total
4	Number of OD with at least one centre that provides PMTCT services * (UA 10).	Output	76 (100%)	67 (88%)
5	Number and percentage of pregnant women who were tested for HIV and received their test result		75%	71.2%
6	Number and percentage of HIV-infected pregnant women who received a complete course of ARV		60%	
7	Number and percentage of individuals newly enrolled in HIV care who were screened* for TB at the first visit	Output	90%	New OI = 7,399 Screen TB = 4,778 64.5%

**Note:** \* For indicators number 4, 5 and 6 of HFBC component, the values from NMCHC

	<b>HBC Indicators</b>	<b>Type</b>	<b>2010 target</b> No. (%)	<b>2010 score</b> No. (%)
1	Total number of HBC teams actively providing home-based care and support services to PLHA	Output	300	356
2	Number of PLHA supported by HBC teams	Output	30,000	31,127
3	Number and percentage of health centers with HBC team support	Output	780 (83%) of 942 HC	848 (90.0%)



	<b>Surveillance Indicators</b>	<b>Type</b>	<b>2010 target</b> No. (%)	<b>2010 score</b> No. (%)
1	Number of HSS conducted	Output	Round 10	Ongoing process of HSS Round 10
2	Number of BSS conducted	Output	Round 8	completed of BSS Round 8 with result disseminated

	<b>Research Indicators</b>	<b>Type</b>	<b>2010 target</b> No. (%)	<b>2010 score</b> No. (%)
1	Number of Research conducted	Output	2	2

	<b>PMR Indicators</b>	<b>Type</b>	<b>2010 target</b> No. (%)	<b>2010 score</b> No. (%)
1	Percentage of major funding sources included in the Annual Comprehensive Work Plan	Output	>90%	>90%
2	No. of NGOs and partners with signed Letters of Agreement for annual work plans on HIV/AIDS & STI programme	Output	50	47
3	Number of NCHADS quarterly program reports produced and disseminated	Output	5	5

	<b>DM Indicators</b>	<b>Type</b>	<b>2010 target</b> No. (%)	<b>2010 score</b> No. (%)
1	Number of provinces with data management units	Output	20	20